

BCAC PC Report – 8-4-2022

Code change Number	Results	Position - A, NP, D	Public Comments	Section number	Topic
ADM013-22 Part 1	AM 2, 19, 24, 37, 38, 39, 40, 41	A	6 PC - AMPC	104	Alternative means section from FCAC committee
ADM013-22 Part 2	AM 12,13,14, 15,16,17, 18,19,20, 21	A	6 PC - AMPC	104	Alternative means section from FCAC committee
ADM014-22	AM 2, 14, 17, 20, 21, 22, 23, 24	A	6PC-AM	104	Alternative means section from FCAC committee - Kevin Scott put in PMGCAC portion
ADM017-22 Part 1	D	A	AS	104.1	add interpretations - FCAC would not support
ADM017-22 Part 2	D	A	AS	104.1	add interpretations - FCAC would not support
ADM018-22	AM committee modifications (2) and Earl 1	NP	AMPC	IFC 104.9	Fire code official to allow for natural disasters
ADM019-22	D	NP	AMPC	IFC 202	approved agency - also in ADM13-22
ADM020-22	D	NP	AS	IEBC 202	approved agency - also in ADM13-22
ADM021-22	D	NP	AMPC	IBC 104.1	listed compliance
ADM022-22	D	NP	AS	IFC 104.1	listed compliance
ADM025-22	AS	D	D	IFC	alternative methods format
ADM026-22	AS	D	D	IEBC	alternative methods format
ADM027-22	AS	D	D	IWUIC	alternative methods format
ADM028-22	D	D	AS	IWUIC	alternative methods in writing
ADM029-22	D	D	AS	IEBC	alternative methods in writing
ADM030-22	D	NP	AMPC	IBC	research reports

ADM034-22 Part 2	D	A	AMPC	IRC	Alternative means
ADM035-22	AM	NP	D	IBC, IEBC; IFC; IFGC, IMC:, IPC; IPSDC	ICCPC performance exception
ADM036-22 Part 1	AM	NP	AMPC	IBC, IEBC; IFC; IFGC, IMC:, IPC; IPMC, IWUIC	expand on fire resistance
ADM036-22 Part 2	D	NP	AMPC	IRC	expand on fire resistance
ADM040-22	AS	A	AMPC	IPSDC	Fees - Coord with ADM 27 and 33
ADM041-22 Part 1	AS	A	None	IBC, IPC, IMC, IFGC, IEBC, IPSDC, IWUIC, ISPSC, IFC	Temporary structures
ADM041-22 Part 2	D	A	AS	IRC	Temporary structures
ADM042-22	AS	A	2 PC - AMPC	IPC 109.3	Section on valuation of fees missing
ADM043-22 Part 1	AS	A	2 PC - AMPC	IECC (submitted) IBC, IFC, IEBC, IWUIC, IZC, IMC, IPMC, IFGC, ISPSC, and IGCC	Coordinate Section on Fees
ADM043-22 Part 2	D	A	2 PC - AMPC	IRC	Coordinate Section on Fees
ADM044-22	AS	A	AMPC	ISPSC, IPSDC, IFGC, IPC, IMC	duplicate text/errata - service utilities/violations
ADM048-22 Part 1	AS	A	2 PC - AMPC	IBC, IEBC, IWUIC, IMC, IFC, ISPSC, IPC, IFGC, IPMC,	Board of Appeals, Means of Appeals

				IPSDC, IGCC	
ADM048-22 Part 2	D	A	2 PC - AMPC	IRC	Board of Appeals, Means of Appeals
EB034-22	D	NP	AMPC	R310	Accessory Dwelling units
EB046-22	AS	D	AMPC	502.1	occupied roof added on an existing buidling
EB047-22	AM	NP	AMPC	502.1.1	Risk category
EB048-22	AS	NP	D	502.1.1	structural design loads
EB067-22	AM	NP	AMPC	503.12, 706.3.2	wind loads
EB083-22	AM	A	AMPC	804.4	Coordination for single exit tables in IEBC and IBC
EB085-22	AS	A	AMPC	804.4	access to exits
EB094-22	AM	A	PC-AS; PC-D	1002.1	occupied roof added on an existing buidling-exception
EB097-22	AS	A	PC-AMPC; PC-D	1011.2.1	sprinklers in COO
EB098-22	AS	NP	D	IEBC 1011.5.1	guards on roof for Group I- 1 & I-2
EB116-22	AM	A	AMPC	Appenedix E	Suggested Appendix Q for temporary emergency use
RB004-22	D	A	AMPC	IRC R101.2	Coordination of scope between IRC and IBC
RB005-22	AM	D	AMPC	IRC R101.2	Coordination of scope between IRC and IBC
RB006-22	D	A	AMPC	IRC R101.3	Property protection added to intent
RB007-22	D	NP	2- AMPC	R102.7.1	Existing buildings in IRC - delete Appendix J
RB011-22	D	NP	AMPC	R104.2.1	listed complinace
RB012-22	D	D	AS	R104.11	Alternative methods format
RB013-22	D	NP	AMPC	IRC	research reports
RB045-22	D	AM	AMPC	IRC R301.9	Rafter splices
RB061-22	AM	A	AMPC; 2PC-D	R302.3	townhouse unit seperation

RB062-22	D	A	AMPC	R302.3	townhouse unit separation
RB063-22	AS	NP	3PC-AMPC	R302.3	townhouse unit separation
RB064-22	AS	NP	2PC-AMPC	R302.3.2	common use accessory rooms
RB066-22	D	NP	AMPC; AS	R302.3.2	opening in townhouse unit separation
RB093-22	D	NP	AMPC	R310.1	EERO
RB100-22	D	A	AMPC	R311.3.2	steps between garage and dwelling
RB122-22	AM	NP	AMPC	R314.1.2	smoke alarms
RB144-22	D	NP	AMPC	R323.1.2	storm shelters
RB151-22	D	A	AS	R325.2	mezzanine height and area.
RB251-22	AS		AMPC; 2PC-D	R902.1	fire classification of roof
RB252-22	AS		AMPC; 2PC-D	R902.1	fire classification of roof
RB253-22	D	A	2- AMPC	R902.1, 2, 3, 4	fire classification of roof
RB297-22	AM	NP	AMPC		Appendix J fixes
S070-22	D	NP	AMPC	Table 1604.5	risk category
S099-22	D	A	AMPC	IBC 106	Move posting to Chapter 16
S134-22	D	A	AMPC	1616.1	reference to ASCE7 Appendix E
S164-22	D	A	AMCP		CONVENTIONAL light frame construction clarifications
S173-22	D	A	AMPC		Slabs on grade bending under uplift
S224-22	D	A	AMPC	2308.3	cutting and notching

ADM13-22 Part I

IBC: SECTION 104, 202; IEBC: SECTION 104, 202; IFC: SECTION 104, 202; IPMC: SECTION 105, 202; IWUIC: SECTION 104, 105, 202; IZC: [A] 104.7, [A] 104.7.1; IGCC: SECTION 104

Proposed Change as Submitted

Proponents: Robert Marshall, representing FCAC (fcac@iccsafe.org); Mike Nugent, representing Building Code Action Committee (bcac@iccsafe.org); Jeffrey Shapiro, representing Lake Travis Fire Rescue (jeff.shapiro@intlcodeconsultants.com)

THIS IS A 2 PART CODE CHANGE. PART I WILL BE HEARD BY THE ADMINISTRATIVE CODE COMMITTEE. PART II WILL BE HEARD BY THE IRC-BUILDING CODE COMMITTEE. SEE THE TENTATIVE HEARING ORDER FOR THESE COMMITTEES.

Primary sections and titles shown as deleted include the deletion of all sections and subsections within them. For clarity, the full text of these deletions are not shown.

2021 International Building Code

Revise as follows:

[A] APPROVED AGENCY. An established and recognized ~~agency organization~~ that is regularly engaged in conducting tests, furnishing inspection services or furnishing product evaluation or certification where such ~~agency organization~~ has been *approved* by the *building official*.

Add new definition as follows:

PEER REVIEW. An independent and objective technical review conducted by an approved third party.

Revise as follows:

~~SECTION 104 DUTIES AND POWERS OF THE BUILDING OFFICIAL (Delete entire section and replace as follows)~~

Add new text as follows:

SECTION 104 DUTIES AND POWERS OF THE BUILDING OFFICIAL.

[A] 104.1 General. The building official is hereby authorized and directed to enforce the provisions of this code.

[A] 104.2 Determination of Compliance. The building official shall have the authority to determine compliance with this code, to render interpretations of this code and to adopt policies, procedures, rules and regulations in order to clarify the application of this code's provisions. Such interpretations, policies, procedures, rules and regulations:

1. Shall be in compliance with the intent and purpose of this code.
2. Shall not have the effect of waiving requirements specifically provided for in this code.

[A] 104.2.1 Listed compliance. Determination of compliance for anything required by this code, or a reference standard, to be listed shall be based on a test standard or approved listing evaluation that is germane to the provision requiring the listing. Anything required by this code, or a reference standard, to be listed shall be installed in accordance with the listing and the manufacturer's instructions. Copies of the listing standard and manufacturer's instructions shall be made available to the building official upon request.

[A] 104.2.2 Technical assistance. To determine compliance with this code, the building official is authorized to require the owner or owner's authorized agent to provide a technical opinion and report.

[A] 104.2.2.1 Cost. A technical opinion and report shall be provided without charge to the jurisdiction.

[A] 104.2.2.2 Preparer qualifications. The technical opinion and report shall be prepared by a qualified engineer, specialist, laboratory or specialty organization acceptable to the building official. The building official is authorized to require design submittals to be prepared by, and bear the stamp of, a registered design professional.

[A] 104.2.2.3 Content. The technical opinion and report shall analyze the safety properties of the design, operation or use of the building or premises and the facilities and appurtenances situated thereon, to identify and propose necessary recommendations.

[A] 104.2.2.4 Tests. Where there is insufficient evidence of compliance with the provisions of this code, the building official is authorized to require

tests as evidence of compliance. Test methods shall be as specified in this code or by other recognized test standards. In the absence of recognized test standards, the building official shall approve the testing procedures. Tests shall be performed by a party acceptable to the building official.

[A] 104.2.3 Alternative materials, design and methods of construction and equipment. The provisions of this code are not intended to prevent the installation of any material or to prohibit any design or method of construction not specifically prescribed by this code, provided that any such alternative is not specifically prohibited by this code and has been approved.

[A] 104.2.3.1 Approval authority. An alternative material, design or method of construction shall be approved where the building official finds that the proposed alternative is satisfactory and complies with Sections 104.2.3 through 104.2.3.7, as applicable.

[A] 104.2.3.2 Application and disposition. A request to use an alternative material, design or method of construction shall be submitted in writing to the building official for approval. Where the alternative material, design or method of construction is not approved, the building official shall respond in writing, stating the reasons the alternative was not approved.

[A] 104.2.3.3 Compliance with code intent. An alternative material, design or method of construction shall comply with the intent of the provisions of this code.

[A] 104.2.3.4 Equivalency criteria. An alternative material, design or method of construction shall, for the purpose intended, be not less than the equivalent of that prescribed in this code with respect to all of the following, as applicable:

1. Quality
2. Strength
3. Effectiveness
4. Durability
5. Safety

[A] 104.2.3.4.1 Fire safety equivalency. Determination of safety equivalency, with respect to fire, shall be based on an analysis that includes applicable fire safety performance properties, such as but not limited to ignitability, flame spread, heat release rate, heat of combustion, smoke development, and fire resistance. Determination of safety equivalency, with respect to structural fire safety, shall also include a structural system analysis.

[A] 104.2.3.5 Tests. Tests conducted to demonstrate equivalency in support of an alternative material, design or method of construction application shall be of a scale that is sufficient to predict performance of the end use configuration. Tests shall be performed by a party acceptable to the building official.

[A] 104.2.3.6 Reports. Supporting documentation, where necessary to assist in the approval of materials or assemblies not specifically provided for in this code, shall comply with Sections 104.2.3.6.1 and 104.2.3.6.2.

[A] 104.2.3.6.1 Evaluation reports. Evaluation reports shall be issued by an approved agency accredited to evaluate or certify products. The alternate material, design or method of construction and product evaluated shall be within the scope of accreditation of the approved agency. Criteria used for the evaluation shall be identified within the report, developed using a process that includes input from the public and made available for review by the public.

[A] 104.2.3.6.2 Other reports. Reports not complying with Section 104.2.3.6.1 shall describe criteria, including but not limited to any referenced testing or analysis, used to determine compliance with code intent and justify code equivalence, including but not limited to any referenced testing or analysis. The report shall be prepared by a qualified engineer, specialist, laboratory or specialty organization acceptable to the building official. The building official is authorized to require design submittals to be prepared by, and bear the stamp of, a registered design professional.

[A] 104.2.3.7 Peer review. The building official is authorized to require submittal of a peer review report in conjunction with a request to use an alternative material, design or method of construction, prepared by a peer reviewer that is approved by the building official.

[A] 104.2.4 Modifications. Where there are practical difficulties involved in carrying out the provisions of this code, the building official shall have the authority to grant modifications for individual cases provided that the building official shall first find that one or more special individual reasons make the strict letter of this code impractical, that the modification is in compliance with the intent and purpose of this code, and that such modification does not lessen health, accessibility, life and fire safety or structural requirements. The details of the written request for and action granting modifications shall be recorded and entered in the files of the department of building safety.

[A] 104.2.4.1 Flood hazard areas. The building official shall not grant modifications to any provision required in flood hazard areas as established by Section 1612.3 unless a determination has been made that:

1. A showing of good and sufficient cause that the unique characteristics of the size, configuration or topography of the site render the elevation standards of Section 1612 inappropriate.
2. A determination that failure to grant the variance would result in exceptional hardship by rendering the lot undevelopable.

3. A determination that the granting of a variance will not result in increased flood heights, additional threats to public safety, extraordinary public expense, cause fraud on or victimization of the public, or conflict with existing laws or ordinances.
4. A determination that the variance is the minimum necessary to afford relief, considering the flood hazard.
5. Submission to the applicant of written notice specifying the difference between the design flood elevation and the elevation to which the building is to be built, stating that the cost of flood insurance will be commensurate with the increased risk resulting from the reduced floor elevation, and stating that construction below the design flood elevation increases risks to life and property.

[A] 104.3 Applications and permits. The building official shall receive applications, review construction documents and issue permits for the erection, and alteration, demolition and moving of buildings and structures, inspect the premises for which such permits have been issued and enforce compliance with the provisions of this code.

[A] 104.3.1 Determination of substantially improved or substantially damaged existing buildings and structures in flood hazard areas. For applications for reconstruction, rehabilitation, repair, alteration, addition or other improvement of existing buildings or structures located in flood hazard areas, the building official shall determine if the proposed work constitutes substantial improvement or repair of substantial damage. Where the building official determines that the proposed work constitutes substantial improvement or repair of substantial damage, and where required by this code, the building official shall require the building to meet the requirements of Section 1612 or Section R322 of the International Residential Code, as applicable.

[A] 104.4 Right of entry. Where it is necessary to make an inspection to enforce the provisions of this code, or where the building official has reasonable cause to believe that there exists in a structure or on a premises a condition that is contrary to or in violation of this code that makes the structure or premises unsafe, dangerous or hazardous, the building official is authorized to enter the structure or premises at all reasonable times to inspect or to perform the duties imposed by this code. If such structure or premises is occupied, the building official shall present credentials to the occupant and request entry. If such structure or premises is unoccupied, the building official shall first make a reasonable effort to locate the owner, the owner's authorized agent or other person having charge or control of the structure or premises and request entry. If entry is refused, the building official shall have recourse to every remedy provided by law to secure entry.

[A] 104.4.1 Warrant. Where the building official has first obtained a proper inspection warrant or other remedy provided by law to secure entry, an owner, the owner's authorized agent or occupant or person having charge, care or control of the building or premises shall not fail or neglect, after proper request is made as herein provided, to permit entry therein by the building official for the purpose of inspection and examination pursuant to this code.

[A] 104.5 Identification. The building official shall carry proper identification when inspecting structures or premises in the performance of duties under this code.

[A] 104.6 Notices and orders. The building official shall issue necessary notices or orders to ensure compliance with this code in accordance with Section 114.

[A] 104.7 Official records. The building official shall keep official records as required by Sections 104.7.1 through 104.7.5. Such official records shall be retained for not less than 5 years or for as long as the building or structure to which such records relate remains in existence, unless otherwise provided by other regulations.

[A] 104.7.1 Approvals. A record of approvals shall be maintained by the building official and shall be available for public inspection during business hours in accordance with applicable laws.

[A] 104.7.2 Inspections. The building official shall keep a record of each inspection made, including notices and orders issued, showing the findings and disposition of each.

[A] 104.7.3 Code alternatives and modifications. Application for alternative materials, design and methods of construction and equipment in accordance with Section 104.2.3; modifications in accordance with Section 104.2.4; and documentation of the final decision of the building official for either shall be in writing and shall be retained in the official records.

[A] 104.7.4 Tests. The building official shall keep a record of tests conducted to comply with Sections 104.2.2.4 and 104.2.3.5.

[A] 104.7.5 Fees. The building official shall keep a record of fees collected and refunded in accordance with Section 109.

[A] 104.8 Liability. The building official, member of the board of appeals or employee charged with the enforcement of this code, while acting for the jurisdiction in good faith and without malice in the discharge of the duties required by this code or other pertinent law or ordinance, shall not thereby be personally liable, either civilly or criminally, and is hereby relieved from personal liability for any damage accruing to persons or property as a result of any act or by reason of an act or omission in the discharge of official duties.

[A] 104.8.1 Legal defense. Any suit or criminal complaint instituted against any officer or employee because of an act performed by that officer or employee in the lawful discharge of duties under the provisions of this code or other laws or ordinances implemented through the enforcement of this code shall be defended by legal representatives of the jurisdiction until the final termination of the proceedings. The building official or any subordinate shall not be liable for costs in any action, suit or proceeding that is instituted in pursuance of the provisions of this code.

[A] 104.9 Approved materials and equipment. Materials, equipment and devices approved by the building official shall be constructed and

installed in accordance with such approval.

[A] 104.9.1 Material and equipment reuse. Materials, equipment and devices shall not be reused unless such elements are in good working condition and approved.

2021 International Existing Building Code

Add new definition as follows:

APPROVED AGENCY. An established and recognized organization that is regularly engaged in conducting tests, furnishing inspection services or furnishing product evaluation or certification where such organization has been approved by the code official.

PEER REVIEW. An independent and objective technical review conducted by an approved third party.

Revise as follows:

SECTION 104 **DUTIES AND POWERS OF THE CODE OFFICIAL** *(Delete entire section and replace as follows)*

Add new text as follows:

SECTION 104 **DUTIES AND POWERS OF THE CODE OFFICIAL**

[A] 104.1 General. The code official is hereby authorized and directed to enforce the provisions of this code.

[A] 104.2 Determination of Compliance. The code official shall have the authority to determine compliance with this code, to render interpretations of this code and to adopt policies, procedures, rules and regulations in order to clarify the application of this code's provisions. Such interpretations, policies, procedures, rules and regulations:

1. Shall be in compliance with the intent and purpose of this code.
2. Shall not have the effect of waiving requirements specifically provided for in this code.

[A] 104.2.1 Listed compliance. Determination of compliance for anything required by this code, or a reference standard, to be listed shall be based on a test standard or approved listing evaluation that is germane to the provision requiring the listing. Anything required by this code, or a reference standard, to be listed shall be installed in accordance with the listing and the manufacturer's instructions. Copies of the listing standard and manufacturer's instructions shall be made available to the code official upon request.

[A] 104.2.2 Technical assistance. To determine compliance with this code, the code official is authorized to require the owner or owner's authorized agent to provide a technical opinion and report.

[A] 104.2.2.1 Cost. A technical opinion and report shall be provided without charge to the jurisdiction.

[A] 104.2.2.2 Preparer qualifications. The technical opinion and report shall be prepared by a qualified engineer, specialist, laboratory or fire safety specialty organization acceptable to the code official. The code official is authorized to require design submittals to be prepared by, and bear the stamp of, a registered design professional.

[A] 104.2.2.3 Content. The technical opinion and report shall analyze the fire safety properties of the design, operation or use of the building or premises and the facilities and appurtenances situated thereon, to identify and propose necessary recommendations.

[A] 104.2.2.4 Tests. Where there is insufficient evidence of compliance with the provisions of this code, the code official is authorized to require tests as evidence of compliance. Test methods shall be as specified in this code or by other recognized test standards. In the absence of recognized test standards, the code official shall approve the testing procedures. Tests shall be performed by a party acceptable to the code official.

[A] 104.2.3 Alternative materials, design and methods of construction, and equipment. The provisions of this code are not intended to prevent the installation of any material or to prohibit any design or method of construction not specifically prescribed by this code, provided that any such alternative is not specifically prohibited by this code and has been approved.

[A] 104.2.3.1 Approval authority. An alternative material, design or method of construction shall be approved where the code official finds that the proposed alternative is satisfactory and complies with Sections 104.2.3.2 through 104.2.3.7, as applicable.

[A] 104.2.3.2 Application and disposition. A request to use an alternative material, design or method of construction shall be submitted in writing to the code official for approval. Where the alternative material, design or method of construction is not approved, the code official shall respond in writing, stating the reasons the alternative was not approved.

[A] 104.2.3.3 Compliance with code intent. An alternative material, design or method of construction shall comply with the intent of the provisions of this code.

[A] 104.2.3.4 Equivalency criteria. An alternative material, design or method of construction shall, for the purpose intended, be not less than the equivalent of that prescribed in this code with respect to all of the following, as applicable:

1. Quality
2. Strength
3. Effectiveness
4. Durability
5. Safety

[A] 104.2.3.4.1 Fire safety equivalency. Determination of safety equivalency, with respect to fire, shall be based on an analysis that includes applicable fire safety performance properties, such as but not limited to ignitability, flame spread, heat release rate, heat of combustion, smoke development, and fire resistance. Determination of safety equivalency, with respect to structural fire safety, shall also include a structural system analysis.

[A] 104.2.3.5 Tests. Tests conducted to demonstrate equivalency in support of an alternative material, design or method of construction application shall be of a scale that is sufficient to predict performance of the end use configuration. Tests shall be performed by a party acceptable to the code official.

[A] 104.2.3.6 Reports. Supporting documentation, where necessary to assist in the approval of materials or assemblies not specifically provided for in this code, shall comply with Sections 104.2.3.6.1 and 104.2.3.6.2.

[A] 104.2.3.6.1 Evaluation reports. Evaluation reports shall be issued by an approved agency accredited to evaluate or certify products. The alternative material, design or method of construction and product evaluated shall be within the scope of accreditation of the approved agency. Criteria used for the evaluation shall be identified within the report, developed using a process that includes input from the public, and made available for review by the public.

[A] 104.2.3.6.2 Other reports. Reports not complying with Section 104.2.3.6.1 shall describe criteria, including but not limited to any referenced testing or analysis, used to determine compliance with code intent and justify code equivalence. The report shall be prepared by a qualified engineer, specialist, laboratory or fire safety specialty organization acceptable to the fire code official. The code official is authorized to require design submittals to be prepared by, and bear the stamp of, a registered design professional.

[A] 104.2.3.7 Peer review. The code official is authorized to require submittal of a peer review report in conjunction with a request to use an alternative material, design or method of construction, prepared by a peer reviewer that is approved by the code official.

[A] 104.2.4 Modifications. Where there are practical difficulties involved in carrying out the provisions of this code, the code official shall have the authority to grant modifications for individual cases, provided that the code official shall first find that one or more special individual reasons make the strict letter of this code impractical, that the modification is in compliance with the intent and purpose of this code, and that such modification does not lessen health, accessibility, life and fire safety, or structural requirements. The details of the written request for and action granting modifications shall be recorded and entered in the files of the department of building safety.

[A] 104.2.4.1 Flood hazard areas. For existing buildings located in flood hazard areas for which repairs, alterations and additions constitute substantial improvement, the code official shall not grant modifications to provisions related to flood resistance unless a determination is made that:

1. The applicant has presented good and sufficient cause that the unique characteristics of the size, configuration or topography of the site render compliance with the flood-resistant construction provisions inappropriate.
2. Failure to grant the modification would result in exceptional hardship.
3. The granting of the modification will not result in increased flood heights, additional threats to public safety, extraordinary public expense nor create nuisances, cause fraud on or victimization of the public, or conflict with existing laws or ordinances.
4. The modification is the minimum necessary to afford relief, considering the flood hazard.

A written notice will be provided to the applicant specifying, if applicable, the difference between the design flood elevation and the elevation to which the building is to be built, stating that the cost of flood insurance will be commensurate with the increased risk resulting from the reduced floor elevation and that construction below the design flood elevation increases risks to life and property.

[A] 104.3 Applications and permits. The code official is authorized to receive applications, review construction documents and issue permits for the repair and construction regulated by this code; inspect the premises for which such permits have been issued; and enforce compliance with the provisions of this code.

[A] 104.3.1 Determination of substantially improved or substantially damaged existing buildings and structures in flood hazard areas.

For applications for reconstruction, rehabilitation, repair, alteration, addition or other improvement of existing buildings or structures located in flood hazard areas, the code official shall determine where the proposed work constitutes substantial improvement or repair of substantial damage. Where the code official determines that the proposed work constitutes substantial improvement or repair of substantial damage, and where required by this code, the code official shall require the building to meet the requirements of Section 1612 of the International Building Code, or Section R322 of the International Residential Code, as applicable.

[A] 104.3.2 Preliminary meeting. When requested by the permit applicant or the code official, the code official shall meet with the permit applicant prior to the application for a construction permit to discuss plans for the proposed work or change of occupancy in order to establish the specific applicability of the provisions of this code.

Exception: Repairs and Level 1 alterations.

[A] 104.3.3 Building evaluation. The code official is authorized to require an existing building to be investigated and evaluated by a registered design professional based on the circumstances agreed on at the preliminary meeting. The design professional shall notify the code official if any potential noncompliance with the provisions of this code is identified.

[A] 104.4 Right of entry. Where it is necessary to make an inspection to enforce the provisions of this code, or where the code official has reasonable cause to believe that there exists in a structure or on a premises any conditions or violations of this code that makes the structure or premises unsafe, dangerous or hazardous, the code official shall have the authority to enter the structure or premises at all reasonable times to inspect or to perform the duties imposed on the code official by this code. If such structure or premises is occupied, the code official shall present credentials to the occupant and request entry. If such structure or premises be unoccupied, the code official shall first make a reasonable effort to locate the owner, the owner's authorized agent or other person having charge or control of the structure or premises and request entry. If entry is refused, the code official shall have recourse to every remedy provided by law to secure entry.

[A] 104.4.1 Warrant. Where the code official has first obtained a proper inspection warrant or other remedy provided by law to secure entry, an owner, the owner's authorized agent or occupant or person having charge, care or control of the building or premises shall not fail or neglect, after proper request is made as herein provided, to permit entry therein by the code official for the purpose of inspection and examination pursuant to this code.

[A] 104.5 Identification. The code official shall carry proper identification when inspecting structures or premises in the performance of duties under this code.

[A] 104.6 Notices and orders. The code official is authorized to issue such notices or orders as are required to affect compliance with this code in accordance with Section 113.

[A] 104.7 Official records. The code official shall keep official records as required by Sections 104.7.1 through 104.7.5. Such official records shall be retained for not less than 5 years or for as long as the structure or activity to which such records relate remains in existence, unless otherwise provided by other regulations.

[A] 104.7.1 Approvals. A record of approvals shall be maintained by the code official and shall be available for public inspection during business hours in accordance with applicable laws.

[A] 104.7.2 Inspections. The code official shall keep a record of each inspection made, including notices and orders issued, showing the findings and disposition of each.

[A] 104.7.3 Code alternatives and modifications. Application for alternative materials, design and methods of construction and equipment in accordance with Section 104.2.3; modifications in accordance with Section 104.2.4; and documentation of the final decision of the code official for either shall be in writing and shall be officially recorded in the permanent records of the code official.

[A] 104.7.4 Tests. The code official shall keep a record of tests conducted to comply with Sections 104.2.2.4 and 104.2.3.5.

[A] 104.7.5 Fees. The code official shall keep a record of fees collected and refunded in accordance with Section 108.

[A] 104.8 Liability. The code official, member of the Board of Appeals, officer or employee charged with the enforcement of this code, while acting for the jurisdiction, in good faith and without malice in the discharge of the duties required by this code or other pertinent law or ordinance, shall not thereby be personally liable, either civilly or criminally, and is hereby relieved from personal liability for any damage accruing to persons or property as a result of any act or by reason of an act or omission in the discharge of official duties.

[A] 104.8.1 Legal defense. Any suit or criminal complaint instituted against any officer or employee because of an act performed by that officer or employee in the lawful discharge of duties and under the provisions of this code or other laws or ordinances implemented through the enforcement of this code shall be defended by legal representatives of the jurisdiction until the final termination of the proceedings. The code official or any subordinate shall not be liable for costs in any action, suit or proceeding that is instituted in pursuance of the provisions of this code.

[A] 104.9 Approved materials and equipment. Materials, equipment and devices approved by the code official shall be constructed and installed in accordance with such approval.

[A] 104.9.1 Material and equipment reuse. Materials, equipment and devices shall not be reused unless such elements are in good working condition and approved.

2021 International Fire Code

Add new definition as follows:

APPROVED AGENCY. An established and recognized organization that is regularly engaged in conducting tests, furnishing inspection services or furnishing product evaluation or certification where such organization has been approved by the fire code official.

PEER REVIEW. An independent and objective technical review conducted by an approved third party.

Revise as follows:

SECTION 104 **DUTIES AND POWERS OF THE FIRE CODE OFFICIAL** *(Delete entire section and replace as follows)*

Add new text as follows:

SECTION 104 **DUTIES AND POWERS OF THE FIRE CODE OFFICIAL**

[A] 104.1 General. The fire code official is hereby authorized to enforce the provisions of this code.

[A] 104.2 Determination of compliance. The fire code official shall have the authority to determine compliance with this code, to render interpretations of this code and to adopt policies, procedures, rules and regulations in order to clarify the application of this code's provisions. Such interpretations, policies, procedures, rules and regulations:

1. Shall be in compliance with the intent and purpose of this code.
2. Shall not have the effect of waiving requirements specifically provided for in this code.

[A] 104.2.1 Listed compliance. Determination of compliance for anything required by this code, or a reference standard, to be listed shall be based on a test standard or approved listing evaluation that is germane to the provision requiring the listing. Anything required by this code, or a reference standard, to be listed shall be installed in accordance with the listing and the manufacturer's instructions. Copies of the listing standard and manufacturer's instructions shall be made available to the fire code official upon request.

[A] 104.2.2 Technical assistance. To determine compliance with this code, the fire code official is authorized to require the owner or owner's authorized agent to provide a technical opinion and report.

[A] 104.2.2.1 Cost. A technical opinion and report shall be provided without charge to the jurisdiction.

[A] 104.2.2.2 Preparer qualifications. The technical opinion and report shall be prepared by a qualified engineer, specialist, laboratory or fire safety specialty organization acceptable to the fire code official. The fire code official is authorized to require design submittals to be prepared by, and bear the stamp of, a registered design professional.

[A] 104.2.2.3 Content. The technical opinion and report shall analyze the fire safety properties of the design, operation or use of the building or premises and the facilities and appurtenances situated thereon, to identify and propose necessary recommendations.

[A] 104.2.2.4 Tests. Where there is insufficient evidence of compliance with the provisions of this code, the fire code official is authorized to require tests as evidence of compliance. Test methods shall be as specified in this code or by other recognized test standards. In the absence of recognized test standards, the fire code official shall approve the testing procedures. Tests shall be performed by a party acceptable to the fire code official.

[A] 104.2.3 Alternative materials, design and methods of construction and equipment. The provisions of this code are not intended to prevent the installation of any material or to prohibit any design or method of construction not specifically prescribed by this code, provided that any such alternative is not specifically prohibited by this code and has been approved.

[A] 104.2.3.1 Approval authority. An alternative material, design or method of construction shall be approved where the fire code official finds that the proposed alternative is satisfactory and complies with Sections 104.2.3.2 through 104.2.3.7, as applicable.

[A] 104.2.3.2 Application and disposition. A request to use an alternative material, design or method of construction shall be submitted in writing to the fire code official for approval. Where the alternative material, design or method of construction is not approved, the fire code official shall respond in writing, stating the reasons the alternative was not approved.

[A] 104.2.3.3 Compliance with code intent. An alternative material, design or method of construction shall comply with the intent of the provisions of this code.

[A] 104.2.3.4 Equivalency criteria. An alternative material, design or method of construction shall, for the purpose intended, be not less than the

equivalent of that prescribed in this code with respect to all of the following, as applicable:

1. Quality
2. Strength
3. Effectiveness
4. Durability
5. Safety

[A] 104.2.3.4.1 Fire safety equivalency. Determination of safety equivalency, with respect to fire, shall be based on an analysis that includes applicable fire safety performance properties, such as but not limited to ignitability, flame spread, heat release rate, heat of combustion, smoke development, and fire resistance. Determination of safety equivalency, with respect to structural fire safety, shall also include a structural system analysis.

[A] 104.2.3.5 Tests. Tests conducted to demonstrate equivalency in support of an alternative material, design or method of construction application shall be of a scale that is sufficient to predict performance of the end use configuration. Tests shall be performed by a party acceptable to the fire code official.

[A] 104.2.3.6 Reports. Supporting documentation, where necessary to assist in the approval of materials or assemblies not specifically provided for in this code, shall comply with Sections 104.2.3.6.1 and 104.2.3.6.2.

[A] 104.2.3.6.1 Evaluation reports. Evaluation reports shall be issued by an approved agency accredited to evaluate or certify products. The alternative material, design or method of construction and product evaluated shall be within the scope of accreditation of the approved agency. Criteria used for the evaluation shall be identified within the report, developed using a process that includes input from the public, and made available for review by the public.

[A] 104.2.3.6.2 Other reports. Reports not complying with Section 104.2.3.6.1 shall describe criteria, including but not limited to any referenced testing or analysis, used to determine compliance with code intent and justify code equivalence. The report shall be prepared by a qualified engineer, specialist, laboratory or fire safety specialty organization acceptable to the fire code official. The fire code official is authorized to require design submittals to be prepared by, and bear the stamp of, a registered design professional.

[A] 104.2.3.7 Peer review. The fire code official is authorized to require submittal of a peer review report in conjunction with a request to use an alternative material, design or method of construction, prepared by a peer reviewer that is approved by the fire code official.

[A] 104.2.4 Modifications. Where there are practical difficulties involved in carrying out the provisions of this code, the fire code official shall have the authority to grant modifications for individual cases, provided that the fire code official shall first find that one or more special individual reasons make the strict letter of this code impractical, that the modification is in compliance with the intent and purpose of this code, and that such modification does not lessen health, life and fire safety requirements. The details of the written request for and action granting modifications shall be recorded and entered in the files of the department of fire prevention.

[A] 104.3 Applications and permits. The fire code official is authorized to receive applications, review construction documents and issue permits for construction regulated by this code, issue permits for operations regulated by this code, inspect the premises for which such permits have been issued and enforce compliance with the provisions of this code.

[A] 104.4 Right of entry. Where it is necessary to make an inspection to enforce the provisions of this code, or where the fire code official has reasonable cause to believe that there exists in a structure or on a premises any conditions or violations of this code that make the structure or premises unsafe, dangerous or hazardous, the fire code official shall have the authority to enter the structure or premises at all reasonable times to inspect or to perform the duties imposed on the fire code official by this code. If such structure or premises is occupied, the fire code official shall present credentials to the occupant and request entry. If such structure or premises is unoccupied, the fire code official shall first make a reasonable effort to locate the owner, the owner's authorized agent or other person having charge or control of the structure or premises and request entry. If entry is refused, the fire code official shall have recourse to every remedy provided by law to secure entry.

[A] 104.4.1 Warrant. Where the fire code official has first obtained a proper inspection warrant or other remedy provided by law to secure entry, an owner, the owner's authorized agent or occupant or person having charge, care or control of the building or premises shall not fail or neglect, after proper request is made as herein provided, to permit entry therein by the fire code official for the purpose of inspection and examination pursuant to this code.

[A] 104.5 Identification. The fire code official shall carry proper identification when inspecting structures or premises in the performance of duties under this code.

[A] 104.6 Notices and orders. The fire code official is authorized to issue such notices or orders as are required to affect compliance with this code in accordance with Sections 112.1 and 112.2.

[A] 104.7 Official records. The fire code official shall keep official records as required by Sections 104.7.1 through 104.7.6. Such official records shall be retained for not less than 5 years or for as long as the structure or activity to which such records relate remains in existence, unless otherwise provided by other regulations.

[A] 104.7.1 Approvals. A record of approvals shall be maintained by the fire code official and shall be available for public inspection during business hours in accordance with applicable laws.

[A] 104.7.2 Inspections. The fire code official shall keep a record of each inspection made, including notices and orders issued, showing the findings and disposition of each.

104.7.3 Fire records. The fire code official fire department shall keep a record of fires occurring within its jurisdiction and of facts concerning the same, including statistics as to the extent of such fires and the damage caused thereby, together with other information as required by the fire code official.

[A] 104.7.4 Code alternatives and modifications. Application for alternative materials, design and methods of construction and equipment in accordance with Section 104.2.3; modifications in accordance with Section 104.2.4; and documentation of the final decision of the fire code official for either shall be in writing and shall be officially recorded in the permanent records of the fire code official.

[A] 104.7.5 Tests. The fire code official shall keep a record of tests conducted to comply with Sections 104.2.2.4 and 104.2.3.5.

[A] 104.7.6 Fees. The fire code official shall keep a record of fees collected and refunded in accordance with Section 107.

[A] 104.8 Liability. The fire code official, member of the board of appeals, officer or employee charged with the enforcement of this code, while acting for the jurisdiction, in good faith and without malice in the discharge of the duties required by this code or other pertinent law or ordinance, shall not be personally liable, either civilly or criminally, and is hereby relieved from all personal liability for any damage accruing to persons or property as a result of an act or by reason of an act or omission in the discharge of official duties.

[A] 104.8.1 Legal defense. Any suit or criminal complaint instituted against any officer or employee because of an act performed by that officer or employee in the lawful discharge of duties under the provisions of this code shall be defended by the legal representatives of the jurisdiction until the final termination of the proceedings. The fire code official or any subordinate shall not be liable for costs in an action, suit or proceeding that is instituted in pursuance of the provisions of this code; and any officer of the department of fire prevention, acting in good faith and without malice, shall be free from liability for acts performed under any of its provisions or by reason of any act or omission in the performance of official duties in connection therewith.

[A] 104.9 Approved materials and equipment. Materials, equipment and devices approved by the fire code official shall be constructed and installed in accordance with such approval.

[A] 104.9.1 Material and equipment reuse. Materials, equipment and devices shall not be reused unless such elements are in good working condition and approved.

104.10 Fire investigations. The fire code official, the fire department or other responsible authority shall have the authority to investigate the cause, origin and circumstances of any fire, explosion or other hazardous condition. Information that could be related to trade secrets or processes shall not be made part of the public record, except as directed by a court of law.

104.10.1 Assistance from other agencies. Police and other enforcement agencies shall have authority to render necessary assistance in the investigation of fires when requested to do so.

104.11 Authority at fires and other emergencies. The fire chief or officer of the fire department in charge at the scene of a fire or other emergency involving the protection of life or property, or any part thereof, shall have the authority to direct such operation as necessary to extinguish or control any fire, perform any rescue operation, investigate the existence of suspected or reported fires, gas leaks or other hazardous conditions or situations, or take any other action necessary in the reasonable performance of duty. In the exercise of such power, the fire chief is authorized to prohibit any person, vehicle, vessel or thing from approaching the scene, and is authorized to remove, or cause to be removed or kept away from the scene, any vehicle, vessel or thing that could impede or interfere with the operations of the fire department and, in the judgment of the fire chief, any person not actually and usefully employed in the extinguishing of such fire or in the preservation of property in the vicinity thereof.

104.11.1 Barricades. The fire chief or officer of the fire department in charge at the scene of an emergency is authorized to place ropes, guards, barricades or other obstructions across any street, alley, place or private property in the vicinity of such operation so as to prevent accidents or interference with the lawful efforts of the fire department to manage and control the situation and to handle fire apparatus.

104.11.2 Obstructing operations. Persons shall not obstruct the operations of the fire department in connection with extinguishment or control of any fire, or actions relative to other emergencies, or disobey any lawful command of the fire chief or officer of the fire department in charge of the emergency, or any part thereof, or any lawful order of a police officer assisting the fire department.

104.11.3 Systems and devices. Persons shall not render a system or device inoperative during an emergency unless by direction of the fire chief or fire department official in charge of the incident.

2021 International Property Maintenance Code

Add new definition as follows:

APPROVED AGENCY. An established and recognized organization that is regularly engaged in conducting tests, furnishing inspection services or furnishing product evaluation or certification where such organization has been approved by the code official.

PEER REVIEW. An independent and objective technical review conducted by an approved third party.

Revise as follows:

SECTION 105
~~DUTIES AND POWERS OF THE CODE OFFICIAL~~
(Delete entire section and replace as follows)

SECTION 106
~~APPROVAL~~
(Delete entire section and replace as follows)

Add new text as follows:

SECTION 105
DUTIES AND POWERS OF THE CODE OFFICIAL

[A] 105.1 General. The code official is hereby authorized and directed to enforce the provisions of this code.

[A] 105.2 Determination of compliance. The code official shall have the authority to determine compliance with this code, to render interpretations of this code and to adopt policies, procedures, rules and regulations in order to clarify the application of this code's provisions. Such interpretations, policies, procedures, rules and regulations:

1. Shall be in compliance with the intent and purpose of this code.
2. Shall not have the effect of waiving requirements specifically provided for in this code.

[A] 105.2.1 Technical assistance. To determine compliance with this code, the code official is authorized to require the owner or owner's authorized agent to provide a technical opinion and report.

[A] 105.2.1.1 Cost. A technical opinion and report shall be provided without charge to the jurisdiction.

[A] 105.2.1.2 Preparer qualifications. The technical opinion and report shall be prepared by a qualified engineer, specialist, laboratory or specialty organization acceptable to the code official. The code official is authorized to require design submittals to be prepared by, and bear the stamp of, a registered design professional.

[A] 105.2.1.3 Content. The technical opinion and report shall analyze the safety properties of the design, operation or use of the building or premises and the facilities and appurtenances situated thereon, to identify and propose necessary recommendations.

[A] 105.2.1.4 Tests. Where there is insufficient evidence of compliance with the provisions of this code, the code official is authorized to require tests as evidence of compliance. Test methods shall be as specified in this code or by other recognized test standards. In the absence of recognized test standards, the code official shall approve the testing procedures. Tests shall be performed by a party acceptable to the code official.

[A] 105.2.2 Alternative materials, design and methods of construction and equipment. The provisions of this code are not intended to prevent the installation of any material or to prohibit any design or method of construction not specifically prescribed by this code, provided that such alternative is not specifically prohibited by this code and has been approved.

[A] 105.2.2.1 Approval authority. An alternative material, design or method of construction shall be approved where the code official finds that the proposed alternative is satisfactory and complies with Sections 105.2.2 through 105.2.2.7, as applicable.

[A] 105.2.2.2 Application and disposition. A request to use an alternative material, design or method of construction shall be submitted in writing to the code official for approval. Where the alternative material, design or method of construction is not approved, the code official shall respond in writing, stating the reasons the alternative was not approved.

[A] 105.2.2.3 Compliance with code intent. An alternative material, design or method of construction shall comply with the intent of the provisions of this code.

[A] 105.2.2.4 Equivalency criteria. An alternative material, design or method of construction shall, for the purpose intended, be not less than the equivalent of that prescribed in this code with respect to all of the following, as applicable:

1. Strength
2. Quality
3. Strength
4. Durability

5. Safety

[A] 105.2.2.4.1 Fire safety equivalency. Determination of safety equivalency, with respect to fire, shall be based on an analysis that includes applicable fire safety performance properties, such as but not limited to ignitability, flame spread, heat release rate, heat of combustion, smoke development, and fire resistance. Determination of safety equivalency, with respect to structural fire safety, shall also include a structural system analysis.

[A] 105.2.2.5 Tests. Tests conducted to demonstrate equivalency in support of an alternative material, design or method of construction application shall be of a scale that is sufficient to predict safety performance of the end use configuration. Tests shall be performed by a party acceptable to the code official.

[A] 105.2.2.6 Reports. Supporting documentation, where necessary to assist in the approval of materials or assemblies not specifically provided for in this code, shall comply with Sections 105.2.2.6.1 and 105.2.2.6.2.

[A] 105.2.2.6.1 Evaluation reports. Evaluation reports shall be issued by an approved agency accredited to evaluate or certify products. The alternate material, design or method of construction and product evaluated shall be within the scope of accreditation of the approved agency. Criteria used for the evaluation shall be identified within the report, developed using a process that includes input from the public and made available for review by the public.

[A] 105.2.2.6.2 Other reports. Reports not complying with Section 105.2.2.6.1 shall describe criteria, including but not limited to any referenced testing or analysis, used to determine compliance with code intent and justify code equivalence, including but not limited to any referenced testing or analysis. The report shall be prepared by a qualified engineer, specialist, laboratory or specialty organization acceptable to the code official. The code official is authorized to require design submittals to be prepared by, and bear the stamp of, a registered design professional.
[A] 105.2.2.6.2 Other reports. Reports not complying with Section 105.2.2.6.1 shall describe criteria, including but not limited to any referenced testing or analysis, used to determine compliance with code intent and justify code equivalence, including but not limited to any referenced testing or analysis. The report shall be prepared by a qualified engineer, specialist, laboratory or specialty organization acceptable to the code official. The code official is authorized to require design submittals to be prepared by, and bear the stamp of, a registered design professional.

[A] 105.2.2.7 Peer review. The code official is authorized to require submittal of a peer review report in conjunction with a request to use an alternative material, design or method of construction, prepared by a peer reviewer that is approved by the code official.

[A] 105.2.3 Modifications. Whenever there are practical difficulties involved in carrying out the provisions of this code, the code official shall have the authority to grant modifications for individual cases provided that the code official shall first find that one or more special individual reasons make the strict letter of this code impractical, that the modification is in compliance with the intent and purpose of this code and that such modification does not lessen health, life and fire safety requirements. The details of the written request for and action granting modifications shall be recorded and entered in the department files.

[A] 105.3 Inspections. The code official shall have the authority to conduct inspections, or shall accept reports of inspection by approved agencies or individuals. Reports of such inspections shall be in writing and be certified by a responsible officer of such approved agency or by the responsible individual.

[A] 105.4 Right of entry. Where it is necessary to make an inspection to enforce the provisions of this code, or whenever the code official has reasonable cause to believe that there exists in a structure or upon a premises a condition in violation of this code, the code official is authorized to enter the structure or premises at all reasonable times to inspect or perform the duties imposed by this code. If such structure or premises is occupied the code official shall present credentials to the occupant and request entry. If such structure or premises is unoccupied, the code official shall first make a reasonable effort to locate the owner, owner's authorized agent or other person having charge or control of the structure or premises and request entry. If entry is refused, the code official shall have recourse to every remedy provided by law to secure entry.

[A] 105.4.1 Warrant. Where the code official has first obtained a proper inspection warrant or other remedy provided by law to secure entry, an owner, the owner's authorized agent or occupant or person having charge, care or control of the building or premises shall not fail or neglect, after proper request is made as herein provided, to permit entry therein by the code official for the purpose of inspection and examination pursuant to this code.

[A] 105.5 Identification. The code official shall carry proper identification when inspecting structures or premises in the performance of duties under this code.

[A] 105.6 Notices and orders. The code official shall issue all necessary notices or orders to ensure compliance with this code in accordance with Section 111.4.

[A] 105.7 Official records. The code official shall keep official records as required by Sections 105.7.1 through 105.7.5. Such official records shall be retained for not less than 5 years or for as long as the building or structure to which such records relate remains in existence, unless otherwise provided by other regulations.

[A] 105.7.1 Approvals. A record of approvals shall be maintained by the code official and shall be available for public inspection during business hours in accordance with applicable laws.

[A] 105.7.2 Inspections. The building official shall keep a record of each inspection made, including notices and orders issued, showing the findings and disposition of each.

[A] 105.7.3 Code alternatives and modifications. Application for alternative materials, design and methods of construction and equipment in accordance with Section 105.2.2; modifications in accordance with Section 105.2.3; and documentation of the final decision of the code official for either shall be in writing and shall be retained in the official records.

[A] 105.7.4 Tests. The code official shall keep a record of tests conducted to comply with Sections 105.2.1.4 and 105.2.2.5.

[A] 105.7.5 Fees. The code official shall keep a record of fees collected and refunded in accordance with Section 104.

[A] 105.8 Liability. The code official, member of the board of appeals or employee charged with the enforcement of this code, while acting for the jurisdiction in good faith and without malice in the discharge of the duties required by this code or other pertinent law or ordinance, shall not thereby be personally liable, either civilly or criminally, and is hereby relieved from personal liability for any damage accruing to persons or property as a result of an act or by reason of an act or omission in the discharge of official duties.

[A] 105.8.1 Legal defense. Any suit or criminal complaint instituted against any officer or employee because of an act performed by that officer or employee in the lawful discharge of duties and under the provisions of this code or other laws or ordinances implemented through the enforcement of this code shall be defended by the legal representative of the jurisdiction until the final termination of the proceedings. The code official or any subordinate shall not be liable for costs in an action, suit or proceeding that is instituted in pursuance of the provisions of this code.

[A] 105.9 Approved materials and equipment. Materials, equipment and devices approved by the code official shall be constructed and installed in accordance with such approval.

[A] 105.9.1 Material and equipment reuse. Materials, equipment and devices shall not be reused unless such elements are in good working condition and approved.

2021 International Wildland-Urban Interface Code

Add new definition as follows:

APPROVED AGENCY. An established and recognized organization that is regularly engaged in conducting tests, furnishing inspection services or furnishing product evaluation or certification where such organization has been approved by the code official.

PEER REVIEW. An independent and objective technical review conducted by an approved third party.

REGISTERED DESIGN PROFESSIONAL. An architect or engineer, registered or licensed to practice professional architecture or engineering, as defined by the statutory requirements of the professional registration laws of the state in which the project is to be constructed.

Revise as follows:

[A] 102.5 ~~104.4~~ Subjects not regulated by this code. Where applicable standards or requirements are not set forth in this code, or are contained within other laws, codes, regulations, ordinances or policies adopted by the jurisdiction, compliance with applicable standards of other nationally recognized safety standards, as *approved*, shall be deemed as prima facie evidence of compliance with the intent of this code. Nothing herein shall derogate from the authority of the code official to determine compliance with codes or standards for those activities or installations within the code official's jurisdiction or responsibility.

[A] 102.6 ~~104.5~~ Matters not provided for. Requirements that are essential for the public safety of an existing or proposed activity, building or structure, or for the safety of the occupants thereof, which are not specifically provided for by this code, shall be determined by the *code official* consistent with the necessity to establish the minimum requirements to safeguard the public health, safety and general welfare.

SECTION 104

AURHORITY OF THE CODE OFFICIAL

(Delete Section 104.1 through 104.3.1, 104.6 and 104.7 and replace as follows)

SECTION 105

COMPLIANCE ALTERNATIVES

(Delete entire section and replace as follows)

Add new text as follows:

SECTION 104

DUTIES AND POWERS OF THE CODE OFFICIAL

[A] 104.1 Powers and duties of the code official. The code official is hereby authorized to enforce the provisions of this code.

[A] 104.2 Determination of compliance. The code official shall have the authority to determine compliance with this code, to render interpretations of this code and to adopt policies, procedures, rules and regulations to clarify the application of this code's provisions. Such interpretations, policies, procedures, rules and regulations:

1. Shall be in compliance with the intent and purpose of this code.
2. Shall not have the effect of waiving requirements specifically provided for in this code.

[A] 104.2.1 Technical assistance. To determine compliance with this code, the code official is authorized to require the owner, the owner's authorized agent or the person in possession or control of the building or premises to provide a technical opinion and report.

[A] 104.2.1.1 Cost. A technical opinion and report shall be provided without charge to the jurisdiction.

[A] 104.2.1.2 Preparer qualifications. The technical opinion and report shall be prepared by a qualified engineer, specialist, laboratory or fire safety specialty organization acceptable to the code official. The code official is authorized to require design submittals to be prepared by, and bear the stamp of, a registered design professional.

[A] 104.2.1.3 Content. The technical opinion and report shall analyze the fire safety of the design, operation or use of the building or premises, the facilities and appurtenances situated thereon and fuel management to identify and propose necessary recommendations.

[A] 104.2.1.4 Tests. Where there is insufficient evidence of compliance with the provisions of this code, the code official is authorized to require tests as evidence of compliance. Test methods shall be as specified in this code or by other recognized test standards. In the absence of recognized test standards, the code official shall approve the testing procedures. Tests shall be performed by a party acceptable to the code official.

[A] 104.2.2 Alternative materials, design and methods. The provisions of this code are not intended to prevent the installation of any material or to prohibit any design or method not specifically prescribed by this code, provided that any such alternative is not specifically prohibited by this code and has been approved.

[A] 104.2.2.1 Approval authority. An alternative material, design or method shall be approved where the code official in concurrence with the code official finds that the proposed alternative is satisfactory and complies with Sections 104.2.2.2 through 104.2.2.7, as applicable.

[A] 104.2.2.2 Application and disposition. A request to use an alternative material, design or method of construction shall be submitted in writing to the code official for approval. Where the alternative material, design or method of construction is not approved, the code official shall respond in writing, stating the reasons the alternative was not approved.

[A] 104.2.2.3 Compliance with code intent. An alternative material, design or method of construction shall comply with the intent of the provisions of this code.

[A] 104.2.2.4 Equivalency criteria. An alternative material, design or method of construction shall, for the purpose intended, be not less than the equivalent of that prescribed in this code with respect to all of the following, as applicable:

1. Quality
2. Strength
3. Effectiveness
4. Durability
5. Safety

[A] 104.2.2.4.1 Fire safety equivalency. Determination of safety equivalency, with respect to fire, shall be based on an analysis that includes applicable fire safety performance properties, such as but not limited to ignitability, flame spread, heat release rate, heat of combustion, smoke development, and fire resistance. Determination of safety equivalency, with respect to structural fire safety, shall also include a structural system analysis.

[A] 104.2.2.5 Tests. Tests conducted to demonstrate equivalency in support of an alternative material, design or method of construction application shall be of a scale that is sufficient to predict performance of the end use configuration. Tests shall be performed by a party acceptable to the code official.

[A] 104.2.2.6 Reports. Supporting documentation, where necessary to assist in the approval of materials or assemblies not specifically provided for in this code, shall comply with Sections 104.2.2.6.1 and 104.2.2.6.2.

[A] 104.2.2.6.1 Evaluation reports. Evaluation reports shall be issued by an approved agency accredited to evaluate or certify products. The alternative material, design or method of construction and product evaluated shall be within the scope of accreditation of the approved agency. Criteria used for the evaluation shall be identified within the report, developed using a process that includes input from the public, and made available for review by the public.

[A] 104.2.2.6.2 Other reports. Reports not complying with Section 104.2.2.6.1 shall describe criteria, including but not limited to any referenced testing or analysis, used to determine compliance with code intent and justify code equivalence. The report shall be prepared by a qualified engineer,

specialist, laboratory or fire safety specialty organization acceptable to the fire code official. The code official is authorized to require design submittals to be prepared by, and bear the stamp of, a registered design professional.

[A] 104.2.2.7 Peer review. The code official is authorized to require submittal of a peer review report in conjunction with a request to use an alternative material, design or method of construction, prepared by a peer reviewer that is approved by the code official.

[A] 104.2.3 Modifications. Where there are practical difficulties involved in carrying out the provisions of this code, the code official shall have the authority to grant modifications for individual cases provided that the code official shall first find that one or more special individual reasons make enforcement of the strict letter of this code impractical, that the modification is in conformance with the intent and purpose of this code, and that such modification does not lessen health, life and fire safety requirements. The details of the written request and action granting modifications shall be recorded and entered into the files of the code enforcement agency.

[A] 104.3 Applications and permits. The code official is authorized to receive applications, review construction documents and issue permits for construction regulated by this code, issue permits for operations regulated by this code, inspect the premises for which such permits have been issued and enforce compliance with the provisions of this code.

[A] 104.4 Right of entry. Where it is necessary to make an inspection to enforce the provisions of this code, or where the code official has reasonable cause to believe that there exists in a structure or on a premises any conditions or violations that makes such building or premises unsafe, the code official shall have the authority to enter the structure or premises at all reasonable times to inspect or to perform the duties imposed by this code. If such structure or premises is occupied, the code official shall present proper credentials to the occupant and request entry. If such structure or premises is unoccupied, the code official shall first make a reasonable effort to locate the owner, the owner's authorized agent, or other persons having charge or control of the structure or premises and request entry. If such entry is refused, then the code official shall have recourse to every remedy provided by law to secure entry.

[A] 104.4.1 Warrant. Where the code official has first obtained a proper inspection warrant or other remedy provided by law to secure entry, an owners, the owner's authorized agent or occupants or persons having charge, care or control of the building or premises, shall not fail or neglect, after proper request is made as herein provided, to permit entry therein by the code official for the purpose of inspection and examination pursuant to this code.

[A] 104.5 Identification. The code official shall carry proper identification when inspecting structures or premises in the performance of duties under this code.

[A] 104.6 Notices and orders. The code official is authorized to issue such notices or orders as are required to affect compliance with this code in accordance with Section 110.2.

[A] 104.7 Official records. The code official shall keep official records as required by Sections 104.7.1 through 104.7.5. Such official records shall be retained for not less than 5 years or for as long as the structure or activity to which such records relate remains in existence, unless otherwise provided by other regulations.

[A] 104.7.1 Approvals. A record of approvals shall be maintained by the code official and shall be available for public inspection during business hours in accordance with applicable laws.

[A] 104.7.2 Inspections. The code official shall keep a record of each inspection made, including notices and orders issued, showing the findings and disposition of each.

[A] 104.7.3 Code alternatives and modifications. Application for alternative materials, design and methods of construction and equipment in accordance with Section 104.2.2; modifications in accordance with Section 104.2.3; and documentation of the final decision of the code official for either shall be in writing and shall be officially recorded in the permanent records of the code official.

[A] 104.7.4 Tests. The code official shall keep a record of tests conducted to comply with Sections 104.2.1.4 and 104.2.2.5.

[A] 104.7.5 Fees. The code official shall keep a record of fees collected and refunded in accordance with Section 109.

[A] 104.8 Liability. The code official, member of the board of appeals or employee charged with the enforcement of this code, while acting for the jurisdiction, in good faith and without malice in the discharge of the duties required by this code or other pertinent law or ordinance, shall not thereby be personally liable, either civilly or criminally, and is hereby relieved from all personal liability for damages accruing to persons or property as a result of an act or by reason of an act or omission in the discharge of official duties.

[A] 104.8.1 Legal defense. Any suit or criminal complaint instituted against any officer or employee because of an act performed by that officer or employee in the lawful discharge of duties and under the provisions of this code or other laws or ordinances implemented through the enforcement of this code shall be defended by the legal representatives of the jurisdiction until the final termination of the proceedings. The code official or any subordinate shall not be liable for costs in an action, suit or proceeding that is instituted in pursuance of the provisions of this code; and any officer of the department of fire prevention, acting in good faith and without malice, shall be free from liability for acts performed under any of its provisions or by reason of any act or omission in the performance of official duties in connection therewith.

[A] 104.9 Approved materials and equipment. Materials, equipment and devices approved by the code official shall be constructed and installed in accordance with such approval.

[A] 104.9.1 Material and equipment reuse. Materials, equipment and devices shall not be reused or reinstalled unless such elements have been reconditioned, tested and placed in good and proper working condition and approved.

[A] 104.10 Other agencies. When requested to do so by the code official, other officials of this jurisdiction shall assist and cooperate with the code official in the discharge of the duties required by this code.

2021 International Zoning Code

Revise as follows:

[A] 104.7 Liability. The code official, ~~or designee,~~ member of the board of adjustment or employee charged with the enforcement of this code, while acting in good faith and without malice in the discharge of the duties ~~described~~ required in this code or other pertinent law or ordinance, shall not be personally liable, either civilly or criminally, and is hereby relieved from personal liability ~~liable~~ for any damage ~~that may accrue~~ accruing to persons or property as a result of an act or by reason of an act or omission in the discharge of such duties.

[A] 104.7.1 Legal defense. ~~A~~ Any suit or criminal complaint ~~brought~~ instituted against the code official or employee because ~~such of an~~ act or omission performed by the code official or employee in the ~~enforcement of any provision of such codes~~ lawful discharge of duties under the provisions of this code or other pertinent laws or ordinances implemented through the enforcement of this code or ~~enforced by the enforcement agency~~ other laws or ordinances implemented through the enforcement of this code shall be defended by the jurisdiction until final termination of such proceedings. ~~Any judgment resulting therefrom shall be assumed by the jurisdiction. The code official or any subordinate shall not be liable for costs in any action, suit or proceeding that is instituted in pursuance of the provisions of this code.~~ This code shall not be construed to relieve from or lessen the responsibility of any person owning, operating or controlling any building or parcel of land for any damages to persons or property caused by defects, nor shall the enforcement agency or its jurisdiction be held as assuming any such liability by reason of the reviews or permits issued under this code.

2021 International Green Construction Code

Revise as follows:

SECTION 104
~~DUTIES AND POWERS OF THE AUTHORITY HAVING JURISDICTION~~
(Delete entire section and replace as follows)

SECTION 105
~~APPROVAL~~
(Delete entire section and replace as follows)

Add new text as follows:

SECTION 104
DUTIES AND POWERS OF THE AUTHORITY HAVING JURISDICTION

104.1 General. The authority having jurisdiction is hereby authorized and directed to enforce the provisions of this code.

104.2 Determination of compliance. The authority having jurisdiction shall have the authority to determine compliance with this code, to render interpretations of this code and to adopt policies, procedures, rules and regulations in order to clarify the application of this code's provisions. Such interpretations, policies, procedures, rules and regulations:

1. Shall be in compliance with the intent and purpose of this code.
2. Shall not have the effect of waiving requirements specifically provided for in this code or other applicable codes and ordinances.

104.2.1 Listed compliance. Determination of compliance for anything required by this code, or a reference standard, to be listed shall be based on a test standard or approved listing evaluation that is germane to the provision requiring the listing. Anything required by this code, or a reference standard, to be listed shall be installed in accordance with the listing and the manufacturer's instructions. Copies of the listing standard and manufacturer's instructions shall be made available to the authority having jurisdiction upon request.

104.2.2 Technical assistance. To determine compliance with this code, the authority having jurisdiction is authorized to require the owner or owner's authorized agent to provide a technical opinion and report.

104.2.2.1 Cost. A technical opinion and report shall be provided without charge to the jurisdiction.

104.2.2.2 Preparer qualifications. The technical opinion and report shall be prepared by a qualified engineer, specialist, laboratory or fire safety specialty organization acceptable to the authority having jurisdiction. The authority having jurisdiction is authorized to require design submittals to be

prepared by, and bear the stamp of, a registered design professional.

104.2.2.3 Content. The technical opinion and report shall analyze the properties of the design, operation or use of the building or premises and the facilities and appurtenances situated thereon, to identify and propose necessary recommendations.

104.2.2.4 Tests. Where there is insufficient evidence of compliance with the provisions of this code, the authority having jurisdiction is authorized to require tests as evidence of compliance. Test methods shall be as specified in this code or by other recognized test standards. In the absence of recognized test standards, the authority having jurisdiction shall approve the testing procedures. Tests shall be performed by a party acceptable to the authority having jurisdiction.

104.2.3 Compliance materials. The authority having jurisdiction shall be permitted to approve specific computer software, worksheets, compliance manuals and other similar materials that meet the intent of this code.

104.2.4 Approved programs. The authority having jurisdiction shall have the authority to deem a national, state or local program as meeting or exceeding this code. Buildings approved in writing by such a program shall be considered to be in compliance with this code.

104.2.4.1 Specific approval. The authority having jurisdiction shall have the authority to approve programs or compliance tools for a specified application, limited scope or specific locale, including approval that is applicable to a specific section or chapter of this code.

104.2.5 Innovative approaches and alternative materials, design, and methods of construction and equipment. The provisions of this code are not intended to prevent the installation of any material or to prohibit any design, innovative approach, or method of construction not specifically prescribed by this code, provided that any such alternative is not specifically prohibited by this code and has been approved.

104.2.5.1 Approval authority. An alternative material, design, innovative approach or method of construction shall be approved where the authority having jurisdiction finds that the proposed alternative is satisfactory and complies with Sections 104.2.5 through 104.2.7, as applicable.

104.2.5.2 Application and disposition. A request to use an alternative material, design, innovative approach or method of construction shall be submitted in writing to the authority having jurisdiction for approval. Where the alternative material, design, innovative approach or method of construction is not approved, the authority having jurisdiction shall respond in writing, stating the reasons the alternative was not approved.

104.2.5.3 Compliance with code intent. An alternative material, design, innovative approach or method of construction shall comply with the intent of the provisions of this code.

104.2.5.4 Equivalency criteria. An alternative material, design, innovative approach or method of construction shall, for the purpose intended, be not less than the equivalent of that prescribed in this code with respect to all of the following, as applicable:

1. Quality
2. Strength
3. Effectiveness
4. Durability
5. Safety

104.2.5.4.1 Fire safety equivalency. Determination of safety equivalency, with respect to fire, shall be based on an analysis that includes applicable fire safety performance properties, such as but not limited to ignitability, flame spread, heat release rate, heat of combustion, smoke development, and fire resistance. Determination of safety equivalency, with respect to structural fire safety, shall also include a structural system analysis.

104.2.5.5 Tests. Tests conducted to demonstrate equivalency in support of an alternative material, design or method of construction application shall be of a scale that is sufficient to predict performance of the end use configuration. Tests shall be performed by a party acceptable to the authority having jurisdiction.

104.2.5.6 Reports. Supporting documentation, where necessary to assist in the approval of materials or assemblies not specifically provided for in this code, shall comply with Sections 104.2.5.6.1 and 104.2.5.6.2.

104.2.5.6.1 Evaluation reports. Evaluation reports shall be issued by an approved agency accredited to evaluate or certify products. The alternate material, design or method of construction and product evaluated shall be within the scope of accreditation of the approved agency. Criteria used for the evaluation shall be identified within the report, developed using a process that includes input from the public and made available for review by the public.

104.2.5.6.2 Other reports. Reports not complying with Section 104.2.5.6.1 shall describe criteria, including but not limited to any referenced testing or analysis, used to determine compliance with code intent and justify code equivalence, including but not limited to any referenced testing or analysis. The report shall be prepared by a qualified engineer, specialist, laboratory or specialty organization acceptable to the authority having jurisdiction. The authority having jurisdiction is authorized to require design submittals to be prepared by, and bear the stamp of, a registered design professional.

104.2.5.7 Peer review. The authority having jurisdiction is authorized to require submittal of a peer review report in conjunction with a request to use an alternative material, design or method of construction, prepared by a peer reviewer that is approved by the authority having jurisdiction.

104.2.6 Modifications. Where there are practical difficulties involved in carrying out the provisions of this code, the authority having jurisdiction shall have the authority to grant modifications for individual cases, provided the authority having jurisdiction shall first find that one or more special individual reasons make the strict letter of this code impractical, that the modification is in compliance with the intent and purpose of this code, and that such modification does not lessen the minimum requirements of this code. The details of the written request for and granting modifications shall be recorded and entered in the files of the department.

104.3 Enforcement. The authority having jurisdiction shall enforce compliance with the provisions of this code as part of the enforcement of other applicable codes and regulations, including the referenced codes listed in Section 102.4.

104.4 Inspections. The authority having jurisdiction shall have the authority to conduct inspections, as required, to determine code compliance, or the authority having jurisdiction shall have the authority to accept reports of inspection by approved agencies or individuals.

104.5 Right of entry. Where it is necessary to make an inspection to enforce the provisions of this code, or where the authority having jurisdiction has reasonable cause to believe that there exists in a structure or on a premises any conditions or violations of this code that make the structure or premises unsafe, dangerous or hazardous, the authority having jurisdiction shall have the authority to enter the structure or premises at all reasonable times to inspect or to perform the duties imposed on the authority having jurisdiction by this code. If such structure or premises is occupied, the authority having jurisdiction shall present credentials to the occupant and request entry. If such structure or premises is unoccupied, the authority having jurisdiction shall first make a reasonable effort to locate the owner, the owner's authorized agent or other person having charge or control of the structure or premises and request entry. If entry is refused, the authority having jurisdiction has recourse to every remedy provided by law to secure entry.

104.5.1 Warrant. Where the authority having jurisdiction has first obtained a proper inspection warrant or other remedy provided by law to secure entry, an owner, the owner's authorized agent or occupant or person having charge, care or control of the building or premises shall not fail or neglect, after proper request is made as herein provided, to permit entry therein by the authority having jurisdiction for the purpose of inspection and examination pursuant to this code.

104.6 Identification. The authority having jurisdiction shall carry proper identification when inspecting structures or premises in the performance of duties under this code.

104.7 Notices and orders. The authority having jurisdiction shall issue all necessary notices or orders to ensure compliance with this code.

104.8 Official records. The authority having jurisdiction shall keep official records as required by Sections 104.8.1 through 104.8.5. Such official records shall be retained for not less than 5 years or for as long as the building or structure to which such records relate remains in existence, unless otherwise provided by other regulations.

104.8.1 Approvals. A record of approvals shall be maintained by the authority having jurisdiction and shall be available for public inspection during business hours in accordance with applicable laws.

104.8.2 Inspections. The authority having jurisdiction shall keep a record of each inspection made, including notices and orders issued, showing the findings and disposition of each.

104.8.3 Code alternatives and modifications. Application for alternative materials, design and methods of construction and equipment in accordance with Section 104.2.5; modifications in accordance with Section 104.2.6; and documentation of the final decision of the authority having jurisdiction for either shall be in writing and shall be retained in the official records.

104.8.4 Tests. The authority having jurisdiction shall keep a record of tests conducted to comply with Sections 104.2.2.4 and 104.2.5.5.

104.8.5 Fees. The authority having jurisdiction shall keep a record of fees collected and refunded in accordance with Section 108.

104.9 Liability. The authority having jurisdiction, member of the board of appeals or employee charged with the enforcement of this code, while acting for the jurisdiction in good faith and without malice in the discharge of the duties required by this code or other pertinent law or ordinance, shall not thereby be personally liable, either civilly or criminally, and is hereby relieved from personal liability for any damage accruing to persons or property as a result of any act or by reason of an act or omission in the discharge of official duties.

104.9.1 Legal defense. Any suit or criminal complaint instituted against any officer or employee because of an act performed by that officer or employee in the lawful discharge of duties under the provisions of this code or other laws or ordinances implemented through the enforcement of this code shall be defended by legal representatives of the jurisdiction until the final termination of the proceedings. The authority having jurisdiction or any subordinate shall not be liable for costs in any action, suit or proceeding that is instituted in pursuance of the provisions of this code.

104.10 Approved materials and equipment. Materials, equipment, devices and innovative approaches approved by the authority having jurisdiction shall be constructed, installed and maintained in accordance with such approval.

104.10.1 Material, product and equipment reuse. Materials, products, equipment and devices shall not be reused unless such elements are in good working condition and approved.

Reason: Section 104 (Section 105 in the IPMC) appears in the IFC, IWUIC, IBC, IEBC, IRC, IgCC and IPMC and contains general requirements for the authority and duties of the code official. Among these authorities and duties is the review and approval of alternate methods. The primary purpose of this code change is to update Section 104 to reflect the current manner that alternate methods and materials are evaluated, and to

differentiate between evaluations from accredited evaluation agencies and evaluations from others, such as engineers. These provisions have basically been the same since the first edition in 2000, with the exception that the section on “Research Reports” was added in 2003. Industry terminology and methods have evolved over the years.

This proposal revises general code enforcement provisions to improve organization, improve clarity, and supplement existing provisions to better align the code text with how the code is commonly applied. The end goal is to provide the same wording and procedures in all of the I-Codes with regard to the Duties and Responsibilities of the Code Official. Some of the codes contain unique provisions applicable to only that code. Those nuances are retained so there are some slight differences, but the formatting will be the same in each code and the language will generally be the same in each code.

As stated earlier, this section has been in the code a long time, and it is believed that it initially envisioned an alternative product or method review and approval process on a project-by-project basis, with substantiating tests and calculations or analyses provided with each permit application. Currently, a more efficient system has evolved where the same product evaluation reports are used in numerous projects, across many jurisdictions, and for many conditions. This evolution causes the need to revise this section to reflect current procedures.

However, the need for designers to be able to apply for one-time approval needs to be maintained, and that is the reason that “research reports” is maintained. In this case, though, when a method or material is not addressed by the code, the code official needs more information on the process that the evaluator used to determine that the method or material complies with the intent of the code.

To achieve the common format, a template is shown below which includes comments on each of the sections. Since the wording in each code is intended to be the same, the outline is not shown for every code, however there is an underline/strikeout version for each code provided. The code change for each code is provided as delete and substitute. This was done because the autoforformatting process in cdpACCESS did not provide a document to easily follow. The underline/strikeout versions show the specific changes.

The following template is from the IBC. The IBC, IFC, IRC, IEBC, IPMC, and IWUIC are formatted the same as this template, however some codes have additional unique provisions, and other codes don't contain all of these sections if they are not appropriate for the code content.

OUTLINE FOR PROPOSED SECTION 104

SECTION 104 DUTIES AND POWERS OF BUILDING OFFICIAL – same title used for each code

104.1 General. – This section has been subdivided with numbered/titled subsections to break up the existing paragraph and specifically state that the code official is authorized to determine compliance with the code. While always implied and applied in this manner, the code never specifically states this important fact.

104.2 Determination of Compliance. – reformatted to identify that when reviewing projects for compliance with the code, the code official can develop policies and procedures. It also specifically states that the developed policies and the project approvals are to be based on the intent of the code.

104.2.1 Listed compliance. – In cases where the code specifies a listing standard, it is common for a code official to accept things listed to that standard without further evaluating whether the standard is germane. When a product listing is appropriate, then the fact that the product is listed and installed in accordance with the listing specifications and the manufacturer's instructions becomes the approval of the product. This section is not included in all codes since not all codes require listed equipment.

104.2.2 Technical assistance. – Nearly all the codes provide for the code official to utilize technical assistance in some form or another. This section is included as a subsection for determining compliance and will be consistent throughout the I-Codes. It is derived from, and replaces, previous text that was originally developed for and limited to hazardous materials related provisions.

104.2.2.1 Cost. – the cost for technical assistance is borne by the applicant or owner. This was previously included in a preceding paragraph and has been separated into its own subsection.

104.2.2.2 Preparer qualifications. – states that the person or agency providing the technical report must be qualified. The code official has the ability to require that the report is stamped by a registered design professional, since not all reports may need to provide this. For example, a hazardous materials classification report often does not include engineering or design. The definition is added to codes that do not currently contain the definition, such as the IWUIC. This was previously included in a preceding paragraph and has been separated into its own subsection. The new text goes beyond simply recommending changes, recognizing that the report may be a source document, as opposed to a review of documentation prepared by others.

104.2.2.3 Content. – the technical report shall include an analysis and any recommended or necessary changes.

104.2.2.4 Tests. – Tests can often provide valuable information. Where a test standard isn't specified by this code or a reference standard, the code official may wish to conduct further evaluation of the suitability of the test method used as a basis. Testing can be performed by an approved agency or by any other party/organization approved by the code official. Proposed provisions for tests are largely derived from existing code text on this topic.

104.2.3 Alternative materials, design and methods of construction and equipment. – All codes make reference to accepting some type of alternative. This section is placed under the general compliance approval section and revised to state that a proposed alternative cannot be something that is specifically prohibited by the code. If ICC members have previously voted to specifically disallow something, alternative methods should not be a means of avoiding such a prohibition. Nevertheless, a code modification would still provide an option to make exceptions for unique cases, as opposed to the door being open for an applicant to end run the intent of the code by presenting an analysis or alternative that suggests an alternative to a prohibition is OK. It is important to note that something not contemplated by the code would not be impacted by this statement. Not contemplated is not the same as a specific prohibition in the code.

104.2.3.1 Approval authority. – if the alternative is acceptable, then it is to be approved by the code official. This is from existing text.

104.2.3.2 Application and disposition. – the submittal for an alternative must be accomplished in writing. If it is not approved, the code official must so state in writing and provide reasons why it was not acceptable. This is largely from existing text, however, the requirement for a written application for alternatives was not previously located in this section, where it is appropriate to reference.

104.2.3.3 Compliance with code intent. – the alternative must comply with the code's intent.

104.2.3.4 Equivalency criteria. – the alternative must provide equivalency to the code's provisions. The list of characteristics to be addressed is included from the current code. The reference to fire-resistance is removed from the list and fire-resistance is included under safety with additional criteria regarding fire characteristics identified in Section 104.2.3.4.1.

104.2.3.4.1 Fire safety equivalency. – this section was added because “fire-resistance” was removed from the list in Section 104.2.3.4 and recognizing that fire-resistance is not the only fire related characteristic to be addressed. Fire-resistance is only one characteristic of safety with respect to fire. This section is added to clarify that the entire issue of performance under fire conditions is the concern. Previously, aspects of fire safety beyond fire resistance would have been evaluated as part of “safety” in the list with no additional guidance on what to consider. Performance under fire conditions also includes equivalency as to how the alternate will perform structurally when exposed to fire.

104.2.3.5 Tests. – this section is added so the code official can ensure that any testing conducted is performed to a scale that adequately

represents the end use of the alternate. This has primarily been added in response to concerns related to Code Change F60-21, which modified Section 2603 to defer alternatives related to fire performance of foam plastics to Section 104.

104.2.3.6 ~~104.11.1~~ Research Reports. This section is relocated and revised to address two different types of reports currently submitted for alternatives.

104.2.3.6.1 Evaluation reports. – This section is added to address reports generate by an approved agency. The definition of “approved agency” was added to several codes in the 2018 editions. The definition is proposed to be revised, as in the IBC, or added as a new definition codes do not contain this definition, as in the IFC. This evaluation report is conducted by an approved agency that is accredited to conduct the tests or evaluations appropriate for the alternative involved. When the applicant provides a product evaluation from an accredited product evaluation agency that uses publicly developed and available criteria for the evaluation, the code official may have increased confidence that the method used for the evaluation does result in a method or material that meets the intent of the code and is at least equivalent to code-prescribed construction. Public development of criteria allows for input from industry experts, the public, and building officials in determining the methods used to evaluate code intent and equivalence, somewhat similar to the code development process where consensus is important. The accreditation ensures that the organization uses a consistent process to perform the evaluations. This section is meant to reflect the current use of evaluation reports from accredited evaluation agencies or organizations.

104.2.3.6.2 Other reports.– this section is added to address reports generated by persons or agencies other than an approved agency. It specifies that the person or agency providing the report must be qualified and must be approved by the code official. The code official has the authority to require the stamp of a registered design professional. When an applicant provides an evaluation from other than an accredited agency, or from a source that does not use publicly developed and available criteria, the code official needs more information in order to perform a proper review. Not only does the code official need to evaluate the product, but also evaluate the method that the applicant has used to determine compliance with code intent and code equivalence. So, in that case, it is proposed that the applicant would also have to provide the criteria that was used to do the evaluation, justification for use of that criteria, and data used for the evaluation, so a complete review can be made.

104.2.3.7 Peer review.– this section is added to address a method of review currently utilized by many jurisdictions. The peer review is an outside, third-party review that is submitted to the code official for use in cases where a jurisdiction may not have qualified resource in-house to perform a sufficient review of an alternative compliance proposal. Again, the peer reviewer must be qualified and approved by the code official.

104.2.4 ~~104.10~~ Modifications. – this section is relocated under the section of compliance. Minor edits occurred to provide consistent language throughout the codes.

104.2.4.1 ~~104.10.1~~ Flood hazard areas. – this section on flood hazard areas only appears in the IBC, IRC and IEBC. This section is relocated to follow the provisions for modifications.

104.3 ~~104.2~~ Applications and permits. – this section is relocated and revised to provide consistent wording.

104.3.1 ~~104.2.1~~ Determination of substantially improved or substantially damaged existing buildings and structures in flood hazard areas. – this section on flood hazard areas only appears in the IBC, IRC and IEBC. This section is relocated to follow the provisions for modifications.

104.4 ~~104.6~~ Right of entry. – This section is relocated and revised to provide consistent wording. The issue of right of entry is the same with all enforcement issues.

104.4.1 Warrant. – this section was not found in all codes, so it was added to the IBC to provide the ability to utilize a warrant. This function is allowed by the courts and currently utilized by jurisdictions.

104.5 Identification. – no change

104.6 ~~104.3~~ Notices and orders. – relocated and revised for consistent wording.

104.7 ~~Department-Official~~ records. – This section revised to provide consistent wording and is reformatted by creating subsections. Each subsection addresses a different type of record that the is to be retained. This format clarifies that these records are required to be maintained.

104.7.1 Approvals.

104.7.2 Inspections.

104.7.3 Code alternatives and modifications.

104.7.4 Tests.

104.7.5 Fees.

104.8 Liability. – this section deals with protection from liability of the code official. The sections are revised to provide consistent wording throughout all I-Codes.

104.8.1 Legal defense. – this section deals with legal defense for the code official. The sections are revised to provide consistent wording throughout all I-Codes.

104.9 Approved materials and equipment. – no change

104.9.1 ~~Used materials~~ Material and equipment reuse. – this section addresses the reuse of materials and equipment. The section is revised to provide consistent wording throughout the codes to say that the code official must approve any materials to be reused.

~~104.4 Inspections~~. – this section is relocated to 104.2.2. Some of the language in this section is not relocated since those portions are already covered in Section 110.

~~104.10 Modifications~~ – this section is relocated to 104.2.4 for formatting.

~~104.10.1 Flood hazard areas~~ – this section is relocated to 104.2.4.1 for formatting.

~~104.11 Alternative materials, design and methods of construction and equipment.~~ – this section is relocated to 104.2.3 for formatting.

~~104.11.1 Research reports.~~ – this section is relocated to 104.2.3.6 for formatting.

~~104.11.2 Tests.~~ – this section is relocated 104.2.2.4, 104.2.3.5 and 104.8.4 for formatting.

Additional unique changes are as follows:

1. Sections in IWUIC 105 are relocated to IWUIC 104, so Section 105 is deleted. This also occurs in the IgCC and IPMC.
2. The IZC has a completely different approach application and therefore, only the duplicated sections in the IZC are revised.
3. IWUIC 104.4 Subjects Not Regulated by this Code is relocated to Section 102.5 and IWUIC 104.5 Matters Not Provided For is relocated to Section 102.6 for consistency with IFC format. A minor change was made to the definition of “approved agency” which removes the repeat of the word that is to be defined, agency, and replaces it with organization. Another revision allows the agency to furnish product evaluation in addition to certification, since evaluation and certification are two different things. Evaluation is for materials and methods not addressed by the code, and certification is for materials and methods that are addressed by the code. It is intended that all I-Codes will be formatted in this fashion. There was not sufficient time to process these revisions through the PMG CAC, so only the codes under the review of the Fire CAC and Building CAC are submitted at this time. The revisions for the other codes will occur during Public Comment.

A strikeout/underline version of each code follows to identify specific revisions.

BCAC was established by the ICC Board of Directors in July 2011 to pursue opportunities to improve and enhance assigned International Codes or portions thereof. In 2020 and 2021 the BCAC has held several virtual meetings open to any interested party. In addition, there were numerous virtual Working Group meetings for the current code development cycle, which included members of the committee as well as interested parties. Related documents and reports are posted on the BCAC website at <https://www.iccsafe.org/products-and-services/i-codes/code-development/cs/building-code-action-committee-bcac/>. The FCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance assigned International Codes with regard to fire and life safety in new and existing buildings and facilities as well as the protection of life and property in wildland urban interface areas. In 2020 and 2021 the Fire-CAC held multiple virtual meetings that were open to any interested party. In addition, there were numerous virtual specific working group meetings that were also open to any interested parties, to develop, discuss and debate the proposed changes. Related documentation and reports are posted on the FCAC website at: <https://www.iccsafe.org/products-and-services/i-codes/code-development/cs/fire-code-action-committee-fcac/>.

The proposal in strikeout and underline text format can be viewed here:

<https://www.cdpassess.com/proposal/8550/25693/files/download/2955/>

Cost Impact: The code change proposal will not increase or decrease the cost of construction. This proposal simply reformats the code sections and provides consistency across the codes.

ADM13-22 Part I

Public Hearing Results

Committee Action:

As Modified

Committee Modification:

2021 International Building Code

[A] 104.2 Determination of Compliance. The building official shall have the authority to determine compliance with this code, to render interpretations of this code and to adopt policies, ~~and procedures, rules and regulations~~ in order to clarify the application of this code's provisions. Such interpretations, policies, ~~and procedures, rules and regulations~~:

1. Shall be in compliance with the intent and purpose of this code.
2. Shall not have the effect of waiving requirements specifically provided for in this code.

[A] 104.2.1 Listed compliance. ~~Where this code or a referenced standard requires equipment, materials, products or services to be listed and a listing standard is specified, the listing shall be based on the specified standard. Where a listing standard is not specified, the listing shall be based on an approved listing criteria. Listings shall be germane to the provision requiring the listing. Installation shall be in accordance with the listing and the manufacturer's instructions, and where required to verify compliance, the listing standard and manufacturer's instructions shall be made available to the building official.~~

~~**[A] 104.2.1 Listed compliance.** Determination of compliance for anything required by this code, or a reference standard, to be listed shall be based on a test standard or approved listing evaluation that is germane to the provision requiring the listing. Anything required by this code, or a reference standard, to be listed shall be installed in accordance with the listing and the manufacturer's instructions. Copies of the listing standard and manufacturer's instructions shall be made available to the building official upon request.~~

[A] 104.2.2.3 Content. The technical opinion and report shall analyze the ~~safety~~ properties of the design, operation or use of the building or premises and the facilities and appurtenances situated thereon, to identify and propose necessary recommendations.

[A] 104.2.2.4 Tests. Where there is insufficient evidence of compliance with the provisions of this code, the building official is authorized to require tests as evidence of compliance. Test methods shall be as specified in this code or by other recognized test standards. In the absence of recognized test standards, the building official shall approve the testing procedures. Such tests shall be performed by a party acceptable to the building official.

[A] 104.2.3.2 Application and disposition. ~~Where required, a~~ request to use an alternative material, design or method of construction shall be submitted in writing to the building official for approval. Where the alternative material, design or method of construction is not approved, the building official shall respond in writing, stating the reasons the alternative was not approved.

[A] 104.2.3.4 Equivalency criteria. An alternative material, design or method of construction shall, for the purpose intended, be not less than the equivalent of that prescribed in this code with respect to all of the following, as applicable:

1. Quality
2. Strength
3. Effectiveness
4. Durability
5. Safety, other than fire safety
6. Fire safety

~~**[A] 104.2.3.4.1 Fire safety equivalency.** Determination of safety equivalency, with respect to fire, shall be based on an analysis that includes applicable fire safety performance properties, such as but not limited to ignitability, flame spread, heat release rate, heat of combustion, smoke development, and fire resistance. Determination of safety equivalency, with respect to structural fire safety, shall also include a structural system analysis.~~

[A] 104.2.3.6 Reports. Supporting documentation, where necessary to assist in the approval of materials or assemblies not specifically provided for in this code, shall comply with Sections 104.2.3.6.1 and 104.2.3.6.2.

[A] 104.2.3.6.1 Evaluation reports. Evaluation reports shall be issued by an approved agency ~~accredited to evaluate or certify products and use of the evaluation report shall require approval by the building official for the installation.~~ The alternate material, design or method of construction and product evaluated shall be within the scope of the building official's recognition ~~accreditation of the approved agency.~~ Criteria used for the evaluation shall be identified within the report and where required, provided to the building official, ~~developed using a process that includes input from the public and made available for review by the public.~~

[A] 104.2.3.6.2 Other reports. Reports not complying with Section 104.2.3.6.1 shall describe criteria, including but not limited to any referenced testing or analysis, used to determine compliance with code intent and justify code equivalence, including but not limited to any referenced testing or analysis. The report shall be prepared by a qualified engineer, specialist, laboratory or specialty organization acceptable to the building official. The

building official is authorized to require design submittals to be prepared by, and bear the stamp of, a registered design professional.

[A] 104.3 Applications and permits. The building official shall receive applications, review construction documents and issue permits ~~for the erection, and alteration, demolition and moving of buildings and structures,~~ inspect the premises for which such permits have been issued and enforce compliance with the provisions of this code.

[A] 104.6 Notices and orders. The ~~building code~~ official shall issue necessary notices or orders to ensure compliance with this code. Notices of violations shall be in accordance with Section 114.

2021 International Existing Building Code

[A] 104.2 Determination of Compliance. The code official shall have the authority to determine compliance with this code, to render interpretations of this code and to adopt policies, ~~and~~ procedures, ~~rules and regulations~~ in order to clarify the application of this code's provisions. Such interpretations, policies, ~~and~~ procedures, ~~rules and regulations~~:

1. Shall be in compliance with the intent and purpose of this code.
2. Shall not have the effect of waiving requirements specifically provided for in this code.

[A] 104.2.1 Listed compliance. Where this code or a referenced standard requires equipment, materials, products or services to be listed and a listing standard is specified, the listing shall be based on the specified standard. Where a listing standard is not specified, the listing shall be based on an approved listing criteria. Listings shall be germane to the provision requiring the listing. Installation shall be in accordance with the listing and the manufacturer's instructions, and where required to verify compliance, the listing standard and manufacturer's instructions shall be made available to the code official.

~~**[A] 104.2.1 Listed compliance.** Determination of compliance for anything required by this code, or a reference standard, to be listed shall be based on a test standard or approved listing evaluation that is germane to the provision requiring the listing. Anything required by this code, or a reference standard, to be listed shall be installed in accordance with the listing and the manufacturer's instructions. Copies of the listing standard and manufacturer's instructions shall be made available to the code official upon request.~~

[A] 104.2.2.3 Content. The technical opinion and report shall analyze the ~~fire safety~~ properties of the design, operation or use of the building or premises and the facilities and appurtenances situated thereon, to identify and propose necessary recommendations.

[A] 104.2.3.2 Application and disposition. Where required, a request to use an alternative material, design or method of construction shall be submitted in writing to the building official for approval. Where the alternative material, design or method of construction is not approved, the building official shall respond in writing, stating the reasons the alternative was not approved.**[A] 104.2.2.4 Tests.** Where there is insufficient evidence of compliance with the provisions of this code, the building official is authorized to require tests as evidence of compliance. Test methods shall be as specified in this code or by other recognized test standards. In the absence of recognized test standards, the building official shall approve the testing procedures. Such tests shall be performed by a party acceptable to the building official.

[A] 104.2.3.4 Equivalency criteria. An alternative material, design or method of construction shall, for the purpose intended, be not less than the equivalent of that prescribed in this code with respect to all of the following, as applicable:

1. Quality
2. Strength
3. Effectiveness
4. Durability
5. Safety, other than fire safety
6. Fire safety

~~**[A] 104.2.3.4.1 Fire safety equivalency.** Determination of safety equivalency, with respect to fire, shall be based on an analysis that includes applicable fire safety performance properties, such as but not limited to ignitability, flame spread, heat release rate, heat of combustion, smoke development, and fire resistance. Determination of safety equivalency, with respect to structural fire safety, shall also include a structural system analysis.~~

[A] 104.2.3.6 Reports. Supporting documentation, where necessary to assist in the approval of materials or assemblies not specifically provided for in this code, shall comply with Sections 104.2.3.6.1 and 104.2.3.6.2.

[A] 104.2.3.6.1 Evaluation reports. Evaluation reports shall be issued by an approved agency accredited to evaluate or certify products and use of the evaluation report shall require approval by the code official for the installation. The alternate material, design or method of construction and

product evaluated shall be within the scope of ~~the code official's recognition accreditation~~ of the *approved agency*. Criteria used for the evaluation shall be identified within the report ~~and where required, provided to the code official, developed using a process that includes input from the public and made available for review by the public.~~ **[A] 104.2.3.6.2 Other reports.** Reports not complying with Section 104.2.3.6.1 shall describe criteria, including but not limited to any referenced testing or analysis, used to determine compliance with code intent and justify code equivalence. The report shall be prepared by a qualified engineer, specialist, laboratory or fire safety specialty organization acceptable to the fire code official. The code official is authorized to require design submittals to be prepared by, and bear the stamp of, a registered design professional.

[A] 104.3 Applications and permits. The code official is authorized to receive applications, review construction documents and issue permits ~~for the repair and construction regulated by this code~~; inspect the premises for which such permits have been issued; and enforce compliance with the provisions of this code. **[A] 104.6 Notices and orders.** The code official ~~shall issue necessary notices or orders to ensure is authorized to issue such notices or orders as are required to affect compliance with this code.~~ Notices of violations shall be in accordance with Section 113.

2021 International Fire Code

[A] 104.2 Determination of Compliance. The fire code official shall have the authority to determine compliance with this code, to render interpretations of this code and to adopt policies, ~~and procedures, rules and regulations~~ in order to clarify the application of this code's provisions. Such interpretations, policies, ~~and procedures, rules and regulations~~:

1. Shall be in compliance with the intent and purpose of this code.
2. Shall not have the effect of waiving requirements specifically provided for in this code.

[A] 104.2.1 Listed compliance. ~~Where this code or a referenced standard requires equipment, materials, products or services to be listed and a listing standard is specified, the listing shall be based on the specified standard. Where a listing standard is not specified, the listing shall be based on an approved listing criteria. Listings shall be germane to the provision requiring the listing. Installation shall be in accordance with the listing and the manufacturer's instructions, and where required to verify compliance, the listing standard and manufacturer's instructions shall be made available to the fire code official.~~

~~**[A] 104.2.1 Listed compliance.** Determination of compliance for anything required by this code, or a reference standard, to be listed shall be based on a test standard or approved listing evaluation that is germane to the provision requiring the listing. Anything required by this code, or a reference standard, to be listed shall be installed in accordance with the listing and the manufacturer's instructions. Copies of the listing standard and manufacturer's instructions shall be made available to the fire code official upon request.~~

[A] 104.2.2.3 Content. The technical opinion and report shall analyze the ~~fire safety~~ properties of the design, operation or use of the building or premises and the facilities and appurtenances situated thereon, to identify and propose necessary recommendations.

[A] 104.2.2.4 Tests. Where there is insufficient evidence of compliance with the provisions of this code, the fire code official is authorized to require tests as evidence of compliance. Test methods shall be as specified in this code or by other recognized test standards. In the absence of recognized test standards, the fire code official shall approve the testing procedures. Such tests shall be performed by a party acceptable to the fire code official.

[A] 104.2.3.2 Application and disposition. ~~Where required, a~~ request to use an alternative material, design or method of construction shall be submitted in writing to the building official for approval. Where the alternative material, design or method of construction is not approved, the building official shall respond in writing, stating the reasons the alternative was not approved. **[A] 104.2.3.4 Equivalency criteria.** An alternative material, design or method of construction shall, for the purpose intended, be not less than the equivalent of that prescribed in this code with respect to all of the following, as applicable:

1. Quality
2. Strength
3. Effectiveness
4. Durability
5. Safety, other than fire safety
6. Fire safety

~~**[A] 104.2.3.4.1 Fire safety equivalency.** Determination of safety equivalency, with respect to fire, shall be based on an analysis that includes applicable fire safety performance properties, such as but not limited to ignitability, flame spread, heat release rate, heat of combustion, smoke development, and fire resistance. Determination of safety equivalency, with respect to structural fire safety, shall also include a structural system analysis.~~

[A] 104.2.3.6 Reports. Supporting documentation, where necessary to assist in the approval of materials or assemblies not specifically provided for in this code, shall comply with Sections 104.2.3.6.1 and 104.2.3.6.2.

[A] 104.2.3.6.1 Evaluation reports. Evaluation reports shall be issued by an *approved agency* ~~accredited to evaluate or certify products~~ and use of the evaluation report shall require approval by the fire code official for the installation. The alternate material, design or method of construction and product evaluated shall be within the scope of the fire code official's recognition-accreditation of the *approved agency*. Criteria used for the evaluation shall be identified within the report and where required, provided to the fire code official, ~~developed using a process that includes input from the public and made available for review by the public.~~

[A] 104.2.3.6.2 Other reports. Reports not complying with Section 104.2.3.6.1 shall describe criteria, including but not limited to any referenced testing or analysis, used to determine compliance with code intent and justify code equivalence. The report shall be prepared by a qualified engineer, specialist, laboratory or fire safety specialty organization acceptable to the fire code official. The fire code official is authorized to require design submittals to be prepared by, and bear the stamp of, a registered design professional.

[A] 104.6 Notices and orders. ~~The fire code official is authorized to issue such notices or orders as are required to affect~~ shall issue necessary notices or orders to ensure compliance with this code. ~~Notices of violations shall be in accordance with Sections 112.1 and 112.2.~~

2021 International Property Maintenance Code

[A] 105.2 Determination of Compliance. The code official shall have the authority to determine compliance with this code, to render interpretations of this code and to adopt policies, ~~and procedures, rules and regulations~~ in order to clarify the application of this code's provisions. Such interpretations, policies, ~~and procedures, rules and regulations:~~

1. Shall be in compliance with the intent and purpose of this code.
2. Shall not have the effect of waiving requirements specifically provided for in this code.

[A] 105.2.1.3 Content. The technical opinion and report shall analyze the ~~safety~~ properties of the design, operation or use of the building or premises and the facilities and appurtenances situated thereon, to identify and propose necessary recommendations.

[A] 105.2.2.2 Application and disposition. ~~Where required, a~~ **A** request to use an alternative material, design or method of construction shall be submitted in writing to the building official for approval. Where the alternative material, design or method of construction is not approved, the building official shall respond in writing, stating the reasons the alternative was not approved.

[A] 105.2.2.4 Equivalency criteria. An alternative material, design or method of construction shall, for the purpose intended, be not less than the equivalent of that prescribed in this code with respect to all of the following, as applicable:

1. Quality
2. Strength
3. Effectiveness
4. Durability
5. Safety, other than fire safety
6. Fire safety

~~**[A] 105.2.2.4.1 Fire safety equivalency.** Determination of safety equivalency, with respect to fire, shall be based on an analysis that includes applicable fire safety performance properties, such as but not limited to ignitability, flame spread, heat release rate, heat of combustion, smoke development, and fire resistance. Determination of safety equivalency, with respect to structural fire safety, shall also include a structural system analysis.~~

[A] 105.2.2.5 Tests. Where there is insufficient evidence of compliance with the provisions of this code, the building official is authorized to require tests as evidence of compliance. Test methods shall be as specified in this code or by other recognized test standards. In the absence of recognized test standards, the building official shall approve the testing procedures. Such tests shall be performed by a party acceptable to the building official.

[A] 105.2.2.6 Reports. Supporting documentation, where necessary to assist in the approval of materials or assemblies not specifically provided for in this code, shall comply with Sections 104.2.3.6.1 and 104.2.3.6.2.

[A] 105.2.2.6.1 Evaluation reports. Evaluation reports shall be issued by an *approved agency* ~~accredited to evaluate or certify products~~ and use of the evaluation report shall require approval by the code official for the installation. The alternate material, design or method of construction and product evaluated shall be within the scope of the code official's recognition-accreditation of the *approved agency*. Criteria used for the evaluation

shall be identified within the report and where required, provided to the code official. ~~developed using a process that includes input from the public and made available for review by the public.~~

[A] 105.2.2.6.2 Other reports. Reports not complying with Section 105.2.2.6.1 shall describe criteria, including but not limited to any referenced testing or analysis, used to determine compliance with code intent and justify code equivalence, including but not limited to any referenced testing or analysis. The report shall be prepared by a qualified engineer, specialist, laboratory or specialty organization acceptable to the code official. The code official is authorized to require design submittals to be prepared by, and bear the stamp of, a registered design professional.

~~[A] 105.2.2.6.2 Other reports. Reports not complying with Section 105.2.2.6.1 shall describe criteria, including but not limited to any referenced testing or analysis, used to determine compliance with code intent and justify code equivalence, including but not limited to any referenced testing or analysis. The report shall be prepared by a qualified engineer, specialist, laboratory or specialty organization acceptable to the code official. The code official is authorized to require design submittals to be prepared by, and bear the stamp of, a registered design professional.~~

~~**[A] 105.3 Inspections.** The code official shall have the authority to conduct inspections, or shall accept reports of inspection by approved agencies or individuals. Reports of such inspections shall be in writing and be certified by a responsible officer of such approved agency or by the responsible individual.~~

[A] 105.6 Notices and orders. The code official shall issue all necessary notices or orders to ensure compliance with this code. Notices of violations shall be in accordance with Section 109.

[A] 105.7.2 Inspections. The code official shall have the authority to conduct inspections, or shall accept reports of inspection by approved agencies or individuals. Reports of such inspections shall be in writing and be certified by a responsible officer of such approved agency or by the responsible individual.

The building code official shall keep a record of each inspection made, including notices and orders issued, showing the findings and disposition of each.

2021 International Wildland-Urban Interface Code

[A] 104.2 Determination of Compliance. The code official shall have the authority to determine compliance with this code, to render interpretations of this code and to adopt policies, and procedures, rules and regulations in order to clarify the application of this code's provisions. Such interpretations, policies, and procedures, rules and regulations:

1. Shall be in compliance with the intent and purpose of this code.
2. Shall not have the effect of waiving requirements specifically provided for in this code.

[A] 104.2.1.3 Content. The technical opinion and report shall analyze the fire safety properties of the design, operation or use of the building or premises, the facilities and appurtenances situated thereon and fuel management to identify and propose necessary recommendations.

[A] 104.2.2.2 Application and disposition. Where required, a request to use an alternative material, design or method of construction shall be submitted in writing to the building official for approval. Where the alternative material, design or method of construction is not approved, the building official shall respond in writing, stating the reasons the alternative was not approved. **[A] 104.2.2.4 Equivalency criteria.** An alternative material, design or method of construction shall, for the purpose intended, be not less than the equivalent of that prescribed in this code with respect to all of the following, as applicable:

1. Quality
2. Strength
3. Effectiveness
4. Durability
5. Safety, other than fire safety
6. Fire safety

~~**[A] 104.2.2.4.1 Fire safety equivalency.** Determination of safety equivalency, with respect to fire, shall be based on an analysis that includes applicable fire safety performance properties, such as but not limited to ignitability, flame spread, heat release rate, heat of combustion, smoke development, and fire resistance. Determination of safety equivalency, with respect to structural fire safety, shall also include a structural system analysis.~~

[A] 104.2.2.5 Tests. Where there is insufficient evidence of compliance with the provisions of this code, the building official is authorized to require tests as evidence of compliance. Test methods shall be as specified in this code or by other recognized test standards. In the absence of

recognized test standards, the building official shall approve the testing procedures. Such tests shall be performed by a party acceptable to the building official.

[A] 104.2.2.6 Reports. Supporting documentation, where necessary to assist in the approval of materials or assemblies not specifically provided for in this code, shall comply with Sections 104.2.3.6.1 and 104.2.3.6.2.

[A] 104.2.2.6.1 Evaluation reports. Evaluation reports shall be issued by an *approved agency* ~~accredited to evaluate or certify products and use of the evaluation report shall require approval by the code official for the installation.~~ The alternate material, design or method of construction and product evaluated shall be within the scope of the code official's recognition-accreditation of the *approved agency*. Criteria used for the evaluation shall be identified within the report and where required, provided to the code official, ~~developed using a process that includes input from the public and made available for review by the public.~~

[A] 104.2.2.6.2 Other reports. Reports not complying with Section 104.2.2.6.1 shall describe criteria, including but not limited to any referenced testing or analysis, used to determine compliance with code intent and justify code equivalence. The report shall be prepared by a qualified engineer, specialist, laboratory or fire safety specialty organization acceptable to the ~~fire~~ code official. The code official is authorized to require design submittals to be prepared by, and bear the stamp of, a registered design professional.

[A] 104.6 Notices and orders. The code official shall issue necessary notices or orders to ensure ~~is authorized to issue such notices or orders as are required to affect compliance with this code.~~ Notices of violations shall be in accordance with Section 110.2.

2021 International Green Construction Code

104.2 Determination of Compliance. The code official shall have the authority to determine compliance with this code, to render interpretations of this code and to adopt policies, ~~and procedures, rules and regulations~~ in order to clarify the application of this code's provisions. Such interpretations, policies, ~~and procedures, rules and regulations~~:

1. Shall be in compliance with the intent and purpose of this code.
2. Shall not have the effect of waiving requirements specifically provided for in this code.

104.2.1 Listed compliance. Where this code or a referenced standard requires equipment, materials, products or services to be listed and a listing standard is specified, the listing shall be based on the specified standard. Where a listing standard is not specified, the listing shall be based on an approved listing criteria. Listings shall be germane to the provision requiring the listing. Installation shall be in accordance with the listing and the manufacturer's instructions, and where required to verify compliance, the listing standard and manufacturer's instructions shall be made available to the code official.

~~**104.2.1 Listed compliance.** Determination of compliance for anything required by this code, or a reference standard, to be listed shall be based on a test standard or approved listing evaluation that is germane to the provision requiring the listing. Anything required by this code, or a reference standard, to be listed shall be installed in accordance with the listing and the manufacturer's instructions. Copies of the listing standard and manufacturer's instructions shall be made available to the authority having jurisdiction upon request.~~

104.2.5.2 Application and disposition. Where required, a ~~A~~ request to use an alternative material, design or method of construction shall be submitted in writing to the building official for approval. Where the alternative material, design or method of construction is not approved, the code official shall respond in writing, stating the reasons the alternative was not approved.

104.2.5.4 Equivalency criteria. An alternative material, design, innovative approach or method of construction shall, for the purpose intended, be not less than the equivalent of that prescribed in this code with respect to all of the following, as applicable:

1. Quality
2. Strength
3. Effectiveness
4. Durability
5. Safety, other than fire safety
6. Fire safety

~~**104.2.5.4.1 Fire safety equivalency.** Determination of safety equivalency, with respect to fire, shall be based on an analysis that includes applicable fire safety performance properties, such as but not limited to ignitability, flame spread, heat release rate, heat of combustion, smoke development, and fire resistance. Determination of safety equivalency, with respect to structural fire safety, shall also include a structural system analysis.~~

104.2.5.5 Tests. Tests conducted to demonstrate equivalency in support of an alternative material, design or method of construction application shall be of a scale that is sufficient to predict performance of the end use configuration. Such tests shall be performed by a party acceptable to the authority having jurisdiction.

104.2.5.6 Reports. Supporting documentation, where necessary to assist in the approval of materials or assemblies not specifically provided for in this code, shall comply with Sections 104.2.5.6.1 and 104.2.5.6.2.

104.2.5.6.1 Evaluation reports. Evaluation reports shall be issued by an *approved agency* ~~accredited to evaluate or certify products~~ and use of the evaluation report shall require approval by the code official for the installation. The alternate material, design or method of construction and product evaluated shall be within the scope of the code official's recognition-accreditation of the *approved agency*. Criteria used for the evaluation shall be identified within the report and where required, provided to the code official, ~~developed using a process that includes input from the public and made available for review by the public.~~

104.2.5.6.2 Other reports. Reports not complying with Section 104.2.5.6.1 shall describe criteria, including but not limited to any referenced testing or analysis, used to determine compliance with code intent and justify code equivalence, including but not limited to any referenced testing or analysis. The report shall be prepared by a qualified engineer, specialist, laboratory or specialty organization acceptable to the authority having jurisdiction. The authority having jurisdiction is authorized to require design submittals to be prepared by, and bear the stamp of, a registered design professional.

~~**104.4 Inspections.** The authority having jurisdiction shall have the authority to conduct inspections, as required, to determine code compliance, or the authority having jurisdiction shall have the authority to accept reports of inspection by approved agencies or individuals.~~

104.7 Notices and orders. The ~~authority having jurisdiction~~ code official shall issue all necessary notices or orders to ensure compliance with this code.

104.8.2 Inspections. The ~~authority having jurisdiction~~ code official shall keep a record of each inspection made, including notices and orders issued, showing the findings and disposition of each.

Committee Reason: The committee stated that the reasons for the approval of the modifications by number were as follows:

2: Safety and fire safety should be identified separately as the modification does and it is significantly easier to read especially for the new or small jurisdiction code officials.

19: It clears up the notices section and the items that were identified which is an improvement to the code.

24: It clears up some of the different concerns with the proposal and provides clarity to the sections as noted.

37: It furthers the family of changes in clarifications by improving the language.

38: It creates consistency between the codes.

39: It addresses concerns originally with an agency accredited to certify products by cleaning that up because as was mentioned, an engineering firm may not be accredited by anybody but it is appropriate for them to do this work.

40: It provides clarification and coordination between all the codes.

41: It addresses another concern with the original proposal that requires that the documentation be provided, and the modification allows for field approval of small modifications or alternatives.

The committee stated multiple reasons for approval as well as opposition to the proposal. In support, it was noted that overall the proposal was an improvement to the existing section and specifically the first two paragraphs are better than what is now in the code. The organizing of that portion is worth it and taken together with all the approved modifications the section is better than the current section. In opposition, it was stated that with all the modifications taken together with the complexity of the entire proposal, it is more than can be thoroughly evaluated at this point. (Vote: 9-4)

Individual Consideration Agenda

Public Comment 1:

IBC: [A] 104.2.3, [A] 104.2.3.1, [A] 104.2.4; IEBC: [A] 104.2.3, [A] 104.2.3.1, [A] 104.2.4; IFC: [A] 104.2.3, [A] 104.2.3.1, [A] 104.2.4; IPMC: [A] 105.2.2, [A] 105.2.2.1, [A] 105.2.3; IWUIC: [A] 104.2.2, [A] 104.2.2.1, [A] 104.2.3; IGCC: 104.2.5, 104.2.5.1, 104.2.6

Proponents: Jenifer Gilliland, representing Washington Association of Building Officials (jenifer.gilliland@seattle.gov); Micah Chappell, representing Washington Association of Building Officials Technical Code Development Committee (micah.chappell@seattle.gov) requests As Modified by Public Comment

Further modify as follows:

2021 International Building Code

[A] 104.2.3 Alternative materials, design and methods of construction and equipment. The provisions of this code are not intended to prevent the installation of any material or to prohibit any design or method of construction not specifically prescribed by this code, provided that ~~any such alternative is not specifically prohibited by this code and has been approved.~~ the building official has approved and authorized its use.

[A] 104.2.3.1 Approval authority. ~~The building official shall be permitted to approve A~~ an alternative material, design or method of construction ~~shall be approved where the building official finds that~~ provided the proposed alternative is satisfactory and complies with Sections 104.2.3 through 104.2.3.7, as applicable.

[A] 104.2.4 Modifications. Where there are practical difficulties involved in carrying out the provisions of this code, the building official shall have the authority to grant modifications for individual cases provided that the building official shall first find that one or more special individual reasons make the strict letter of this code impractical, that the modification is in compliance with the intent and purpose of this code, and that such modification does not lessen health, accessibility, ~~life and~~ fire safety or structural requirements where considered together with other safety features of the building or other relevant circumstances. The details of the written request for and action granting modifications shall be recorded and entered in the files of the department of building safety.

2021 International Existing Building Code

[A] 104.2.3 Alternative materials, design and methods of construction, and equipment. The provisions of this code are not intended to prevent the installation of any material or to prohibit any design or method of construction not specifically prescribed by this code, provided that ~~any such alternative is not specifically prohibited by this code and has been approved.~~ the building official has approved and authorized its use.

[A] 104.2.3.1 Approval authority. ~~The building official shall be permitted to approve A~~ an alternative material, design or method of construction ~~shall be approved where the code official finds that~~ provided the proposed alternative is satisfactory and complies with Sections 104.2.3.2 through 104.2.3.7, as applicable.

[A] 104.2.4 Modifications. Where there are practical difficulties involved in carrying out the provisions of this code, the code official shall have the authority to grant modifications for individual cases, provided that the code official shall first find that one or more special individual reasons make the strict letter of this code impractical, that the modification is in compliance with the intent and purpose of this code, and that such modification does not lessen health, accessibility, ~~life and~~ safety, fire safety, or structural requirements where considered together with other safety features of the building or other relevant circumstances. The details of the written request for and action granting modifications shall be recorded and entered in the files of the department of building safety.

2021 International Fire Code

[A] 104.2.3 Alternative materials, design and methods of construction and equipment. The provisions of this code are not intended to prevent the installation of any material or to prohibit any design or method of construction not specifically prescribed by this code, provided that ~~any such alternative is not specifically prohibited by this code and has been approved.~~ the fire code official has approved and authorized its use.

[A] 104.2.3.1 Approval authority. ~~The fire code official shall be permitted to approve A~~ an alternative material, design or method of construction ~~shall be approved where the fire code official finds~~ provided that the proposed alternative is satisfactory and complies with Sections 104.2.3.2 through 104.2.3.7, as applicable.

[A] 104.2.4 Modifications. Where there are practical difficulties involved in carrying out the provisions of this code, the fire code official shall have the authority to grant modifications for individual cases, provided that the fire code official shall first find that one or more special individual reasons make the strict letter of this code impractical, that the modification is in compliance with the intent and purpose of this code, and that such modification does not lessen health, ~~life and~~ safety, fire safety requirements. The details of the ~~written~~ request for and action granting modifications shall be recorded and ~~entered~~ maintained in the official record of the fire code official files of the department of fire prevention.

2021 International Property Maintenance Code

[A] 105.2.2 Alternative materials, design and methods of construction and equipment. The provisions of this code are not intended to prevent the installation of any material or to prohibit any design or method of construction not specifically prescribed by this code, provided that ~~such alternative is not specifically prohibited by this code and has been approved~~ the code official has approved and authorized its use.

[A] 105.2.2.1 Approval authority. ~~The building official shall be permitted to approve A~~ an alternative material, design or method of construction ~~shall be approved where the code official finds that~~ provided the proposed alternative is satisfactory and complies with Sections 105.2.2 through 105.2.2.7, as applicable.

[A] 105.2.3 Modifications. Whenever there are practical difficulties involved in carrying out the provisions of this code, the code official shall have the authority to grant modifications for individual cases provided that the code official shall first find that one or more special individual reasons make the strict letter of this code impractical, that the modification is in compliance with the intent and purpose of this code and that such modification does not lessen health, ~~life and safety~~, and fire safety requirements where considered together with other safety features of the building or other relevant circumstances. The details of the ~~written~~ request for and action granting modifications shall be recorded and ~~entered in the department files~~ maintained in the official record by the code official.

2021 International Wildland-Urban Interface Code

[A] 104.2.2 Alternative materials, design and methods. The provisions of this code are not intended to prevent the installation of any material or to prohibit any design or method not specifically prescribed by this code, provided that ~~any such alternative is not specifically prohibited by this code and has been approved~~: the code official has approved and authorized its use.

[A] 104.2.2.1 Approval authority. ~~The code official shall be permitted to approve~~ ~~A~~ an alternative material, design or method ~~shall be approved where the code official in concurrence with the code official finds that~~ provided the proposed alternative is satisfactory and complies with Sections 104.2.2.2 through 104.2.2.7, as applicable.

[A] 104.2.3 Modifications. Where there are practical difficulties involved in carrying out the provisions of this code, the code official shall have the authority to grant modifications for individual cases provided that the code official shall first find that one or more special individual reasons make enforcement of the strict letter of this code impractical, that the modification is in conformance to with the intent and purpose of this code, and that such modification does not lessen health, ~~life~~ safety and fire safety requirements where considered together with other safety features of the building or other relevant circumstances. The details of the ~~written~~ request and action granting modifications shall be recorded and ~~entered~~ maintained in the official record by the code official ~~into the files of the code enforcement agency~~.

2021 International Green Construction Code

104.2.5 Innovative approaches and alternative materials, design, and methods of construction and equipment. The provisions of this code are not intended to prevent the installation of any material or to prohibit any design, innovative approach, or method of construction not specifically prescribed by this code, provided that ~~any such alternative is not specifically prohibited by this code and has been approved~~ the authority having jurisdiction has approved and authorized its use.

104.2.5.1 Approval authority. The authority having jurisdiction shall be permitted to approve ~~A~~ an alternative material, design, innovative approach or method of construction ~~shall be approved where the authority having jurisdiction finds that~~ provided the proposed alternative is satisfactory and complies with Sections 104.2.5 through 104.2.7, as applicable.

104.2.6 Modifications. Where there are practical difficulties involved in carrying out the provisions of this code, the authority having jurisdiction shall have the authority to grant modifications for individual cases, provided the authority having jurisdiction shall first find that one or more special individual reasons make the strict letter of this code impractical, that the modification is in compliance with the intent and purpose of this code, and that such modification does not lessen the minimum requirements of this code considered together with other features of the building or other relevant circumstances. The details of the ~~written~~ request for and granting modifications shall be recorded and ~~entered in the files of the department~~ maintained in the official record by the authority having jurisdiction.

Commenter's Reason: The code proposal as currently written unduly constrains the building official.

This PC restores flexibility for the building official to use judgement when evaluating alternative means, methods, materials and equipment as well as modifications. Controversial language restricting building official approval of items prohibited elsewhere in this code is removed and replaced with a blanket statement giving the building official the ability to approve alternatives as long as the building official authorizes its use. In a newly formed section, Approval authority, the building official is permitted to approve alternatives that are suitable and comply with the equivalency criteria in Sections 104.2.3.4-104.2.3.7.

In modifications, additional flexibility is provided for the building official to first, evaluate a proposal based on the current criteria, ie. health, accessibility, safety and fire safety features of the building and second, consider with other safety features of the building or relevant circumstances if necessary. Modifications are by definition not compliant with the strict letter of the code. For instance, a building official might want to consider other issues when approving a proposal such as how their local fire department stages for a fire and whether or not a building has been voluntarily sprinklered. If fire department policy is to "Run the stairs" rather than use ladder trucks to access an upper story it may impact your approval of a modification.

Cost Impact: The net effect of the public comment and code change proposal will not increase or decrease the cost of construction

This proposal is mainly aimed at delineating the authority of the building official to approve non-conventional approaches to solving code issues. If anything, costs might be reduced because there is more flexibility to approve a creative approach to a code problem.

Public Comment 2:

IBC: [A] 104.2.3.5, [A] 104.2.3.5.1 (New); IEBC: [A] 104.2.3.5, 104.2.3.5.1 (New); IFC: [A] 104.2.3.5, [A] 104.2.3.5.1 (New); IPMC: [A] 105.2.2.5, [A] 105.2.2.5.1 (New); IWUIC: [A] 104.2.2.5, 104.2.2.5.1 (New); IGCC: 104.2.5.5, 104.2.5.5 (New)

Proponents: Jenifer Gilliland, representing Washington Association of Building Officials (jenifer.gilliland@seattle.gov); Micah Chappell, representing Seattle Department of Construction & Inspections (micah.chappell@seattle.gov) requests As Modified by Public Comment

Further modify as follows:

2021 International Building Code

[A] **104.2.3.5 Tests.** Tests conducted to demonstrate equivalency in support of an alternative material, design or method of construction application shall be of a scale that is sufficient to ~~predict~~ simulate performance of ~~in~~ the end use configuration. ~~Tests shall be performed by a party acceptable to the building official.~~

[A] **104.2.3.5.1 Performance.** Tests shall be performed by a party acceptable to the building official.

2021 International Existing Building Code

[A] **104.2.3.5 Tests.** Tests conducted to demonstrate equivalency in support of an alternative material, design or method of construction application shall be of a scale that is sufficient to ~~predict~~ simulate performance of ~~in~~ the end use configuration. ~~Tests shall be performed by a party acceptable to the code official.~~

[A] **104.2.3.5.1 Performance.** Tests shall be performed by a party acceptable to the code official.

2021 International Fire Code

[A] **104.2.3.5 Tests.** Tests conducted to demonstrate equivalency in support of an alternative material, design or method of construction application shall be of a scale that is sufficient to ~~predict~~ simulate performance of ~~in~~ the end use configuration. ~~Tests shall be performed by a party acceptable to the fire code official.~~

[A] **104.2.3.5.1 Performance.** Tests shall be performed by a party acceptable to the fire code official.

2021 International Property Maintenance Code

[A] **105.2.2.5 Tests.** Tests conducted to demonstrate equivalency in support of an alternative material, design or method of construction application shall be of a scale that is sufficient to ~~predict~~ simulate performance of ~~in~~ the end use configuration. ~~Tests shall be performed by a party acceptable to the code official.~~

[A] **105.2.2.5.1 Performance.** Tests shall be performed by a party acceptable to the code official.

2021 International Wildland-Urban Interface Code

[A] **104.2.2.5 Tests.** Tests conducted to demonstrate equivalency in support of an alternative material, design or method of construction application shall be of a scale that is sufficient to ~~predict~~ simulate performance of ~~in~~ the end use configuration. ~~Tests shall be performed by a party acceptable to the code official.~~

[A] **104.2.2.5.1 Performance.** Tests shall be performed by a party acceptable to the code official.

2021 International Green Construction Code

104.2.5.5 Tests. Tests conducted to demonstrate equivalency in support of an alternative material, design or method of construction application shall be of a scale that is sufficient to predict performance of the end use configuration. ~~Such tests shall be performed by a party acceptable to the authority having jurisdiction.~~

104.2.5.5 Performance. Tests shall be performed by a party acceptable to the authority having jurisdiction.

Commenter's Reason: This PC seeks to further clarify that full-scale testing is not necessary to support an alternative material, design or method of construction. It only needs to be large enough to give confidence to the building official that a product, component or assembly will perform as expected in the end use configuration. We don't want to just "predict" performance—we need more assurance than that—we actually want to simulate performance in testing. If the performance is simulated then this knowledge can be used to determine how the product, component or assembly will perform in situ.

Testing doesn't always occur in a lab. It could be a fire test of the material of a temporary tent that has no labeling witnessed by the fire department. These tests can consist of burning a tiny piece of the fabric. The language here needs to be written in a general manner to cover all situations where testing may be required.

This is one of three public comments submitted related to fire testing found through out the ICC Family of Codes.

Cost Impact: The net effect of the public comment and code change proposal will not increase or decrease the cost of construction. The changes in the PC should not impact costs. If anything the changes would reduce costs because full-scale testing would not be required.

Public Comment# 3311

Public Comment 3:

IBC: [A] 104.2.3.2, [A] 104.2.4, [A] 104.7, [A] 104.7.1, [A] 104.7.2, [A] 104.7.3, [A] 104.7.4, [A] 104.7.5; **IEBC:** [A] 104.2.3.2, [A] 104.2.4, [A] 104.7, [A] 104.7.1, [A] 104.7.2, [A] 104.7.3, [A] 104.7.4, [A] 104.7.5; **IFC:** [A] 104.2.3.2, [A] 104.2.4, [A] 104.7, [A] 104.7.1, [A] 104.7.2, [A] 104.7.3, [A] 104.7.4, [A] 104.7.5, [A] 104.7.6; **IPMC:** [A] 105.2.2.2, [A] 105.2.3, [A] 105.7, [A] 105.7.1, [A] 105.7.2, [A] 105.7.3, [A] 105.7.4, [A] 105.7.5; **IWUIC:** [A] 104.2.2.2, [A] 104.2.3, [A] 104.7, [A] 104.7.1, [A] 104.7.2, [A] 104.7.3, [A] 104.7.4, [A] 104.7.5; **IGCC:** 104.2.5.2, 104.2.6, 104.8, 104.8.1, 104.8.2, 104.8.3, 104.8.4, 104.8.5

Proponents: Jenifer Gilliland, representing Washington Association of Building Officials (jenifer.gilliland@seattle.gov); Micah Chappell, representing Washington Association of Building Officials Technical Code Development Committee (micah.chappell@seattle.gov) requests As Modified by Public Comment

Further modify as follows:

2021 International Building Code

[A] 104.2.3.2 Application and disposition. Where required a request to use an alternative material, design or method of construction shall be submitted ~~in writing~~ to the building official for approval. Where the alternative material, design or method of construction is not approved, the building official shall ~~provide a response~~ provide a response, stating the reasons the alternative was not approved.

[A] 104.2.4 Modifications. Where there are practical difficulties involved in carrying out the provisions of this code, the building official shall have the authority to grant modifications for individual cases provided that the building official shall first find that one or more special individual reasons make the strict letter of this code impractical, that the modification is in compliance with the intent and purpose of this code, and that such modification does not lessen health, accessibility, life and fire safety or structural requirements. The details of the written request for and action granting modifications shall be recorded and ~~maintained entered in the files of the department of building safety~~ maintained entered in the files of the department of building safety in the official record by the building official.

[A] 104.7 Official records. The building official shall keep official records as required by Sections 104.7.1 through 104.7.5. Such official records shall be retained ~~for not less than 5 years or~~ for as long as the building or structure to which such records relate remains in existence, unless otherwise provided by other laws, regulations, or rules. Such records shall be made available for public inspection.

[A] 104.7.1 Approvals Applications. A record of ~~approvals~~ the status or the final disposition of shall be maintained by the applications submitted to the building official and shall be maintained available for public inspection during business hours in accordance with applicable laws.

[A] 104.7.2 Inspections. The building official shall ~~keep~~ maintain a record of each inspection made, including notices and orders , and notices of violation issued, showing the findings and disposition of each.

[A] 104.7.3 Code alternatives and modifications. Application for alternative materials, design and methods of construction and equipment in accordance with Section 104.2.3; modifications in accordance with Section 104.2.4; and documentation of the final decision of the building official ~~for either shall be in writing and~~ shall be retained in the official records.

[A] 104.7.4 Tests. The building official shall ~~keep~~ maintain a record of tests conducted to comply with Sections 104.2.2.4 and 104.2.3.5.

[A] 104.7.5 Fees. The building official shall ~~keep~~ maintain a record of fees collected and refunded in accordance with Section 109.

2021 International Existing Building Code

[A] 104.2.3.2 Application and disposition. Where required a request to use an alternative material, design or method of construction shall be submitted ~~in writing~~ to the code official for approval. Where the alternative material, design or method of construction is not approved, the code official shall ~~respond in writing~~ provide a response, stating the reasons the alternative was not approved.

[A] 104.2.4 Modifications. Where there are practical difficulties involved in carrying out the provisions of this code, the code official shall have the authority to grant modifications for individual cases, provided that the code official shall first find that one or more special individual reasons make the strict letter of this code impractical, that the modification is in compliance with the intent and purpose of this code, and that such modification does not lessen health, accessibility, life and fire safety, or structural requirements. The details of the written request for and action granting modifications shall be recorded and maintained entered in the files of the department of building safety in the official record by the building official.

[A] 104.7 Official records. The code official shall keep official records as required by Sections 104.7.1 through 104.7.5. Such official records shall

be retained for not less than 5 years or for as long as the structure or activity to which such records relate remains in existence, unless otherwise provided by other laws, regulations, or rules. Such records shall be made available for public inspection.

[A] 104.7.1 Approvals-Applications. A record of ~~approvals~~ the status or the final disposition of shall be maintained by the applications submitted to the code official for review and shall be maintained, available for public inspection during business hours in accordance with applicable laws.

[A] 104.7.2 Inspections. The code official shall ~~keep~~ maintain a record of each inspection made, including notices and orders, and notices of violation issued, showing the findings and disposition of each. Such records shall be made available for public inspection during business hours in accordance with applicable laws.

[A] 104.7.3 Code alternatives and modifications. Application for alternative materials, design and methods of construction and equipment in accordance with Section 104.2.3; modifications in accordance with Section 104.2.4; and documentation of the final decision of the code official ~~for either shall be in writing~~ and shall be retained ~~officially recorded in the permanent~~ official records of the code official.

[A] 104.7.4 Tests. The code official shall ~~keep~~ maintain a record of tests conducted to comply with Sections 104.2.2.4 and 104.2.3.5.

[A] 104.7.5 Fees. The code official shall ~~keep~~ maintain a record of fees collected and refunded in accordance with Section 108.

2021 International Fire Code

[A] 104.2.3.2 Application and disposition. Where required a request to use an alternative material, design or method of construction shall be submitted ~~in writing~~ to the fire code official for approval. Where the alternative material, design or method of construction is not approved, the fire code official shall ~~respond in writing~~ provide a response, stating the reasons the alternative was not approved.

[A] 104.2.4 Modifications. Where there are practical difficulties involved in carrying out the provisions of this code, the fire code official shall have the authority to grant modifications for individual cases, provided that the fire code official shall first find that one or more special individual reasons make the strict letter of this code impractical, that the modification is in compliance with the intent and purpose of this code, and that such modification does not lessen health, life and fire safety requirements. The details of the written request for and action granting modifications shall be recorded and entered in the files of the department of fire prevention.

[A] 104.7 Official records. The fire code official shall keep official records as required by Sections 104.7.1 through 104.7.6. Such official records shall be retained for not less than 5 years ~~or~~ for as long as the structure or activity to which such records relate remains in existence, unless otherwise provided by other laws, regulations, or rules. Such records shall be made available for public inspection.

[A] 104.7.1 Approvals-Applications. A record of ~~approvals~~ the status or the final disposition of shall be maintained by the applications submitted to the fire code official for review and shall be available, maintained as part of the official record, for public inspection during business hours in accordance with applicable laws. Where required, documentation including construction documents and supporting reports shall be retained in the official record.

[A] 104.7.2 Inspections. The fire code official shall ~~keep~~ maintain a record of each inspection made, including notices and orders, and notices of violation issued, showing the findings and disposition of each.

104.7.3 Fire records. The fire code official fire department shall keep a record of fires occurring within its jurisdiction and of facts concerning the same, including statistics as to the extent of such fires and the damage caused thereby, together with other information as required by the fire code official.

[A] 104.7.4 Code alternatives and modifications. Applications for alternative materials, design and methods of construction and equipment in accordance with Section 104.2.3; modifications in accordance with Section 104.2.4; and documentation of the final decision of the fire code official ~~for either shall be in writing and shall~~ maintained in the officially recorded in the permanent official records of the fire code official.

[A] 104.7.5 Tests. The fire code official shall ~~keep~~ maintain a record of tests conducted to comply with Sections 104.2.2.4 and 104.2.3.5.

[A] 104.7.6 Fees. The fire code official shall ~~keep~~ maintain a record of fees collected and refunded in accordance with Section 107.

2021 International Property Maintenance Code

[A] 105.2.2.2 Application and disposition. Where required a request to use an alternative material, design or method of construction shall be submitted ~~in writing~~ to the code official for approval. Where the alternative material, design or method of construction is not approved, the code official shall ~~respond in writing~~ provide a response stating the reasons the alternative was not approved.

[A] 105.2.3 Modifications. Whenever there are practical difficulties involved in carrying out the provisions of this code, the code official shall have the authority to grant modifications for individual cases provided that the code official shall first find that one or more special individual reasons make the strict letter of this code impractical, that the modification is in compliance with the intent and purpose of this code and that such modification does not lessen health, life and fire safety requirements. The details of the written request for and action granting modifications shall be recorded and maintained ~~entered in the department files in the official record by the code official.~~

[A] 105.7 Official records. The code official shall keep official records as required by Sections 105.7.1 through 105.7.5. Such official records shall be retained ~~for not less than 5 years or~~ for as long as the building or structure to which such records relate remains in existence, unless otherwise

provided by other laws, regulations, or rules. Such records shall be made available for public inspection.

[A] 105.7.1 Approvals Applications. A record of ~~approvals~~ the status or final disposition of ~~shall be maintained by the~~ applications submitted to the code official for review and ~~shall be maintained~~ available for public inspection during business hours in accordance with applicable laws. Where required, documentation including construction documents and supporting reports shall be maintained in the official record.

[A] 105.7.2 Inspections. The code official shall have the authority to conduct inspections, or shall accept reports of inspection by approved agencies or individuals. Reports of such inspections shall be ~~in writing and be certified by a responsible officer of such approved agency or by the responsible individual.~~ The code official shall ~~keep~~ maintain a record of each inspection made, including notices and orders and notices of violations issued, showing the findings and disposition of each.

[A] 105.7.3 Code alternatives and modifications. Application for alternative materials, design and methods of construction and equipment in accordance with Section 105.2.2; modifications in accordance with Section 105.2.3; and documentation of the final decision of the code official ~~for either shall be in writing and shall be retained in the official records.~~

[A] 105.7.4 Tests. The code official shall keep a record of tests conducted to comply with Sections 105.2.1.4 and 105.2.2.5.

[A] 105.7.5 Fees. The code official shall ~~keep~~ maintain a record of fees collected and refunded in accordance with Section 104.

2021 International Wildland-Urban Interface Code

[A] 104.2.2.2 Application and disposition. Where required a request to use an alternative material, design or method of construction shall be submitted ~~in writing~~ to the code official for approval. Where the alternative material, design or method of construction is not approved, the code official shall ~~respond in writing~~ provide a response, stating the reasons the alternative was not approved.

[A] 104.2.3 Modifications. Where there are practical difficulties involved in carrying out the provisions of this code, the code official shall have the authority to grant modifications for individual cases provided that the code official shall first find that one or more special individual reasons make enforcement of the strict letter of this code impractical, that the modification is in conformance with the intent and purpose of this code, and that such modification does not lessen health, life and fire safety requirements. The details of the ~~written~~ request for and action granting modifications shall be recorded and ~~entered into the files of the code enforcement agency~~ maintained in the official record by the code official.

[A] 104.7 Official records. The code official shall ~~keep~~ maintain official records as required by Sections 104.7.1 through 104.7.5. Such official records shall be retained for ~~not less than 5 years or for as long as the structure or activity to which such records relate remains in existence,~~ unless otherwise provided by other laws, regulations, or rules. Where required, documentation including construction documents and supporting reports shall be retained in the official record.

[A] 104.7.1 Approvals Applications. A record of ~~approvals~~ the status or the final disposition of ~~shall be maintained by the~~ applications submitted to the code official for review and shall be available for public inspection during business hours in accordance with applicable laws ~~maintained~~.

[A] 104.7.2 Inspections. The code official shall ~~keep~~ maintain a record of each inspection made, including notices and orders and notices of violation issued, showing the findings and disposition of each.

[A] 104.7.3 Code alternatives and modifications. Applications for alternative materials, design and methods of construction and equipment in accordance with Section 104.2.2; modifications in accordance with Section 104.2.3; and documentation of the final decision of the code official ~~for either shall be in writing and shall be officially recorded in the permanent records of the code official.~~

[A] 104.7.4 Tests. The code official shall ~~keep~~ maintain a record of tests conducted to comply with Sections 104.2.1.4 and 104.2.2.5.

[A] 104.7.5 Fees. The code official shall ~~keep~~ maintain a record of fees collected and refunded in accordance with Section 109.

2021 International Green Construction Code

104.2.5.2 Application and disposition. Where required a request to use an alternative material, design, innovative approach or method of construction shall be submitted ~~in writing~~ to the authority having jurisdiction for approval. Where the alternative material, design, innovative approach or method of construction is not approved, the authority having jurisdiction shall ~~respond in writing~~ provide a response stating the reasons the alternative was not approved.

104.2.6 Modifications. Where there are practical difficulties involved in carrying out the provisions of this code, the authority having jurisdiction shall have the authority to grant modifications for individual cases, provided the authority having jurisdiction shall first find that one or more special individual reasons make the strict letter of this code impractical, that the modification is in compliance with the intent and purpose of this code, and that such modification does not lessen the minimum requirements of this code. The details of the ~~written~~ request for and granting modifications shall be recorded and maintained ~~entered in the files of the department~~ in the official record by the authority having jurisdiction.

104.8 Official records. The authority having jurisdiction shall keep official records as required by Sections 104.8.1 through 104.8.5. Such official records shall be retained for ~~not less than 5 years or for as long as the building or structure to which such records relate remains in existence,~~ unless otherwise provided by other laws, regulations or rules. Such records shall be made available for public inspections.

104.8.1 Approvals Applications. A record of ~~approvals~~ the status or the final disposition of ~~shall be maintained~~ applications submitted to ~~by the~~

authority having jurisdiction for review and shall be maintained ~~available for public inspection during business hours in accordance with applicable laws.~~ Where required, documentation including construction documents and supporting reports shall be retained in the official record.

104.8.2 Inspections. The code official shall ~~keep~~ maintain a record of each inspection made, including notices and orders and notices of violation issued, showing the findings and disposition of each.

104.8.3 Code alternatives and modifications. Applications ~~for~~ alternative materials, design and methods of construction and equipment in accordance with Section 104.2.5; modifications in accordance with Section 104.2.6; and documentation of the final decision of the authority having jurisdiction ~~for either shall be in writing and~~ shall be retained in the official records.

104.8.4 Tests. The authority having jurisdiction shall ~~keep~~ maintain a record of tests conducted to comply with Sections 104.2.2.4 and 104.2.5.5.

104.8.5 Fees. The authority having jurisdiction shall ~~keep~~ maintain a record of fees collected and refunded in accordance with Section 108.

Commenter's Reason: This PC attempts to coordinate terms and eliminate dated language, by making the following changes to the original proposal:

- The 5-year minimum time limit for keeping records is eliminated in this PC because public record retention laws vary so much from place to place. There really is no best practice. Some jurisdictions keep permit and inspections records for the life of the building, while others keep no records of residential buildings after a few years. It takes time and money to keep records in a format that allows access to them by the public. Individual jurisdictions will need to customize this section to meet their local conditions.
- More than just approvals need to be kept as part of the official record. Tracking disapprovals of applications and permits is just as important. The requirement to track "status" and "final disposition" makes it clear that records relating to important approval milestones and the final outcome are to be maintained.
- Language is added to make it clear that the building official authority can require the retention of construction documents as part of the public record.
- Language about maintaining construction documents and supporting reports as part of the official record is added but only "where required". This again allows the building official to keep the records based on local and state retention requirements as well as department capacity.
- All records should be subject to "public inspection", not just the inspection records. This language has been relocated 104.7.2 inspections from the charging statement to 104.7 Official Records.
- Notices of violation are added to the list of inspection items in 104.7.2 that need to be maintained as the part of the public record.
- Plan review and inspection results are now recorded and maintained almost entirely electronically in most building departments. There is no need to keep outdated language that requires a department to maintain records "in writing" or a "written response".
- Also, the word "kept" is replaced by "maintained" in this PC. "Kept" implies that the record is being saved "as is". "Maintained" implies more effort to include actions like moving the record from paper to microfiche and finally to a digitized record. "Maintain" might also include sorting, storing and indexing documents in an organized manner.

This PC is the 1st of 3 submitted public comments dealing with record keeping by the code official.

Cost Impact: The net effect of the public comment and code change proposal will not increase or decrease the cost of construction. This PC is just describing the official record that is being kept by the building official/code official or authority having jurisdiction. It should not increase the costs for a department as most of the records, outside of the inspection and plan review results, are permitted to be kept by the code official rather than required.

Public Comment 4:

IBC: [A] 104.2.3.4; **IEBC:** [A] 104.2.3.4; **IFC:** [A] 104.2.3.4; **IPMC:** [A] 105.2.2.4; **IWUIC:** [A] 104.2.2.4; **IGCC:** 104.2.5.4

Proponents: Bill McHugh, representing Firestop Contractors International Assn., National Fireproofing Contractors Assn. (bill@mc-hugh.us) requests As Modified by Public Comment

Further modify as follows:

2021 International Building Code

[A] 104.2.3.4 Equivalency criteria. An alternative material, design or method of construction shall, for the purpose intended, be not less than the equivalent of that prescribed in this code with respect to all of the following, as applicable:

1. Quality
2. Strength
3. Effectiveness
4. Durability
5. Safety, other than fire safety
6. Fire safety
7. Fire Resistance

2021 International Existing Building Code

[A] 104.2.3.4 Equivalency criteria. An alternative material, design or method of construction shall, for the purpose intended, be not less than the equivalent of that prescribed in this code with respect to all of the following, as applicable:

1. Quality
2. Strength
3. Effectiveness
4. Durability
5. Safety, other than fire safety
6. Fire safety
7. Fire Resistance

2021 International Fire Code

[A] 104.2.3.4 Equivalency criteria. An alternative material, design or method of construction shall, for the purpose intended, be not less than the equivalent of that prescribed in this code with respect to all of the following, as applicable:

1. Quality
2. Strength
3. Effectiveness
4. Durability
5. Safety, other than fire safety
6. Fire safety
7. Fire Resistance

2021 International Property Maintenance Code

[A] 105.2.2.4 Equivalency criteria. An alternative material, design or method of construction shall, for the purpose intended, be not less than the equivalent of that prescribed in this code with respect to all of the following, as applicable:

1. Strength
2. Quality

3. Strength
4. Durability
5. Safety, other than fire safety
6. Fire safety
7. Fire Resistance

2021 International Wildland-Urban Interface Code

[A] 104.2.2.4 Equivalency criteria. An alternative material, design or method of construction shall, for the purpose intended, be not less than the equivalent of that prescribed in this code with respect to all of the following, as applicable:

1. Quality
2. Strength
3. Effectiveness
4. Durability
5. Safety, other than fire safety
6. Fire safety
7. Fire Resistance

2021 International Green Construction Code

104.2.5.4 Equivalency criteria. An alternative material, design, innovative approach or method of construction shall, for the purpose intended, be not less than the equivalent of that prescribed in this code with respect to all of the following, as applicable:

1. Quality
2. Strength
3. Effectiveness
4. Durability
5. Safety, other than fire safety
6. Fire safety
7. Fire Resistance

Commenter's Reason: The reason for this public comment is to re-insert the words 'Fire Resistance'. Fire Resistance has been in the BOCA National Building Code 104.11 ('96 and before), the Uniform Building Code ('97 and before), and for a reason. Fire Resistance is a critical part of the building's fire and life safety protection package. Any alternative to fire-resistance needs to be equal to the fire resistance provided. During the Committee Action Hearings, a list of items explaining what's in 'Fire Safety' including Fire Resistance was deleted, leaving 'Fire Safety' with no definition. Because the term Fire-Resistance has in the International Building Code since the 2000 version, and in the BOCA National Building Code, Uniform Building Code - as a stand alone item - we believe it needs to remain a stand alone item in this section.

Cost Impact: The net effect of the public comment and code change proposal will not increase or decrease the cost of construction. This code proposal would put a term back in the code that was removed. Therefore, it is cost neutral.

Public Comment# 3329

Public Comment 5:

IBC: [A] 104.1, [A] 104.2, [A] 104.2.2; **IEBC:** [A] 104.1, [A] 104.2, [A] 104.2.2; **IFC:** [A] 104.1, [A] 104.2, [A] 104.2.2; **IPMC:** [A] 105.1, [A] 105.2, [A] 105.2.1; **IWUIC:** [A] 104.1, [A] 104.2, [A] 104.2.1; **IGCC:** 104.1, 104.2, 104.2.2

Proponents: Shane Nilles, representing Self (snilles@cityofcheney.org) requests As Modified by Public Comment

Further modify as follows:

2021 International Building Code

[A] **104.1 General.** The building official is hereby authorized and directed to enforce the provisions of this code- and shall have the authority to render interpretations of this code and to adopt policies and procedures in order to clarify the application of this code's provisions. Such interpretations, policies and procedures:

1. Shall be in compliance with the intent and purpose of this code.
2. Shall not have the effect of waiving requirements specifically provided for in this code.

[A] **104.2 Determination of Evaluate for Compliance.** The building official shall ~~have the authority to determine~~ evaluate for compliance with this code in accordance with this section and the, ~~to render interpretations of this code and to adopt ed~~ policies and procedures as authorized by Section 104.1 ~~in order to clarify the application of this code's provisions. Such interpretations, policies and procedures:-~~

1. ~~Shall be in compliance with the intent and purpose of this code.~~
2. ~~Shall not have the effect of waiving requirements specifically provided for in this code.~~

[A] **104.2.2 Technical assistance.** To ~~determine~~ evaluate for compliance with this code, the building official is authorized to require the owner or owner's authorized agent to provide a technical opinion and report.

2021 International Existing Building Code

[A] **104.1 General.** The code official is hereby authorized and directed to enforce the provisions of this code- and shall have the authority to render interpretations of this code and to adopt policies and procedures in order to clarify the application of this code's provisions. Such interpretations, policies and procedures:

1. Shall be in compliance with the intent and purpose of this code.
2. Shall not have the effect of waiving requirements specifically provided for in this code.

[A] **104.2 Determination of Evaluate for Compliance.** The code official shall ~~have the authority to determine~~ evaluate for compliance with this code in accordance with this section and the, ~~to render interpretations of this code and to adopt ed~~ policies and procedures as authorized by Section 104.1 ~~in order to clarify the application of this code's provisions. Such interpretations, policies and procedures:-~~

1. ~~Shall be in compliance with the intent and purpose of this code.~~
2. ~~Shall not have the effect of waiving requirements specifically provided for in this code.~~

[A] **104.2.2 Technical assistance.** To ~~determine~~ evaluate for compliance with this code, the code official is authorized to require the owner or owner's authorized agent to provide a technical opinion and report.

2021 International Fire Code

[A] **104.1 General.** The fire code official is hereby authorized to enforce the provisions of this code- and shall have the authority to render interpretations of this code and to adopt policies and procedures in order to clarify the application of this code's provisions. Such interpretations, policies and procedures:

1. Shall be in compliance with the intent and purpose of this code.
2. Shall not have the effect of waiving requirements specifically provided for in this code.

[A] **104.2 Determination of Evaluate for compliance.** The fire code official shall ~~have the authority to determine~~ evaluate for compliance with this code in accordance with this section and the, ~~to render interpretations of this code and to adopt ed~~ policies and procedures as authorized by Section 104.1 ~~in order to clarify the application of this code's provisions. Such interpretations, policies and procedures:-~~

1. ~~Shall be in compliance with the intent and purpose of this code.~~
2. ~~Shall not have the effect of waiving requirements specifically provided for in this code.~~

[A] **104.2.2 Technical assistance.** To ~~determine~~ evaluate for compliance with this code, the fire code official is authorized to require the owner or owner's authorized agent to provide a technical opinion and report.

2021 International Property Maintenance Code

[A] **105.1 General.** The code official is hereby authorized and directed to enforce the provisions of this code- and shall have the authority to render interpretations of this code and to adopt policies and procedures in order to clarify the application of this code's provisions. Such interpretations, policies and procedures:

1. Shall be in compliance with the intent and purpose of this code.
2. Shall not have the effect of waiving requirements specifically provided for in this code.

[A] 105.2 Determination of Evaluate for compliance. The code official shall ~~have the authority to determine~~ evaluate for compliance with this code in accordance with this section and the, ~~to render interpretations of this code and to adopt ed~~ policies and procedures as authorized by Section 104.1 in order to clarify the application of this code's provisions. Such interpretations, policies and procedures:-

1. ~~Shall be in compliance with the intent and purpose of this code.~~
2. ~~Shall not have the effect of waiving requirements specifically provided for in this code.~~

[A] 105.2.1 Technical assistance. To ~~determine~~ evaluate for compliance with this code, the code official is authorized to require the owner or owner's authorized agent to provide a technical opinion and report.

2021 International Wildland-Urban Interface Code

[A] 104.1 Powers and duties of the code official. The code official is hereby authorized to enforce the provisions of this code ~~and shall have the authority to render interpretations of this code and to adopt policies and procedures in order to clarify the application of this code's provisions. Such interpretations, policies and procedures:~~

1. Shall be in compliance with the intent and purpose of this code.
2. Shall not have the effect of waiving requirements specifically provided for in this code.

[A] 104.2 Determination of Evaluate for compliance. The code official shall ~~have the authority to determine~~ evaluate for compliance with this code in accordance with this section and the, ~~to render interpretations of this code and to adopt ed~~ policies and procedures as authorized by Section 104.1 in order to clarify the application of this code's provisions. Such interpretations, policies and procedures:-

1. ~~Shall be in compliance with the intent and purpose of this code.~~
2. ~~Shall not have the effect of waiving requirements specifically provided for in this code.~~

[A] 104.2.1 Technical assistance. To ~~determine~~ evaluate for compliance with this code, the code official is authorized to require the owner, the owner's authorized agent or the person in possession or control of the building or premises to provide a technical opinion and report.

2021 International Green Construction Code

104.1 General. The authority having jurisdiction is hereby authorized and directed to enforce the provisions of this code ~~and shall have the authority to render interpretations of this code and to adopt policies and procedures in order to clarify the application of this code's provisions. Such interpretations, policies and procedures:~~

1. Shall be in compliance with the intent and purpose of this code.
2. Shall not have the effect of waiving requirements specifically provided for in this code.

104.2 Determination of Evaluate for compliance. The code official shall ~~have the authority to determine~~ evaluate for compliance with this code in accordance with this section and the, ~~to render interpretations of this code and to adopt ed~~ policies and procedures as authorized by Section 104.1 in order to clarify the application of this code's provisions. Such interpretations, policies and procedures:-

1. ~~Shall be in compliance with the intent and purpose of this code.~~
2. ~~Shall not have the effect of waiving requirements specifically provided for in this code or other applicable codes and ordinances.~~

104.2.2 Technical assistance. To ~~determine~~ evaluate for compliance with this code, the authority having jurisdiction is authorized to require the owner or owner's authorized agent to provide a technical opinion and report.

Commenter's Reason: Currently the code does not grant the code official the authority to determine that any work fully complies with the code, but rather the authority to enforce the code by reviewing, inspecting, and evaluating for compliance with the code. This is an important distinction because it is not the responsibility of the code official to guarantee that there are no violations when they complete plan reviews or inspections. If that were the case, then contractors, designers, and owners would be able to be absolved of all responsibility for any violations that were not caught by the code official. This public comment corrects that critical oversight that was made by the original proposal and maintains the current intent of the administrative authorities while supporting the original proposal's effort to clarify these sections.

Cost Impact: The net effect of the public comment and code change proposal will not increase or decrease the cost of construction. The proposal and this public comment only clarifies the current intent of the code and does not directly affect the cost of construction.

Public Comment 6:

IBC: [A] 104.2.1; IEBC: [A] 104.2.1; IFC: [A] 104.2.1; IGCC: 104.2.1

Proponents: John Woestman, representing Composite Lumber Manufacturers Association (CLMA) (jwoestman@kellencompany.com) requests As Modified by Public Comment

Further modify as follows:

2021 International Building Code

[A] 104.2.1 Listed compliance. Where this code or a referenced standard requires equipment, materials, products or services to be listed and a listing standard is specified, the listing shall be based on the specified standard. Where a listing standard is not specified, the listing shall be based on an *approved* listing criteria. Listings shall be germane to the provision requiring the listing. Installation shall be in accordance with the listing and the manufacturer's instructions, and where required to verify compliance, the listing ~~standard~~ and the manufacturer's instructions shall be made available to the building official.

2021 International Existing Building Code

[A] 104.2.1 Listed compliance. Where this code or a referenced standard requires equipment, materials, products or services to be listed and a listing standard is specified, the listing shall be based on the specified standard. Where a listing standard is not specified, the listing shall be based on an *approved* listing criteria. Listings shall be germane to the provision requiring the listing. Installation shall be in accordance with the listing and the manufacturer's instructions, and where required to verify compliance, the listing ~~standard~~ and the manufacturer's instructions shall be made available to the code official.

2021 International Fire Code

[A] 104.2.1 Listed compliance. Where this code or a referenced standard requires equipment, materials, products or services to be listed and a listing standard is specified, the listing shall be based on the specified standard. Where a listing standard is not specified, the listing shall be based on an *approved* listing criteria. Listings shall be germane to the provision requiring the listing. Installation shall be in accordance with the listing and the manufacturer's instructions, and where required to verify compliance, the listing ~~standard~~ and the manufacturer's instructions shall be made available to the fire code official.

2021 International Green Construction Code

104.2.1 Listed compliance. Where this code or a referenced standard requires equipment, materials, products or services to be listed and a listing standard is specified, the listing shall be based on the specified standard. Where a listing standard is not specified, the listing shall be based on an *approved* listing criteria. Listings shall be germane to the provision requiring the listing. Installation shall be in accordance with the listing and the manufacturer's instructions, and where required to verify compliance, the listing ~~standard~~ and the manufacturer's instructions shall be made available to the code official.

Commenter's Reason: We recommend revising the last sentence in this section for consistency between the installation requirements and the information required to be made available to the code official. That is: install per the listing and the manufacturer's instructions, and to make this same information available to the code official if needed to verify compliance.

We agree with the intent of the provisions in Section 104.2.1. However, we have concerns with the ambiguity of part of the last sentence of 104.2.1 and the likelihood of job-by-job and product-by-product interpretation and enforcement of this particular part of the that sentence: ". . . and where required to verify compliance, the listing standard . . . shall be made available to the building official."

Regarding ambiguity of ". . . shall be made available . . .", we anticipate some code officials will ask for a printed copy of a specific standard for a specific product on specific projects. Other code officials will consider the standard available if the standard can be viewed online. And, other code officials may interpret this phrase different than either of these examples.

Standards to which products are listed are typically available from the standards development organization (SDO), or from their authorized agent (e.g. techstreet.com). Some standards are posted online by the SDO for downloading at no cost. Some standards are available from the SDO for viewing online at no cost, but have document protection that prevents copying / pasting and / or downloading, and may be purchased for downloading and printing. And, some standards are available online and require purchasing to view, download, or print.

The standard to which a product is listed is almost always a copyrighted document. Typically, only the copyright owner of a standard, the SDO, can make available copyrighted material. The current language implies the party responsible for complying with the code would be responsible for making available an SDO's copyrighted material, which would likely infringe on the copyright.

Unlike the copyrighted standard, the listing is typically publicly available, With these concerns in mind, we recommend revising Section R104.2.1 as proposed in this public comment.

Cost Impact: The net effect of the public comment and code change proposal will not increase or decrease the cost of construction. This public comment will not increase the cost of construction. On the other hand, this public comment may, or may not, decrease the cost of construction. Without this public comment, standards which are referenced in the code could be requested to be made available by the project owner - and that may require purchase of the standard.

Public Comment# 3487

ADM13-22 Part II

IRC: SECTION 202, R104

Proposed Change as Submitted

Proponents: Robert Marshall, representing FCAC (fcac@iccsafe.org); Mike Nugent, representing Building Code Action Committee (bcac@iccsafe.org); Jeffrey Shapiro, representing Lake Travis Fire Rescue (jeff.shapiro@intlcodeconsultants.com)

Primary sections and titles shown as deleted include the deletion of all sections and subsections within them. For clarity, the full text of these deletions are not shown.

2021 International Residential Code

Revise as follows:

[RB] APPROVED AGENCY. An established and recognized agency organization that is regularly engaged in conducting tests, furnishing inspection services or furnishing product evaluation or certification, and where such organization has been approved by the building official.

Add new definition as follows:

PEER REVIEW. An independent and objective technical review conducted by an approved third party.

Revise as follows:

SECTION R104 **~~DUTIES AND POWERS OF THE BUILDING OFFICIAL~~** ***(Delete entire section and replace as follows)***

Add new text as follows:

SECTION R104 **DUTIES AND POWERS OF THE BUILDING OFFICIAL**

R104.1 General. The building official is hereby authorized and directed to enforce the provisions of this code.

R104.2 Determination of compliance. The building official shall have the authority to determine compliance with this code, to render interpretations of this code and to adopt policies, procedures, rules and regulations in order to clarify the application of this code's provisions. Such interpretations, policies, procedures, rules and regulations:

1. Shall be in compliance with the intent and purpose of this code.
2. Shall not have the effect of waiving requirements specifically provided for in this code.

R104.2.1 Listed compliance. Determination of compliance for anything required by this code, or a reference standard, to be listed shall be based on a test standard or approved listing evaluation that is germane to the provision requiring the listing. Anything required by this code, or a reference standard, to be listed shall be installed in accordance with the listing and the manufacturer's instructions. Copies of the listing standard and manufacturer's instructions shall be made available to the building official upon request.

R104.2.2 Technical assistance. To determine compliance with this code, the building official is authorized to require the owner or owner's authorized agent to provide a technical opinion and report.

R104.2.2.1 Cost. A technical opinion and report shall be provided without charge to the jurisdiction.

R104.2.2.2 Preparer qualifications. The technical opinion and report shall be prepared by a qualified engineer, specialist, laboratory or specialty organization acceptable to the building official. The building official is authorized to require design submittals to be prepared by, and bear the stamp of, a registered design professional.

R104.2.2.3 Content. The technical opinion and report shall analyze the safety properties of the design, operation or use of the building or premises and the facilities and appurtenances situated thereon, to identify and propose necessary recommendations.

R104.2.2.4 Tests. Where there is insufficient evidence of compliance with the provisions of this code, the building official is authorized to require tests as evidence of compliance. Test methods shall be as specified in this code or by other recognized test standards. In the absence of recognized test standards, the building official shall approve the testing procedures. Tests shall be performed by a party acceptable to the building official.

R104.2.3 Alternative materials, design and methods of construction and equipment. The provisions of this code are not intended to prevent

the installation of any material or to prohibit any design or method of construction not specifically prescribed by this code, provided that any such alternative is not specifically prohibited by this code and has been approved.

R104.2.3.1 Approval authority. An alternative material, design or method of construction shall be approved where the building official finds that the proposed alternative is satisfactory and complies with Sections 104.2.3 through 104.2.3.7, as applicable.

R104.2.3.2 Application and disposition. A request to use an alternative material, design or method of construction shall be submitted in writing to the building official for approval. Where the alternative material, design or method of construction is not approved, the building official shall respond in writing, stating the reasons the alternative was not approved.

R104.2.3.3 Compliance with code intent. An alternative material, design or method of construction shall comply with the intent of the provisions of this code.

R104.2.3.4 Equivalency criteria. An alternative material, design or method of construction shall, for the purpose intended, be not less than the equivalent of that prescribed in this code with respect to all the following, as applicable:

1. Quality
2. Strength
3. Effectiveness
4. Durability
5. Safety

R104.2.3.4.1 Fire safety equivalency. Determination of safety equivalency, with respect to fire, shall be based on an analysis that includes applicable fire safety performance properties, such as but not limited to flame spread, heat release rate, heat of combustion, smoke development and fire resistance.

R104.2.3.5 Tests. Tests conducted to demonstrate equivalency in support of an alternative material, design or method of construction application shall be of a scale that is sufficient to predict performance of the end use configuration. Tests shall be performed by a party acceptable to the building official.

R104.2.3.6 Reports. Supporting documentation, where necessary to assist in the approval of materials or assemblies not specifically provided for in this code, shall comply with Sections R104.2.3.6.1 and R104.2.3.6.2.

R104.2.3.6.1 Evaluation reports. Evaluation reports shall be issued by an approved agency accredited to evaluate or certify products. The alternate material, design or method of construction and product evaluated shall be within the scope of accreditation of the approved agency. Criteria used for the evaluation shall be identified within the report, developed using a process that includes input from the public and made available for review by the public.

R104.2.3.6.2 Other reports. Reports not complying with Section R104.2.3.6.1 shall describe criteria, including but not limited to any referenced testing or analysis, used to determine compliance with code intent and justify code equivalence, including but not limited to any referenced testing or analysis. The report shall be prepared by a qualified engineer, specialist, laboratory or specialty organization acceptable to the building official. The building official is authorized to require design submittals to be prepared by, and bear the stamp of, a registered design professional.

R104.2.3.7 Peer review. The building official is authorized to require submittal of a peer review report in conjunction with a request to use an alternative material, design or method of construction, prepared by a peer reviewer that is approved by the building official.

R104.2.4 Modifications. Where there are practical difficulties involved in carrying out the provisions of this code, the building official shall have the authority to grant modifications for individual cases, provided the building official shall first find that one or more special individual reasons make the strict letter of this code impractical, that the modification is in compliance with the intent and purpose of this code, and that the modification does not lessen health, life and fire safety or structural requirements. The details of the written request for and action granting modifications shall be recorded and entered in the files of the department of building safety.

R104.2.4.1 Flood hazard areas. The building official shall not grant modifications to any provisions required in flood hazard areas as established by Table R301.2 unless a determination has been made that:

1. There is good and sufficient cause showing that the unique characteristics of the size, configuration or topography of the site render the elevation standards of Section R322 inappropriate.
2. Failure to grant the modification would result in exceptional hardship by rendering the lot undevelopable.
3. The granting of modification will not result in increased flood heights, additional threats to public safety, extraordinary public expense, cause fraud on or victimization of the public, or conflict with existing laws or ordinances.
4. The modification is the minimum necessary to afford relief, considering the flood hazard.

5. Written notice specifying the difference between the design flood elevation and the elevation to which the building is to be built, stating that the cost of flood insurance will be commensurate with the increased risk resulting from the reduced floor elevation and stating that construction below the design flood elevation increases risks to life and property, has been submitted to the applicant.

R104.3 Applications and permits. The building official shall receive applications, review construction documents and issue permits for the erection and alteration of buildings and structures, inspect the premises for which such permits have been issued and enforce compliance with the provisions of this code.

R104.4 Right of entry. Where it is necessary to make an inspection to enforce the provisions of this code, or where the building official has reasonable cause to believe that there exists in a structure or upon a premises a condition that is contrary to or in violation of this code that makes the structure or premises unsafe, dangerous or hazardous, the building official is authorized to enter the structure or premises at all reasonable times to inspect or to perform the duties imposed by this code. If such structure or premises is occupied, the building official shall present credentials to the occupant and request entry. If such structure or premises is unoccupied, the building official shall first make a reasonable effort to locate the owner, the owner's authorized agent, or other person having charge or control of the structure or premises and request entry. If entry is refused, the building official shall have recourse to every remedy provided by law to secure entry.

R104.4.1 Warrant. Where the building code official has first obtained a proper inspection warrant or other remedy provided by law to secure entry, an owner, the owner's authorized agent or occupant or person having charge, care or control of the building or premises shall not fail or neglect, after proper request is made as herein provided, to permit entry therein by the building code official for the purpose of inspection and examination pursuant to this code.

R104.5 Identification. The building official shall carry proper identification when inspecting structures or premises in the performance of duties under this code.

R104.6 Notices and orders. The building official shall issue necessary notices or orders to ensure compliance with this code in accordance with Section R113.2.

R104.7 Official records. The building official shall keep official records as required in Sections R104.7.1 through R104.7.5. Such official records shall be retained for not less than 5 years or for as long as the building or structure to which such records relate remains in existence, unless otherwise provided by other regulations.

R104.7.1 Approvals. A record of approvals shall be maintained by the building official and shall be available for public inspection during business hours in accordance with applicable laws.

R104.7.2 Inspections. The building official shall keep a record of each inspection made, including notices and orders issued, showing the findings and disposition of each.

R104.7.3 Code alternatives and modifications. Application for alternative materials, design and methods of construction and equipment in accordance with Section R104.2.3; modifications in accordance with Section R104.2.4; and documentation of the final decision of the building official for either shall be in writing and shall be retained in the official records.

R104.7.4 Tests. The building official shall keep a record of tests conducted to comply with Sections R104.2.2.4 and R104.2.3.5.

R104.7.5 Fees. The building official shall keep a record of fees collected and refunded in accordance with Section R108.

R104.8 Liability. The building official, member of the board of appeals or employee charged with the enforcement of this code, while acting for the jurisdiction in good faith and without malice in the discharge of the duties required by this code or other pertinent law or ordinance, shall not thereby be personally liable, either civilly or criminally, and is hereby relieved from personal liability for any damage accruing to persons or property as a result of any act or by reason of an act or omission in the discharge of official duties.

R104.8.1 Legal defense. Any suit or criminal complaint instituted against any officer or employee because of an act performed by that officer or employee in the lawful discharge of duties and under the provisions of this code or other laws or ordinances implemented through the enforcement of this code shall be defended by legal representatives of the jurisdiction until the final termination of the proceedings. The building official or any subordinate shall not be liable for cost in any action, suit or proceeding that is instituted in pursuance of the provisions of this code.

R104.9 Approved materials and equipment. Materials, equipment and devices approved by the building official shall be constructed and installed in accordance with such approval.

R104.9.1 Materials and equipment reuse. Materials, equipment and devices shall not be reused unless such elements are in good working condition and approved.

Reason: Section 104 (Section 105 in the IPMC) appears in the IFC, IWUIC, IBC, IEBC, IRC, IgCC and IPMC and contains general requirements for the authority and duties of the code official. Among these authorities and duties is the review and approval of alternate methods. The primary purpose of this code change is to update Section 104 to reflect the current manner that alternate methods and materials are evaluated, and to differentiate between evaluations from accredited evaluation agencies and evaluations from others, such as engineers. These provisions have basically been the same since the first edition in 2000, with the exception that the section on "Research Reports" was added in 2003. Industry terminology and methods have evolved over the years.

This proposal revises general code enforcement provisions to improve organization, improve clarity, and supplement existing provisions to better align the code text with how the code is commonly applied. The end goal is to provide the same wording and procedures in all of the I-Codes with regard to the Duties and Responsibilities of the Code Official. Some of the codes contain unique provisions applicable to only that code. Those nuances are retained so there are some slight differences, but the formatting will be the same in each code and the language will generally be the same in each code.

As stated earlier, this section has been in the code a long time, and it is believed that it initially envisioned an alternative product or method review and approval process on a project-by-project basis, with substantiating tests and calculations or analyses provided with each permit application. Currently, a more efficient system has evolved where the same product evaluation reports are used in numerous projects, across many jurisdictions, and for many conditions. This evolution causes the need to revise this section to reflect current procedures.

However, the need for designers to be able to apply for one-time approval needs to be maintained, and that is the reason that "research reports" is maintained. In this case, though, when a method or material is not addressed by the code, the code official needs more information on the process that the evaluator used to determine that the method or material complies with the intent of the code.

To achieve the common format, a template is shown below which includes comments on each of the sections. Since the wording in each code is intended to be the same, the outline is not shown for every code, however there is an underline/strikeout version for each code provided. The code change for each code is provided as delete and substitute. This was done because the autoforamtting process in cdpACCESS did not provide a document to easily follow. The underline/strikeout versions show the specific changes.

The following template is from the IBC. The IBC, IFC, IRC, IEBC, IPMC, and IWUIC are formatted the same as this template, however some codes have additional unique provisions, and other codes don't contain all of these sections if they are not appropriate for the code content.

OUTLINE FOR PROPOSED SECTION 104

SECTION 104 DUTIES AND POWERS OF BUILDING OFFICIAL – same title used for each code

104.1 General. – This section has been subdivided with numbered/titled subsections to break up the existing paragraph and specifically state that the code official is authorized to determine compliance with the code. While always implied and applied in this manner, the code never specifically states this important fact.

104.2 Determination of Compliance. – reformatted to identify that when reviewing projects for compliance with the code, the code official can develop policies and procedures. It also specifically states that the developed policies and the project approvals are to be based on the intent of the code.

104.2.1 Listed compliance. – In cases where the code specifies a listing standard, it is common for a code official to accept things listed to that standard without further evaluating whether the standard is germane. When a product listing is appropriate, then the fact that the product is listed and installed in accordance with the listing specifications and the manufacturer's instructions becomes the approval of the product. This section is not included in all codes since not all codes require listed equipment.

104.2.2 Technical assistance. – Nearly all the codes provide for the code official to utilize technical assistance in some form or another. This section is included as a subsection for determining compliance and will be consistent throughout the I-Codes. It is derived from, and replaces, previous text that was originally developed for and limited to hazardous materials related provisions.

104.2.2.1 Cost. – the cost for technical assistance is borne by the applicant or owner. This was previously included in a preceding paragraph and has been separated into its own subsection.

104.2.2.2 Preparer qualifications. – states that the person or agency providing the technical report must be qualified. The code official has the ability to require that the report is stamped by a registered design professional, since not all reports may need to provide this. For example, a hazardous materials classification report often does not include engineering or design. The definition is added to codes that do not currently contain the definition, such as the IWUIC. This was previously included in a preceding paragraph and has been separated into its own subsection. The new text goes beyond simply recommending changes, recognizing that the report may be a source document, as opposed to a review of documentation prepared by others.

104.2.2.3 Content. – the technical report shall include an analysis and any recommended or necessary changes.

104.2.2.4 Tests. – Tests can often provide valuable information. Where a test standard isn't specified by this code or a reference standard, the code official may wish to conduct further evaluation of the suitability of the test method used as a basis. Testing can be performed by an approved agency or by any other party/organization approved by the code official. Proposed provisions for tests are largely derived from existing code text on this topic.

104.2.3 Alternative materials, design and methods of construction and equipment. – All codes make reference to accepting some type of alternative. This section is placed under the general compliance approval section and revised to state that a proposed alternative cannot be something that is specifically prohibited by the code. If ICC members have previously voted to specifically disallow something, alternative methods should not be a means of avoiding such a prohibition. Nevertheless, a code modification would still provide an option to make exceptions for unique cases, as opposed to the door being open for an applicant to end run the intent of the code by presenting an analysis or alternative that suggests an alternative to a prohibition is OK. It is important to note that something not contemplated by the code would not be impacted by this statement. Not contemplated is not the same as a specific prohibition in the code.

104.2.3.1 Approval authority. – if the alternative is acceptable, then it is to be approved by the code official. This is from existing text.

104.2.3.2 Application and disposition. – the submittal for an alternative must be accomplished in writing. If it is not approved, the code official must so state in writing and provide reasons why it was not acceptable. This is largely from existing text, however, the requirement for a written application for alternatives was not previously located in this section, where it is appropriate to reference.

104.2.3.3 Compliance with code intent. – the alternative must comply with the code's intent.

104.2.3.4 Equivalency criteria. – the alternative must provide equivalency to the code's provisions. The list of characteristics to be addressed is included from the current code. The reference to fire-resistance is removed from the list and fire-resistance is included under safety with additional criteria regarding fire characteristics identified in Section 104.2.3.4.1.

104.2.3.4.1 Fire safety equivalency. – this section was added because "fire-resistance" was removed from the list in Section 104.2.3.4 and recognizing that fire-resistance is not the only fire related characteristic to be addressed. Fire-resistance is only one characteristic of safety with respect to fire. This section is added to clarify that the entire issue of performance under fire conditions is the concern. Previously, aspects of fire safety beyond fire resistance would have been evaluated as part of "safety" in the list with no additional guidance on what to consider. Performance under fire conditions also includes equivalency as to how the alternate will perform structurally when exposed to fire.

104.2.3.5 Tests. – this section is added so the code official can ensure that any testing conducted is performed to a scale that adequately represents the end use of the alternate. This has primarily been added in response to concerns related to Code Change F60-21, which modified Section 2603 to defer alternatives related to fire performance of foam plastics to Section 104.

104.2.3.6 ~~104.11.1~~ ~~Research~~ Reports. This section is relocated and revised to address two different types of reports currently submitted for alternatives.

104.2.3.6.1 Evaluation reports. – This section is added to address reports generate by an approved agency. The definition of “approved agency” was added to several codes in the 2018 editions. The definition is proposed to be revised, as in the IBC, or added as a new definition codes do not contain this definition, as in the IFC. This evaluation report is conducted by an approved agency that is accredited to conduct the tests or evaluations appropriate for the alternative involved. When the applicant provides a product evaluation from an accredited product evaluation agency that uses publicly developed and available criteria for the evaluation, the code official may have increased confidence that the method used for the evaluation does result in a method or material that meets the intent of the code and is at least equivalent to code-prescribed construction. Public development of criteria allows for input from industry experts, the public, and building officials in determining the methods used to evaluate code intent and equivalence, somewhat similar to the code development process where consensus is important. The accreditation ensures that the organization uses a consistent process to perform the evaluations. This section is meant to reflect the current use of evaluation reports from accredited evaluation agencies or organizations.

104.2.3.6.2 Other reports. – this section is added to address reports generated by persons or agencies other than an approved agency. It specifies that the person or agency providing the report must be qualified and must be approved by the code official. The code official has the authority to require the stamp of a registered design professional. When an applicant provides an evaluation from other than an accredited agency, or from a source that does not use publicly developed and available criteria, the code official needs more information in order to perform a proper review. Not only does the code official need to evaluate the product, but also evaluate the method that the applicant has used to determine compliance with code intent and code equivalence. So, in that case, it is proposed that the applicant would also have to provide the criteria that was used to do the evaluation, justification for use of that criteria, and data used for the evaluation, so a complete review can be made.

104.2.3.7 Peer review. – this section is added to address a method of review currently utilized by many jurisdictions. The peer review is an outside, third-party review that is submitted to the code official for use in cases where a jurisdiction may not have qualified resource in-house to perform a sufficient review of an alternative compliance proposal. Again, the peer reviewer must be qualified and approved by the code official.

104.2.4 ~~104.10~~ Modifications. – this section is relocated under the section of compliance. Minor edits occurred to provide consistent language throughout the codes.

104.2.4.1 ~~104.10.1~~ Flood hazard areas. – this section on flood hazard areas only appears in the IBC, IRC and IEBC. This section is relocated to follow the provisions for modifications.

104.3 ~~104.2~~ Applications and permits. – this section is relocated and revised to provide consistent wording.

104.3.1 ~~104.2.1~~ Determination of substantially improved or substantially damaged existing buildings and structures in flood hazard areas. – this section on flood hazard areas only appears in the IBC, IRC and IEBC. This section is relocated to follow the provisions for modifications.

104.4 ~~104.6~~ Right of entry. – This section is relocated and revised to provide consistent wording. The issue of right of entry is the same with all enforcement issues.

104.4.1 Warrant. – this section was not found in all codes, so it was added to the IBC to provide the ability to utilize a warrant. This function is allowed by the courts and currently utilized by jurisdictions.

104.5 Identification. – no change

~~104.6~~ ~~104.3~~ Notices and orders. – relocated and revised for consistent wording.

104.7 ~~Department-Official~~ records. – This section revised to provide consistent wording and is reformatted by creating subsections. Each subsection addresses a different type of record that the is to be retained. This format clarifies that these records are required to be maintained.

104.7.1 Approvals.

104.7.2 Inspections.

104.7.3 Code alternatives and modifications.

104.7.4 Tests.

104.7.5 Fees.

104.8 Liability. – this section deals with protection from liability of the code official. The sections are revised to provide consistent wording throughout all I-Codes.

104.8.1 Legal defense. – this section deals with legal defense for the code official. The sections are revised to provide consistent wording throughout all I-Codes.

104.9 Approved materials and equipment. – no change

104.9.1 ~~Used materials~~ Material and equipment reuse. – this section addresses the reuse of materials and equipment. The section is revised to provide consistent wording throughout the codes to say that the code official must approve any materials to be reused.

~~104.4 Inspections~~. – this section is relocated to 104.2.2. Some of the language in this section is not relocated since those portions are already covered in Section 110.

~~104.10 Modifications~~ – this section is relocated to 104.2.4 for formatting.

~~104.10.1 Flood hazard areas~~ – this section is relocated to 104.2.4.1 for formatting.

~~104.11 Alternative materials, design and methods of construction and equipment.~~ – this section is relocated to 104.2.3 for formatting.

~~104.11.1 Research reports.~~ – this section is relocated to 104.2.3.6 for formatting.

~~104.11.2 Tests.~~ – this section is relocated 104.2.2.4, 104.2.3.5 and 104.8.4 for formatting.

Additional unique changes are as follows:

1. Sections in IWUIC 105 are relocated to IWUIC 104, so Section 105 is deleted. This also occurs in the IgCC and IPMC.
2. The IZC has a completely different approach application and therefore, only the duplicated sections in the IZC are revised.
3. IWUIC 104.4 Subjects Not Regulated by this Code is relocated to Section 102.5 and IWUIC 104.5 Matters Not Provided For is relocated to Section 102.6 for consistency with IFC format. A minor change was made to the definition of “approved agency” which removes the repeat of the word that is to be defined, agency, and replaces it with organization. Another revision allows the agency to furnish product evaluation in addition to certification, since evaluation and certification are two different things. Evaluation is for materials and methods not addressed by the code, and certification is for materials and methods that are addressed by the code. It is intended that all I-Codes will be formatted in this fashion. There was not sufficient time to process these revisions through the PMG CAC, so only the codes under the review of the Fire CAC and Building CAC are submitted at this time. The revisions for the other codes will occur during Public Comment.

A strikeout/underline version of each code follows to identify specific revisions.

BCAC was established by the ICC Board of Directors in July 2011 to pursue opportunities to improve and enhance assigned International Codes or portions thereof. In 2020 and 2021 the BCAC has held several virtual meetings open to any interested party. In addition, there were numerous virtual Working Group meetings for the current code development cycle, which included members of the committee as well as interested parties. Related documents and reports are posted on the BCAC website at <https://www.iccsafe.org/products-and-services/i-codes/code-development/cs/building-code-action-committee-bcac/>. The FCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance assigned International Codes with regard to fire and life safety in new and existing buildings and facilities as well as the protection of life and property in wildland urban interface areas. In 2020 and 2021 the Fire-CAC held multiple virtual meetings that were open to any interested party. In addition, there were numerous virtual specific working group meetings that were also open to any interested parties, to develop, discuss and debate the proposed changes. Related documentation and reports are posted on the FCAC website at: <https://www.iccsafe.org/products-and-services/i-codes/code-development/cs/fire-code-action-committee-fcac/>.

The proposal in strikeout and underline text format can be viewed here:

<https://www.cdpassess.com/proposal/8550/25693/files/download/2955/>

Cost Impact: The code change proposal will not increase or decrease the cost of construction
This proposal simply reformats the code sections and provides consistency across the codes.

ADM13-22 Part II

Public Hearing Results

Committee Action:

As Modified

Committee Modification:

~~**PEER REVIEW.** An independent and objective technical review conducted by an approved third party.~~

R104.2 Determination of compliance. The building official shall have the authority to determine compliance with this code, to render interpretations

of this code and to adopt policies, ~~and~~ procedures, ~~rules and regulations~~ in order to clarify the application of this code's provisions. Such interpretations, policies, ~~and~~ procedures, ~~rules and regulations~~:

1. Shall be in compliance with the intent and purpose of this code.
2. Shall not have the effect of waiving requirements specifically provided for in this code.

R104.2.1 Listed compliance. ~~Determination of compliance for anything required by this code, or a reference standard, to be listed shall be based on a test standard or approved listing evaluation that is germane to the provision requiring the listing. Anything required by this code, or a reference standard, to be listed shall be installed in accordance with the listing and the manufacturer's instructions. Copies of the listing standard and manufacturer's instructions shall be made available to the building official upon request.~~

R104.2.1 Listed compliance. Where this code or a referenced standard requires equipment, materials, products or services to be listed and a listing standard is specified, the listing shall be based on the specified standard. Where a listing standard is not specified, the listing shall be based on an approved listing criteria. Listings shall be germane to the provision requiring the listing. Installation shall be in accordance with the listing and the manufacturer's instructions, and where required to verify compliance, the listing standard and manufacturer's instructions shall be made available to the building official.

R104.2.2 Technical assistance. ~~To determine compliance with this code, the building official is authorized to require the owner or owner's authorized agent to provide a technical opinion and report.~~

R104.2.2.1 Cost. ~~A technical opinion and report shall be provided without charge to the jurisdiction.~~

R104.2.2.2 Preparer qualifications. ~~The technical opinion and report shall be prepared by a qualified engineer, specialist, laboratory or specialty organization acceptable to the building official. The building official is authorized to require design submittals to be prepared by, and bear the stamp of, a registered design professional.~~

R104.2.2.3 Content. ~~The technical opinion and report shall analyze the safety properties of the design, operation or use of the building or premises and the facilities and appurtenances situated thereon, to identify and propose necessary recommendations.~~

R104.2.2.4 Tests. ~~Where there is insufficient evidence of compliance with the provisions of this code, the building official is authorized to require tests as evidence of compliance. Test methods shall be as specified in this code or by other recognized test standards. In the absence of recognized test standards, the building official shall approve the testing procedures. Tests shall be performed by a party acceptable to the building official.~~

R104.2.3.2 Application and disposition. Where required, a ~~A~~ request to use an alternative material, design or method of construction shall be submitted in writing to the building official for approval. Where the alternative material, design or method of construction is not approved, the building official shall respond in writing, stating the reasons the alternative was not approved.

R104.2.3.4 Equivalency criteria. An alternative material, design or method of construction shall, for the purpose intended, be not less than the equivalent of that prescribed in this code with respect to all the following, as applicable:

1. Quality
2. Strength
3. Effectiveness
4. Durability
5. Safety, other than fire safety
6. Fire safety

R104.2.3.4.1 Fire safety equivalency. ~~Determination of safety equivalency, with respect to fire, shall be based on an analysis that includes applicable fire safety performance properties, such as but not limited to flame spread, heat release rate, heat of combustion, smoke development and fire resistance.~~

R104.2.3.5 Tests. Tests conducted to demonstrate equivalency in support of an alternative material, design or method of construction application shall be of a scale that is sufficient to predict performance of the end use configuration. Such tests ~~Tests~~ shall be performed by a party acceptable to the building official.

R104.2.3.6.1 Evaluation reports. Evaluation reports shall be issued by an approved agency ~~accredited to evaluate or certify products~~ and use of the evaluation report shall require approval by the building official for the installation. The alternate material, design or method of construction and product evaluated shall be within the scope of the building official's recognition accreditation ~~of the approved agency.~~ Criteria used for the evaluation shall be identified within the report and where required, provided to the building official, ~~developed using a process that includes input from the public and made available for review by the public.~~

R104.2.3.7 Peer review. ~~The building official is authorized to require submittal of a peer review report in conjunction with a request to use an alternative material, design or method of construction, prepared by a peer reviewer that is approved by the building official.~~

R104.3 Applications and permits. The building official shall receive applications, review construction documents and issue permits ~~for the erection and alteration of buildings and structures,~~ inspect the premises for which such permits have been issued and enforce compliance with the

provisions of this code.

R104.6 Notices and orders. The building official shall issue necessary notices or orders to ensure compliance with this code. Notices of violations shall be in accordance with Section R113.2.

Committee Reason: This proposal, as modified, is a much needed clean up of Section R104 on Duties and Powers of the Code Official. There was a coordinated series of modifications to address areas of concern.

Section R104.2 - The removal of 'rules and regulations' removes some ambiguity and is positive from a builder's perspective.

Section R104.2.1 - The rewrite of this section adds clarity for compliance for what is considered 'listed'. This also provided listing criteria and manufacturer's instructions.

Sections R104.2.2 through R104.2.2.4 - In the IRC, the sections on technical opinions and reports was removed as a requirement for determination of compliance. Systems in the IRC are not as complex as those in many IBC buildings.

Section R104.2.3.2 - This modification makes testing only required when needed.

Section R104.2.3.5 - Adding 'such' takes the ambiguity out of what testing is required.

Section R104.2.3.6.1 - This modification makes the evaluations reports available to the code official when needed. It took out items of concern, such as costs associated with providing hard copies all the time and a requirement for 'input from the public and made available for review by the public' for evaluations.

Section R104.2.3.7 - The requirement for peer review (and the definition) was removed from the IRC proposal. Systems in the IRC are not as complex as those in many IBC buildings.

Section R104.3 - The modification clarifies the permit process.

Section R104.2.3.4 and R104.2.3.4.1 - Fire safety was include in the list of items required for consideration of 'equivalent'. While fire safety is a subsection of 'safety', pulling it out of the list could be interpreted that fire safety was more important than other items in the list. The criteria for what should be considered 'fire safety' should be included in the commentary for this section.

Section R104.6 - Breaking this requirement into two makes better sense for the reference to Section R113.2.

The work of several organizations to develop modification to this proposal to address multiple issues should be moved forward to the membership for a complete review. (Vote: 10-0)

ADM13-22 Part II

Individual Consideration Agenda

Public Comment 1:

IRC: R104.2.3, R104.2.3.1, R104.2.4

Proponents: Jenifer Gilliland, representing Washington Association of Building Officials (jenifer.gilliland@seattle.gov); Micah Chappell, representing Washington Association of Building Officials Technical Code Development Committee (micah.chappell@seattle.gov) requests As Modified by Public Comment

Further modify as follows:

2021 International Residential Code

R104.2.3 Alternative materials, design and methods of construction and equipment. The provisions of this code are not intended to prevent the installation of any material or to prohibit any design or method of construction not specifically prescribed by this code, provided that ~~any such alternative is not specifically prohibited by this code and has been approved.~~ the building official has approved and authorized its use.

R104.2.3.1 Approval authority. The building official shall be permitted to approve ~~A~~ an alternative material, design or method of construction ~~that be approved where the building official finds~~ provided that the proposed alternative is satisfactory and complies with Sections 104.2.3 through 104.2.3.7, as applicable.

R104.2.4 Modifications. Where there are practical difficulties involved in carrying out the provisions of this code, the building official shall have the authority to grant modifications for individual cases, provided the building official shall first find that one or more special individual reasons make the

strict letter of this code impractical, that the modification is in compliance with the intent and purpose of this code, and that the modification does not lessen health, ~~life and safety~~ fire safety or structural requirements where considered together with other safety features of the building or other relevant circumstances. The details of the written request for and action granting modifications shall be recorded and entered in the files of the department of building safety.

Commenter's Reason: The code proposal as currently written unduly constrains the building official.

The PC restores flexibility for the building official to use judgement when evaluating alternative means, methods, materials and equipment as well as modifications. Controversial language restricting building official approval of items prohibited elsewhere in this code is removed and replaced with a blanket statement giving the building official the ability to approve alternatives as long as the building official authorizes its use. In a newly formed section, Approval authority, the building official is permitted to approve alternatives that are suitable and comply with the equivalency criteria in Sections 104.2.3.4-104.2.3.7.

Under modifications, additional flexibility is provided for the building official to first, evaluate a proposal based on the current criteria, ie. health, accessibility, safety and fire safety features of the building and second, consider with other safety features of the building or relevant circumstances if necessary. Modifications are by definition not compliant with the strict letter of the code. For instance, a building official might want to consider other issues when approving a proposal such as how their local fire department stages for a fire and whether or not a building has been voluntarily sprinklered. If fire department policy is to "Run the stairs" rather than use ladder trucks to access an upper story it may impact your approval of a modification.

This is the second of three proposals addressing the powers of the building official through out the ICC family of codes.

Cost Impact: The net effect of the public comment and code change proposal will not increase or decrease the cost of construction

This proposal is mainly aimed at delineating the authority of the building official to approve non-conventional approaches to solving code issues. If anything, costs might be reduced because there is more flexibility to approve a creative approach to a code problem.

Public Comment# 3437

Public Comment 2:

IRC: R104.2.3.5, R104.2.3.5.1 (New)

Proponents: Jenifer Gilliland, representing Washington Association of Building Officials (jenifer.gilliland@seattle.gov); Micah Chappell, representing Seattle Department of Construction & Inspections (micah.chappell@seattle.gov) requests As Modified by Public Comment

Further modify as follows:

2021 International Residential Code

R104.2.3.5 Tests. Tests conducted to demonstrate equivalency in support of an alternative material, design or method of construction application shall be of a scale that is sufficient to ~~predict~~ stimulate performance ~~of in~~ the end use configuration. ~~Such tests shall be performed by a party acceptable to the building official.~~

R104.2.3.5.1 Performance. Such tests shall be performed by a party acceptable to the building official.

Commenter's Reason: This PC seeks to further clarify that full-scale testing is not necessary to support an alternative material, design or method of construction. It only needs to be large enough to give confidence to the building official that a product, component or assembly will perform as expected in the end use configuration. We don't want to just "predict" performance—we need more assurance than that—we actually want to simulate performance in testing. If the performance is simulated then this knowledge can be used to determine how the product, component or assembly will perform in situ.

Testing doesn't always occur in a lab. It could be a fire test of the material of a temporary tent that has no labeling witnessed by the fire department. These tests can consist of burning a tiny piece of the fabric. The language here needs to be written in a general manner to cover all situations where testing may be required.

This is the second of three public comments submitted related to fire testing found through out the ICC Family of Codes.

Cost Impact: The net effect of the public comment and code change proposal will not increase or decrease the cost of construction

If anything, unnecessary costs will be avoided as it is more clear with the amendments that full scale testing is not required to show compliance.

Public Comment# 3316

Public Comment 3:

IRC: R104.2.3.2, R104.2.4, R104.7, R104.7.1, R104.7.2, R104.7.3, R104.7.4, R104.7.5

Proponents: Jenifer Gilliland, representing Washington Association of Building Officials (jenifer.gilliland@seattle.gov); Micah Chappell, representing Washington Association of Building Officials Technical Code Development Committee (micah.chappell@seattle.gov) requests As Modified by Public Comment

Further modify as follows:

2021 International Residential Code

R104.2.3.2 Application and disposition. Where required a request to use an alternative material, design or method of construction shall be submitted ~~in writing~~ to the building official for approval. Where the alternative material, design or method of construction is not approved, the building official shall ~~respond in writing~~ provide a response, stating the reasons the alternative was not approved.

R104.2.4 Modifications. Where there are practical difficulties involved in carrying out the provisions of this code, the building official shall have the authority to grant modifications for individual cases, provided the building official shall first find that one or more special individual reasons make the strict letter of this code impractical, that the modification is in compliance with the intent and purpose of this code, and that the modification does not lessen health, life and fire safety or structural requirements. The details of the ~~written~~ request for and action granting modifications shall be recorded and ~~entered in the files of the department of building safety in the official record by the building official.~~

R104.7 Official records. The building official shall keep official records as required in Sections R104.7.1 through R104.7.5. Such official records shall be retained ~~for not less than 5 years or~~ for as long as the building or structure to which such records relate remains in existence, unless otherwise provided by other laws, regulations, or rules. Such records shall be made available for public inspection.

R104.7.1 Approvals Applications. A record of ~~approvals- the status or the final disposition of~~ shall be maintained by the applications submitted to the building official for review and shall be maintained, available for public inspection during business hours in accordance with applicable laws. Where required, documentation including construction documents and supporting reports shall be retained in the official record.

R104.7.2 Inspections. The building official shall ~~keep~~ maintain a record of each inspection made, including notices and orders and notices of violation issued, showing the findings and disposition of each.

R104.7.3 Code alternatives and modifications. Applications for alternative materials, design and methods of construction and equipment in accordance with Section R104.2.3; modifications in accordance with Section R104.2.4; and documentation of the final decision of the building official and/or either shall be in writing shall be retained in the official records.

R104.7.4 Tests. The building official shall ~~keep~~ maintain a record of tests conducted to comply with Sections R104.2.2.4 and R104.2.3.5.

R104.7.5 Fees. The building official shall ~~keep~~ maintain a record of fees collected and refunded in accordance with Section R108.

Commenter's Reason: This PC attempts to coordinate terms and eliminate dated language, by making the following changes to the original proposal:

- The 5-year minimum time limit for keeping records is eliminated in this PC because public record retention laws vary so much from place to place. There really is no best practice. Some jurisdictions keep permit and inspections records for the life of the building, while others keep no records of residential buildings after a few years. It takes time and money to keep records in a format that allows access to them by the public. Individual jurisdictions will need to customize this section to meet their local conditions.
- More than just approvals need to be kept as part of the official record. Tracking disapprovals of applications and permits is just as important. The requirement to track "status" and "final disposition" makes it clear that records relating to important approval milestones and the final outcome are to be maintained.
- Language is added to make it clear that the building official authority can require the retention of construction documents as part of the public record.
- Language about maintaining construction documents and supporting reports as part of the official record is added but only "where required". This again allows the building official to keep the records based on local and state retention requirements as well as department capacity.
- All records should be subject to "public inspection", not just the inspection records. This language has been relocated 104.7.2 inspections

from the charging statement to 104.7 Official Records.

- Notices of violation are added to the list of inspection items in 104.7.2 that need to be maintained as the part of the public record.
- Plan review and inspection results are now recorded and maintained almost entirely electronically in most building departments. There is no need to keep outdated language that requires a department to maintain records “in writing” or a “written response”.
- Also, the word “kept” is replaced by “maintained” in this PC. “Kept” implies that the record is being saved “as is”. “Maintained” implies more effort to include actions like moving the record from paper to microfiche and finally to a digitized record. “Maintain” might also include sorting, storing and indexing documents in an organized manner.

This PC is the 2nd of 3 submitted public comments dealing with record keeping by the code official.

Cost Impact: The net effect of the public comment and code change proposal will not increase or decrease the cost of construction

This PC is just describing the official record that is being kept by the building official. It should not increase the costs for a department as most of the records, outside of the inspection and plan review results, are permitted to be kept by the code official rather than required.

Public Comment# 3383

Public Comment 4:

IRC: R104.2.3.4

Proponents: Bill McHugh, representing Firestop Contractors International Assn., National Fireproofing Contractors Assn. (bill@mc-hugh.us) requests As Modified by Public Comment

Further modify as follows:

2021 International Residential Code

R104.2.3.4 Equivalency criteria. An alternative material, design or method of construction shall, for the purpose intended, be not less than the equivalent of that prescribed in this code with respect to all the following, as applicable:

1. Quality
2. Strength
3. Effectiveness
4. Durability
5. Safety, other than fire safety
6. Fire safety
7. Fire Resistance

Commenter's Reason: The reason for this public comment is to re-insert the words 'Fire Resistance'. Fire Resistance has been in the BOCA National Building Code 104.11 ('96 and before), the Uniform Building Code ('97 and before), and for a reason. Fire Resistance is a critical part of the building's fire and life safety protection package. Any alternative needs to be equal to the fire resistance provided. During the Committee Action Hearings, a list of items including Fire Resistance was deleted, leaving 'Fire Safety' with no definition. Because the term Fire Resistance was in the International Building Code since the 2000 version, and in the BOCA National Building Code, Uniform Building Code - as a stand alone item - we believe it needs to remain a stand alone item in this section.

Cost Impact: The net effect of the public comment and code change proposal will not increase or decrease the cost of construction

The net effect of this change is that it returns to text already in the code, and will not increase or decrease the cost of construction.

Public Comment# 3327

Public Comment 5:

IRC: R104.1, R104.2

Proponents: Shane Nilles, representing Self (snilles@cityofcheney.org) requests As Modified by Public Comment

Further modify as follows:

2021 International Residential Code

R104.1 General. The building official is hereby authorized and directed to enforce the provisions of this code: and shall have the authority to render interpretations of this code and to adopt policies and procedures in order to clarify the application of this code's provisions. Such interpretations, policies and procedures:

1. Shall be in compliance with the intent and purpose of this code.
2. Shall not have the effect of waiving requirements specifically provided for in this code.

R104.2 ~~Determination of Evaluation for compliance.~~ The building official shall ~~have the authority to determine~~ evaluate for compliance with this code in accordance with this section and the, ~~to render interpretations of this code and to adopt ed policies and procedures~~ as authorized by Section 104.1, ~~in order to clarify the application of this code's provisions. Such interpretations, policies and procedures:-~~

1. ~~Shall be in compliance with the intent and purpose of this code.~~
2. ~~Shall not have the effect of waiving requirements specifically provided for in this code.~~

Commenter's Reason: Currently the code does not grant the code official the authority to determine that any work fully complies with the code, but rather the authority to enforce the code by reviewing, inspecting, and evaluating for compliance with the code. This is an important distinction because it is not the responsibility of the code official to guarantee that there are no violations when they complete plan reviews or inspections. If that were the case, then contractors, designers, and owners would be able to be absolved of all responsibility for any violations that were not caught by the code official. This public comment corrects that critical oversight that was made by the original proposal and maintains the current intent of the administrative authorities while supporting the original proposal's effort to clarify these sections.

Cost Impact: The net effect of the public comment and code change proposal will not increase or decrease the cost of construction. The proposal and this public comment only clarifies the current intent of the code and does not directly affect the cost of construction.

Public Comment# 3452

Public Comment 6:

IRC: R104.2.1

Proponents: John Woestman, representing Composite Lumber Manufacturers Association (CLMA) (jwoestman@kellenccompany.com) requests As Modified by Public Comment

Further modify as follows:

2021 International Residential Code

R104.2.1 Listed compliance. Where this code or a referenced standard requires equipment, materials, products or services to be *listed* and a listing standard is specified, the listing shall be based on the specified standard. Where a listing standard is not specified, the listing shall be based on an *approved* listing criteria. Listings shall be germane to the provision requiring the listing. Installation shall be in accordance with the listing and the manufacturer's instructions, and where required to verify compliance, the listing ~~standard~~ and the manufacturer's instructions shall be made available to the *building official*.

Commenter's Reason: We recommend revising the last sentence in this section for consistency between the installation requirements and the information required to be made available to the code official. That is: install per the listing and the manufacturer's instructions, and to make this same information available to the code official if needed to verify compliance.

We agree with the intent of the provisions in Section 104.2.1. However, we have concerns with the ambiguity of part of the last sentence of 104.2.1 and the likelihood of job-by-job and product-by-product interpretation and enforcement of this particular part of the that sentence: ". . . and where required to verify compliance, the listing standard . . . shall be made available to the building official."

Regarding ambiguity of ". . . shall be made available . . .", we anticipate some code officials will ask for a printed copy of a specific standard for a specific product on specific projects. Other code officials will consider the standard available if the standard can be viewed online. And, other code officials may interpret this phrase different than either of these examples.

Standards to which products are listed are typically available from the standards development organization (SDO), or from their authorized agent (e.g. techstreet.com). Some standards are posted online by the SDO for downloading at no cost. Some standards are available from the SDO for viewing online at no cost, but have document protection that prevents copying / pasting and / or downloading, and may be purchased for downloading and printing. And, some standards are available online and require purchasing to view, download, or print.

The standard to which a product is listed is almost always a copyrighted document. Typically, only the copyright owner of a standard, the SDO, can make available copyrighted material. The current language implies the party responsible for complying with the code would be responsible for making available an SDO's copyrighted material, which would likely infringe on the copyright.

Unlike the copyrighted standard, the listing is typically publicly available, With these concerns in mind, we recommend revising Section R104.2.1 as proposed in this public comment.

Cost Impact: The net effect of the public comment and code change proposal will not increase or decrease the cost of construction. The net effect of the public comment and code change proposal will not increase or decrease the cost of construction. This public comment will not increase the cost of construction. On the other hand, this public comment may, or may not, decrease the cost of construction. Without this public comment, standards which are referenced in the code could be requested to be made available by the project owner - and that may require purchase of the standard.

ADM14-22

IMC: SECTION 104, 202; IFGC: SECTION 104, SECTION 105, 202; IPC: SECTION 104, 202; ISpsc: SECTION 104, 202; IPSDC: SECTION 104, 202

Proposed Change as Submitted

Proponents: Kevin Scott, representing KH Scott & Associates LLC (khscottassoc@gmail.com)

Primary sections and titles shown as deleted include the deletion of all sections and subsections within them. For clarity, the full text of these deletions are not shown.

2021 International Mechanical Code

Revise as follows:

[A] APPROVED AGENCY. An established and recognized ~~agency organization~~ that is regularly engaged in conducting tests, furnishing inspection services or furnishing product ~~evaluation or certification~~ where such ~~agency organization~~ has been approved by the code official.

Add new definition as follows:

PEER REVIEW. An independent and objective technical review conducted by an approved third party.

Revise as follows:

~~SECTION 104~~ **~~DUTIES AND POWERS OF THE CODE OFFICIAL~~** ***(Delete entire section and replace as follows)***

Add new text as follows:

SECTION 104 **DUTIES AND POWERS OF THE CODE OFFICIAL**

[A] 104.1 General. The code official is hereby authorized and directed to enforce the provisions of this code.

[A] 104.2 Determination of compliance. The code official shall have the authority to determine compliance with this code, to render interpretations of this code and to adopt policies, procedures, rules and regulations in order to clarify the application of this code's provisions. Such interpretations, policies, procedures, rules and regulations:

1. Shall be in compliance with the intent and purpose of this code.
2. Shall not have the effect of waiving requirements specifically provided for in this code or other applicable codes and ordinances.

104.2.1 Listed compliance. Determination of compliance for anything required by this code, or a reference standard, to be listed shall be based on a test standard or approved listing evaluation that is germane to the provision requiring the listing. Anything required by this code, or a reference standard, to be listed shall be installed in accordance with the listing and the manufacturer's instructions. Copies of the listing standard and manufacturer's instructions shall be made available to the code official upon request.

[A] 104.2.2 Technical assistance. To determine compliance with this code, the code official is authorized to require the owner or owner's authorized agent to provide a technical opinion and report.

[A] 104.2.2.1 Cost. A technical opinion and report shall be provided without charge to the jurisdiction.

[A] 104.2.2.2 Preparer qualifications. The technical opinion and report shall be prepared by a qualified engineer, specialist, laboratory or specialty organization acceptable to the code official. The code official is authorized to require design submittals to be prepared by and bear the stamp of a registered design professional.

[A] 104.2.2.3 Content. The technical opinion and report shall analyze the safety properties of the design, operation or use of the building or premises and the facilities and appurtenances situated thereon, to identify and propose necessary recommendations.

[A] 104.2.2.4 Tests. Where there is insufficient evidence of compliance with the provisions of this code, the code official is authorized to require tests as evidence of compliance. Test methods shall be as specified in this code or by other recognized test standards. In the absence of recognized test standards, the code official shall approve the testing procedures. Tests shall be performed by a party acceptable to the code official.

[A] 104.2.3 Alternative materials, design and methods of construction and equipment. The provisions of this code are not intended to prevent the installation of any material or to prohibit any design or method of construction not specifically prescribed by this code, provided that any

such alternative is not specifically prohibited by this code and has been approved.

[A] 104.2.3.1 Approval authority. An alternative material, design or method of construction shall be approved where the code official finds that the proposed alternative is satisfactory and complies with Sections 104.2.3 through 104.2.3.7, as applicable.

[A] 104.2.3.2 Application and disposition. A request to use an alternative material, design or method of construction shall be submitted in writing to the code official for approval. Where the alternative material, design or method of construction is not approved, the code official shall respond in writing, stating the reasons the alternative was not approved.

[A] 104.2.3.3 Compliance with code intent. An alternative material, design or method of construction shall comply with the intent of the provisions of this code.

[A] 104.2.3.4 Equivalency criteria. An alternative material, design or method of construction shall, for the purpose intended, be not less than the equivalent of that prescribed in this code with respect to all of the following, as applicable:

1. Quality
2. Strength
3. Effectiveness
4. Durability
5. Safety

[A] 104.2.3.4.1 Fire safety equivalency. Determination of safety equivalency, with respect to fire, shall be based on an analysis that includes applicable fire safety performance properties, such as but not limited to ignitability, flame spread, heat release rate, heat of combustion, smoke development, and fire resistance. Determination of safety equivalency, with respect to structural fire safety, shall also include a structural system analysis.

[A] 104.2.3.5 Tests. Tests conducted to demonstrate equivalency in support of an alternative material, design or method of construction application shall be of a scale that is sufficient to predict performance of the end use configuration. Tests shall be performed by a party acceptable to the code official.

[A] 104.2.3.6 Reports. Supporting documentation, where necessary to assist in the approval of materials or assemblies not specifically provided for in this code, shall comply with Sections 104.2.3.6.1 and 104.2.3.6.2.

[A] 104.2.3.6.1 Evaluation reports. Evaluation reports shall be issued by an approved agency accredited to evaluate or certify products. The alternate material, design or method of construction and product evaluated shall be within the scope of accreditation of the approved agency. Criteria used for the evaluation shall be identified within the report, developed using a process that includes input from the public and made available for review by the public.

[A] 104.2.3.6.2 Other reports. Reports not complying with Section 104.2.3.6.1 shall describe criteria, including but not limited to any referenced testing or analysis, used to determine compliance with code intent and justify code equivalence, including but not limited to any referenced testing or analysis. The report shall be prepared by a qualified engineer, specialist, laboratory or specialty organization acceptable to the code official. The code official is authorized to require design submittals to be prepared by, and bear the stamp of, a registered design professional.

[A] 104.2.3.7 Peer review. The code official is authorized to require submittal of a peer review report in conjunction with a request to use an alternative material, design or method of construction, prepared by a peer reviewer that is approved by the code official.

[A] 104.2.4 Modifications. Where there are practical difficulties involved in carrying out the provisions of this code, the code official shall have the authority to grant modifications for individual cases provided that the code official shall first find that one or more special individual reasons make the strict letter of this code impractical, that the modification is in compliance with the intent and purpose of this code, and that such modification does not lessen health, accessibility, life and fire safety or structural requirements. The details of the written request for and action granting modifications shall be recorded and entered in the files of the department of building safety.

[A] 104.2.4.1 Flood hazard areas. The code official shall not grant modifications to any provision required in flood hazard areas as established by Section 1612.3 unless a determination has been made that:

1. A showing of good and sufficient cause that the unique characteristics of the size, configuration or topography of the site render the elevation standards of Section 1612 inappropriate.
2. A determination that failure to grant the variance would result in exceptional hardship by rendering the lot undevelopable.
3. A determination that the granting of a variance will not result in increased flood heights, additional threats to public safety, extraordinary public expense, cause fraud on or victimization of the public, or conflict with existing laws or ordinances.
4. A determination that the variance is the minimum necessary to afford relief, considering the flood hazard.
5. Submission to the applicant of written notice specifying the difference between the design flood elevation and the elevation to which the building is to be built, stating that the cost of flood insurance will be commensurate with the increased risk resulting from the reduced floor elevation, and stating that construction below the design flood elevation increases risks to life and property.

[A] 104.3 Applications and permits. The code official shall receive applications, review construction documents and issue permits for the erection, and alteration, demolition and moving of buildings and structures, inspect the premises for which such permits have been issued and enforce compliance with the provisions of this code.

[A] 104.3.1 Determination of substantially improved or substantially damaged existing buildings and structures in flood hazard areas. For applications for reconstruction, rehabilitation, repair, alteration, addition or other improvement of existing buildings or structures located in flood hazard areas, the code official shall determine if the proposed work constitutes substantial improvement or repair of substantial damage. Where the code official determines that the proposed work constitutes substantial improvement or repair of substantial damage, and where required by this code, the code official shall require the building to meet the requirements of Section 1612 or Section R322 of the International Residential Code, as applicable.

[A] 104.4 Right of entry. Where it is necessary to make an inspection to enforce the provisions of this code, or where the code official has reasonable cause to believe that there exists in a structure or on a premises a condition that is contrary to or in violation of this code that makes the structure or premises unsafe, dangerous or hazardous, the code official is authorized to enter the structure or premises at all reasonable times to inspect or to perform the duties imposed by this code. If such structure or premises is occupied, the code official shall present credentials to the occupant and request entry. If such structure or premises is unoccupied, the code official shall first make a reasonable effort to locate the owner, the owner's authorized agent or other person having charge or control of the structure or premises and request entry. If entry is refused, the code official shall have recourse to every remedy provided by law to secure entry.

[A] 104.4.1 Warrant. Where the code official has first obtained a proper inspection warrant or other remedy provided by law to secure entry, an owner, the owner's authorized agent or occupant or person having charge, care or control of the building or premises shall not fail or neglect, after proper request is made as herein provided, to permit entry therein by the code official for the purpose of inspection and examination pursuant to this code.

[A] 104.5 Identification. The code official shall carry proper identification when inspecting structures or premises in the performance of duties under this code.

[A] 104.6 Notices and orders. The code official shall issue necessary notices or orders to ensure compliance with this code in accordance with Section 114.

[A] 104.7 Official records. The code official shall keep official records as required by Sections 104.7.1 through 104.7.5. Such official records shall be retained for not less than 5 years or for as long as the building or structure to which such records relate remains in existence, unless otherwise provided by other regulations.

[A] 104.7.1 Approvals. A record of approvals shall be maintained by the code official and shall be available for public inspection during business hours in accordance with applicable laws.

[A] 104.7.2 Inspections. The code official shall keep a record of each inspection made, including notices and orders issued, showing the findings and disposition of each.

[A] 104.7.3 Code alternatives and modifications. Application for alternative materials, design and methods of construction and equipment in accordance with Section 104.2.3; modifications in accordance with Section 104.2.4; and documentation of the final decision of the code official for either shall be in writing and shall be retained in the official records.

[A] 104.7.4 Tests. The code official shall keep a record of tests conducted to comply with Sections 104.2.2.4 and 104.2.3.5.

[A] 104.7.5 Fees. The code official shall keep a record of fees collected and refunded in accordance with Section 109.

[A] 104.8 Liability. The code official, member of the board of appeals or employee charged with the enforcement of this code, while acting for the jurisdiction in good faith and without malice in the discharge of the duties required by this code or other pertinent law or ordinance, shall not thereby be personally liable, either civilly or criminally, and is hereby relieved from personal liability for any damage accruing to persons or property as a result of any act or by reason of an act or omission in the discharge of official duties.

[A] 104.8.1 Legal defense. Any suit or criminal complaint instituted against any officer or employee because of an act performed by that officer or employee in the lawful discharge of duties under the provisions of this code or other laws or ordinances implemented through the enforcement of this code shall be defended by legal representatives of the jurisdiction until the final termination of the proceedings. The code official or any subordinate shall not be liable for costs in any action, suit or proceeding that is instituted in pursuance of the provisions of this code.

[A] 104.9 Approved materials and equipment. Materials, equipment and devices approved by the code official shall be constructed and installed in accordance with such approval.

[A] 104.9.1 Material and equipment reuse. Materials, equipment and devices shall not be reused unless such elements are in good working condition and approved.

2021 International Fuel Gas Code

Revise as follows:

[A] APPROVED AGENCY. An established and recognized agency organization that is regularly engaged in conducting tests, furnishing inspection services or furnishing evaluation or certification, where such agency organization has been *approved* by the *code official*.

Add new definition as follows:

PEER REVIEW. An independent and objective technical review conducted by and approved third party.

Revise as follows:

SECTION 104
DUTIES AND POWERS OF THE CODE OFFICIAL
(Delete entire section and replace as follows)

SECTION 105
APPROVAL
(Delete entire section and replace as follows)

Add new text as follows:

SECTION 104
DUTIES AND POWERS OF THE CODE OFFICIAL

[A] 104.1 General. The code official is hereby authorized and directed to enforce the provisions of this code.

[A] 104.2 Determination of Compliance. The code official shall have the authority to determine compliance with this code, to render interpretations of this code and to adopt policies, procedures, rules and regulations in order to clarify the application of this code's provisions. Such interpretations, policies, procedures, rules and regulations:

1. Shall be in compliance with the intent and purpose of this code.
2. Shall not have the effect of waiving requirements specifically provided for in this code.

[A] 104.2.1 Listed compliance. Determination of compliance for anything required by this code, or a reference standard, to be listed shall be based on a test standard or approved listing evaluation that is germane to the provision requiring the listing. Anything required by this code, or a reference standard, to be listed shall be installed in accordance with the listing and the manufacturer's instructions. Copies of the listing standard and manufacturer's instructions shall be made available to the code official upon request.

[A] 104.2.2 Technical assistance. To determine compliance with this code, the code official is authorized to require the owner or owner's authorized agent to provide a technical opinion and report.

[A] 104.2.2.1 Cost. A technical opinion and report shall be provided without charge to the jurisdiction.

[A] 104.2.2.2 Preparer qualifications. The technical opinion and report shall be prepared by a qualified engineer, specialist, laboratory or specialty organization acceptable to the code official. The code official is authorized to require design submittals to be prepared by and bear the stamp of a registered design professional.

[A] 104.2.2.3 Content. The technical opinion and report shall analyze the safety properties of the design, operation or use of the building or premises and the facilities and appurtenances situated thereon, to identify and propose necessary recommendations.

[A] 104.2.2.4 Tests. Where there is insufficient evidence of compliance with the provisions of this code, the code official is authorized to require tests as evidence of compliance. Test methods shall be as specified in this code or by other recognized test standards. In the absence of recognized test standards, the code official shall approve the testing procedures. Tests shall be performed by a party acceptable to the code official.

[A] 104.2.3 Alternative materials, design and methods of construction equipment. The provisions of this code are not intended to prevent the installation of any material or to prohibit any design or method of construction not specifically prescribed by this code, provided that any such alternative is not specifically prohibited by this code and has been approved.

[A] 104.2.3.1 Approved authority. An alternative material, design or method of construction shall be approved where the code official finds that the proposed alternative is satisfactory and complies with Sections 104.2.3 through 104.2.3.7, as applicable.

[A] 104.2.3.2 Application and disposition. A request to use an alternative material, design or method of construction shall be submitted in writing to the code official for approval. Where the alternative material, design or method of construction is not approved, the code official shall respond in writing, stating the reasons the alternative was not approved.

[A] 104.2.3.3 Compliance with code intent. An alternative material, design or method of construction shall comply with the intent of the provisions

of this code.

[A] 104.2.3.4 Equivalency criteria. An alternative material, design or method of construction shall, for the purpose intended, be not less than the equivalent of that prescribed in this code with respect to all of the following, as applicable:

1. Quality
2. Strength
3. Effectiveness
4. Durability
5. Safety

[A] 104.2.3.4.1 Fire safety equivalency. Determination of safety equivalency, with respect to fire, shall be based on an analysis that includes applicable fire safety performance properties, such as but not limited to ignitability, flame spread, heat release rate, heat of combustion, smoke development, and fire resistance. Determination of safety equivalency, with respect to structural fire safety, shall also include a structural system analysis.

[A] 104.2.3.5 Tests. Tests conducted to demonstrate equivalency in support of an alternative material, design or method of construction application shall be of a scale that is sufficient to predict performance of the end use configuration. Tests shall be performed by a party acceptable to the code official.

[A] 104.2.3.6 Reports. Supporting documentation, where necessary to assist in the approval of materials or assemblies not specifically provided for in this code, shall comply with Sections 104.2.3.6.1 and 104.2.3.6.2.

[A] 104.2.3.6.1 Evaluation reports. Evaluation reports shall be issued by an approved agency accredited to evaluate or certify products. The alternate material, design or method of construction and product evaluated shall be within the scope of accreditation of the approved agency. Criteria used for the evaluation shall be identified within the report, developed using a process that includes input from the public and made available for review by the public.

[A] 104.2.3.6.2 Other reports. Reports not complying with Section 104.2.3.6.1 shall describe criteria, including but not limited to any referenced testing or analysis, used to determine compliance with code intent and justify code equivalence, including but not limited to any referenced testing or analysis. The report shall be prepared by a qualified engineer, specialist, laboratory or specialty organization acceptable to the code official. The code official is authorized to require design submittals to be prepared by, and bear the stamp of, a registered design professional.

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1. A showing of good and sufficient cause that the unique characteristics of the size, configuration or topography of the site render the elevation standards of Section 1612 inappropriate.
2. A determination that failure to grant the variance would result in exceptional hardship by rendering the lot undevelopable.
3. A determination that the granting of a variance will not result in increased flood heights, additional threats to public safety, extraordinary public expense, cause fraud on or victimization of the public, or conflict with existing laws or ordinances.
4. A determination that the variance is the minimum necessary to afford relief, considering the flood hazard.
5. Submission to the applicant of written notice specifying the difference between the design flood elevation and the elevation to which the building is to be built, stating that the cost of flood insurance will be commensurate with the increased risk resulting from the reduced floor elevation, and stating that construction below the design flood elevation increases risks to life and property.

[A] 104.3 Applications and permits. The code official shall receive applications, review construction documents and issue permits for the erection, and alteration, demolition and moving of buildings and structures, inspect the premises for which such permits have been issued and enforce compliance with the provisions of this code.

[A] 104.3.1 Determination of substantially damaged existing buildings and structures in flood hazard areas. For applications for reconstruction, rehabilitation, repair, alteration, addition or other improvement of existing buildings or structures located in flood hazard areas, the code official shall determine if the proposed work constitutes substantial improvement or repair of substantial damage. Where the code official determines that the proposed work constitutes substantial improvement or repair of substantial damage, and where required by this code, the code

official shall require the building to meet the requirements of Section 1612 or Section R322 of the International Residential Code, as applicable.

[A] 104.4 Right of entry. Where it is necessary to make an inspection to enforce the provisions of this code, or where the code official has reasonable cause to believe that there exists in a structure or on a premises a condition that is contrary to or in violation of this code that makes the structure or premises unsafe, dangerous or hazardous, the code official is authorized to enter the structure or premises at all reasonable times to inspect or to perform the duties imposed by this code. If such structure or premises is occupied, the code official shall present credentials to the occupant and request entry. If such structure or premises is unoccupied, the code official shall first make a reasonable effort to locate the owner, the owner's authorized agent or other person having charge or control of the structure or premises and request entry. If entry is refused, the code official shall have recourse to every remedy provided by law to secure entry.

[A] 104.4.1 Warrant. Where the code official has first obtained a proper inspection warrant or other remedy provided by law to secure entry, an owner, the owner's authorized agent or occupant or person having charge, care or control of the building or premises shall not fail or neglect, after proper request is made as herein provided, to permit entry therein by the code official for the purpose of inspection and examination pursuant to this code.

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[A] 104.6 Notices and orders. The code official shall issue necessary notices or orders to ensure compliance with this code in accordance with Section 114.

[A] 104.7 Official records. The code official shall keep official records as required by Sections 104.7.1 through 104.7.5. Such official records shall be retained for not less than 5 years or for as long as the building or structure to which such records relate remains in existence, unless otherwise provided by other regulations.

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[A] 104.8.1 Legal defense. Any suit or criminal complaint instituted against any officer or employee because of an act performed by that officer or employee in the lawful discharge of duties under the provisions of this code or other laws or ordinances implemented through the enforcement of this code shall be defended by legal representatives of the jurisdiction until the final termination of the proceedings. The code official or any subordinate shall not be liable for costs in any action, suit or proceeding that is instituted in pursuance of the provisions of this code.

[A] 104.9 Approved materials and equipment. Materials, equipment and devices approved by the code official shall be constructed and installed in accordance with such approval.

[A] 104.9.1 Materials and equipment reuse. Materials, equipment and devices shall not be reused unless such elements are in good working condition and approved.

2021 International Plumbing Code

Revise as follows:

[A] APPROVED AGENCY. An established and recognized agency organization that is regularly engaged in conducting tests or furnishing inspection services, or furnishing product evaluation or certification where such agency organization has been *approved* by the code official.

Add new definition as follows:

PEER REVIEW. An independent and objective technical review conducted by an approved third party.

Revise as follows:

SECTION 104

~~DUTIES AND POWERS OF THE CODE OFFICIAL~~
(Delete entire section and replace as follows)

Add new text as follows:

SECTION 104
DUTIES AND POWERS OF THE CODE OFFICIAL

[A] 104.1 General. The code official is hereby authorized and directed to enforce the provisions of this code.

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2. Shall not have the effect of waiving requirements specifically provided for in this code.

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[A] 104.2.2.3 Content. The technical opinion and report shall analyze the safety properties of the design, operation or use of the building or premises and the facilities and appurtenances situated thereon, to identify and propose necessary recommendations.

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[A] 104.2.3.3 Compliance with code intent. An alternative material, design or method of construction shall comply with the intent of the provisions of this code.

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2. Strength
3. Effectiveness
4. Durability
5. Safety

[A] 104.2.3.4.1 Fire safety equivalency. Determination of safety equivalency, with respect to fire, shall be based on an analysis that includes applicable fire safety performance properties, such as but not limited to ignitability, flame spread, heat release rate, heat of combustion, smoke development, and fire resistance. Determination of safety equivalency, with respect to structural fire safety, shall also include a structural system

analysis.

[A] 104.2.3.5 Tests. Tests conducted to demonstrate equivalency in support of an alternative material, design or method of construction application shall be of a scale that is sufficient to predict performance of the end use configuration. Tests shall be performed by a party acceptable to the code official.

[A] 104.2.3.6 Reports. Supporting documentation, where necessary to assist in the approval of materials or assemblies not specifically provided for in this code, shall comply with Sections 104.2.3.6.1 and 104.2.3.6.2.

[A] 104.2.3.6.1 Evaluation reports. Evaluation reports shall be issued by an approved agency accredited to evaluate or certify products. The alternate material, design or method of construction and product evaluated shall be within the scope of accreditation of the approved agency. Criteria used for the evaluation shall be identified within the report, developed using a process that includes input from the public and made available for review by the public.

[A] 104.2.3.6.2 Other reports. Reports not complying with Section 104.2.3.6.1 shall describe criteria, including but not limited to any referenced testing or analysis, used to determine compliance with code intent and justify code equivalence, including but not limited to any referenced testing or analysis. The report shall be prepared by a qualified engineer, specialist, laboratory or specialty organization acceptable to the code official. The code official is authorized to require design submittals to be prepared by, and bear the stamp of, a registered design professional.

[A] 104.2.3.7 Peer review. The code official is authorized to require submittal of a peer review report in conjunction with a request to use an alternative material, design or method of construction, prepared by a peer reviewer that is approved by the code official.

[A] 104.2.4 Modifications. Where there are practical difficulties involved in carrying out the provisions of this code, the code official shall have the authority to grant modifications for individual cases provided that the code official shall first find that one or more special individual reasons make the strict letter of this code impractical, that the modification is in compliance with the intent and purpose of this code, and that such modification does not lessen health, accessibility, life and fire safety or structural requirements. The details of the written request for and action granting modifications shall be recorded and entered in the files of the department of building safety.

[A] 104.2.4.1 Flood hazard areas. The code official shall not grant modifications to any provision required in flood hazard areas as established by Section 1612.3 unless a determination has been made that:

1. A showing of good and sufficient cause that the unique characteristics of the size, configuration or topography of the site render the elevation standards of Section 1612 inappropriate.
2. A determination that failure to grant the variance would result in exceptional hardship by rendering the lot undevelopable.
3. A determination that the granting of a variance will not result in increased flood heights, additional threats to public safety, extraordinary public expense, cause fraud on or victimization of the public, or conflict with existing laws or ordinances.
4. A determination that the variance is the minimum necessary to afford relief, considering the flood hazard.
5. Submission to the applicant of written notice specifying the difference between the design flood elevation and the elevation to which the building is to be built, stating that the cost of flood insurance will be commensurate with the increased risk resulting from the reduced floor elevation, and stating that construction below the design flood elevation increases risks to life and property.

[A] 104.3 Applications and permits. The code official shall receive applications, review construction documents and issue permits for the erection, and alteration, demolition and moving of buildings and structures, inspect the premises for which such permits have been issued and enforce compliance with the provisions of this code.

[A] 104.3.1 Determination of substantially damaged existing buildings and structures in flood hazard areas. For applications for reconstruction, rehabilitation, repair, alteration, addition or other improvement of existing buildings or structures located in flood hazard areas, the code official shall determine if the proposed work constitutes substantial improvement or repair of substantial damage. Where the code official determines that the proposed work constitutes substantial improvement or repair of substantial damage, and where required by this code, the code official shall require the building to meet the requirements of Section 1612 or Section R322 of the International Residential Code, as applicable.

[A] 104.4 Right of entry. Where it is necessary to make an inspection to enforce the provisions of this code, or where the code official has reasonable cause to believe that there exists in a structure or on a premises a condition that is contrary to or in violation of this code that makes the structure or premises unsafe, dangerous or hazardous, the code official is authorized to enter the structure or premises at all reasonable times to inspect or to perform the duties imposed by this code. If such structure or premises is occupied, the code official shall present credentials to the occupant and request entry. If such structure or premises is unoccupied, the code official shall first make a reasonable effort to locate the owner, the owner's authorized agent or other person having charge or control of the structure or premises and request entry. If entry is refused, the code official shall have recourse to every remedy provided by law to secure entry.

[A] 104.4.1 Warrant. Where the code official has first obtained a proper inspection warrant or other remedy provided by law to secure entry, an owner, the owner's authorized agent or occupant or person having charge, care or control of the building or premises shall not fail or neglect, after proper request is made as herein provided, to permit entry therein by the code official for the purpose of inspection and examination pursuant to this code.

[A] 104.5 Identification. The code official shall carry proper identification when inspecting structures or premises in the performance of duties

under this code.

[A] 104.6 Notices and orders. The code official shall issue necessary notices or orders to ensure compliance with this code in accordance with Section 114.

[A] 104.7 Official records. The code official shall keep official records as required by Sections 104.7.1 through 104.7.5. Such official records shall be retained for not less than 5 years or for as long as the building or structure to which such records relate remains in existence, unless otherwise provided by other regulations.

[A] 104.7.1 Approvals. A record of approvals shall be maintained by the code official and shall be available for public inspection during business hours in accordance with applicable laws.

[A] 104.7.2 Inspections. The code official shall keep a record of each inspection made, including notices and orders issued, showing the findings and disposition of each.

[A] 104.7.3 Code alternatives and modifications. Application for alternative materials, design and methods of construction and equipment in accordance with Section 104.2.3; modifications in accordance with Section 104.2.4; and documentation of the final decision of the code official for either shall be in writing and shall be retained in the official records.

[A] 104.7.4 Tests. The code official shall keep a record of tests conducted to comply with Sections 104.2.2.4 and 104.2.3.5.

[A] 104.7.5 Fees. The code official shall keep a record of fees collected and refunded in accordance with Section 109.

[A] 104.8 Liability. The code official, member of the board of appeals or employee charged with the enforcement of this code, while acting for the jurisdiction in good faith and without malice in the discharge of the duties required by this code or other pertinent law or ordinance, shall not thereby be personally liable, either civilly or criminally, and is hereby relieved from personal liability for any damage accruing to persons or property as a result of any act or by reason of an act or omission in the discharge of official duties.

[A] 104.8.1 Legal defense. Any suit or criminal complaint instituted against any officer or employee because of an act performed by that officer or employee in the lawful discharge of duties under the provisions of this code or other laws or ordinances implemented through the enforcement of this code shall be defended by legal representatives of the jurisdiction until the final termination of the proceedings. The code official or any subordinate shall not be liable for costs in any action, suit or proceeding that is instituted in pursuance of the provisions of this code.

[A] 104.9 Approved materials and equipment. Materials, equipment and devices approved by the code official shall be constructed and installed in accordance with such approval.

[A] 104.9.1 Material and equipment reuse. Materials, equipment and devices shall not be reused unless such elements are in good working condition and approved.

2021 International Swimming Pool and Spa Code

Revise as follows:

[A] APPROVED AGENCY. An established and recognized ~~agency~~ organization regularly engaged in conducting tests or furnishing inspection services, or furnishing product evaluation or certification where such ~~agency~~ organization has been *approved* by the *code official*.

Add new definition as follows:

PEER REVIEW. An independent and objective technical review conducted by an approved third party.

Add new text as follows:

REGISTERED DESIGN PROFESSIONAL. An architect or engineer, registered or licensed to practice professional architecture or engineering, as defined by the statutory requirements of the professional registration laws of the state in which the project is to be constructed.

Revise as follows:

SECTION 104

~~DUTIES AND POWERS OF THE CODE OFFICIAL~~

(Delete entire section and replace as follows)

Add new text as follows:

SECTION 104

DUTIES AND POWERS OF THE CODE OFFICIAL

[A] 104.1 General. The code official is hereby authorized and directed to enforce the provisions of this code.

[A] 104.2 Determination of compliance. The code official shall have the authority to determine compliance with this code, to render interpretations of this code and to adopt policies, procedures, rules and regulations in order to clarify the application of this code's provisions. Such interpretations, policies, procedures, rules and regulations:

1. Shall be in compliance with the intent and purpose of this code.
2. Shall not have the effect of waiving requirements specifically provided for in this code.

[A] 104.2.1 Listed compliance. Determination of compliance for anything required by this code, or a reference standard, to be listed shall be based on a test standard or approved listing evaluation that is germane to the provision requiring the listing. Anything required by this code, or a reference standard, to be listed shall be installed in accordance with the listing and the manufacturer's instructions. Copies of the listing standard and manufacturer's instructions shall be made available to the code official upon request.

[A] 104.2.2 Technical assistance. To determine compliance with this code, the code official is authorized to require the owner or owner's authorized agent to provide a technical opinion and report.

[A] 104.2.2.1 Cost. A technical opinion and report shall be provided without charge to the jurisdiction.

[A] 104.2.2.2 Preparer qualifications. The technical opinion and report shall be prepared by a qualified engineer, specialist, laboratory or specialty organization acceptable to the code official. The code official is authorized to require design submittals to be prepared by and bear the stamp of a registered design professional.

[A] 104.2.2.3 Content. The technical opinion and report shall analyze the safety properties of the design, operation or use of the building or premises and the facilities and appurtenances situated thereon, to identify and propose necessary recommendations.

[A] 104.2.2.4 Tests. Where there is insufficient evidence of compliance with the provisions of this code, the code official is authorized to require tests as evidence of compliance. Test methods shall be as specified in this code or by other recognized test standards. In the absence of recognized test standards, the code official shall approve the testing procedures. Tests shall be performed by a party acceptable to the code official.

[A] 104.2.3 Alternative materials, design and methods of construction and equipment. The provisions of this code are not intended to prevent the installation of any material or to prohibit any design or method of construction not specifically prescribed by this code, provided that any such alternative is not specifically prohibited by this code and has been approved.

[A] 104.2.3.1 Approval authority. An alternative material, design or method of construction shall be approved where the code official finds that the proposed alternative is satisfactory and complies with Sections 104.2.3 through 104.2.3.7, as applicable.

[A] 104.2.3.2 Application and disposition. A request to use an alternative material, design or method of construction shall be submitted in writing to the code official for approval. Where the alternative material, design or method of construction is not approved, the code official shall respond in writing, stating the reasons the alternative was not approved.

[A] 104.2.3.3 Compliance with code intent. An alternative material, design or method of construction shall comply with the intent of the provisions of this code.

[A] 104.2.3.4 Equivalency criteria. An alternative material, design or method of construction shall, for the purpose intended, be not less than the equivalent of that prescribed in this code with respect to all of the following, as applicable:

1. Quality
2. Strength
3. Effectiveness
4. Durability
5. Safety

[A] 104.2.3.4.1 Fire safety equivalency. Determination of safety equivalency, with respect to fire, shall be based on an analysis that includes applicable fire safety performance properties, such as but not limited to ignitability, flame spread, heat release rate, heat of combustion, smoke development, and fire resistance. Determination of safety equivalency, with respect to structural fire safety, shall also include a structural system analysis.

[A] 104.2.3.5 Tests. Tests conducted to demonstrate equivalency in support of an alternative material, design or method of construction application shall be of a scale that is sufficient to predict performance of the end use configuration. Tests shall be performed by a party acceptable to the code official.

[A] 104.2.3.6 Reports. Supporting documentation, where necessary to assist in the approval of materials or assemblies not specifically provided for in this code, shall comply with Sections 104.2.3.6.1 and 104.2.3.6.2.

[A] 104.2.3.6.1 Evaluation reports. Evaluation reports shall be issued by an approved agency accredited to evaluate or certify products. The alternate material, design or method of construction and product evaluated shall be within the scope of accreditation of the approved agency. Criteria used for the evaluation shall be identified within the report, developed using a process that includes input from the public and made available

for review by the public.

[A] 104.2.3.6.2 Other reports. Reports not complying with Section 104.2.3.6.1 shall describe criteria, including but not limited to any referenced testing or analysis, used to determine compliance with code intent and justify code equivalence, including but not limited to any referenced testing or analysis. The report shall be prepared by a qualified engineer, specialist, laboratory or specialty organization acceptable to the code official. The code official is authorized to require design submittals to be prepared by, and bear the stamp of, a registered design professional.

[A] 104.2.3.7 Peer review. The code official is authorized to require submittal of a peer review report in conjunction with a request to use an alternative material, design or method of construction, prepared by a peer reviewer that is approved by the code official.

[A] 104.2.4 Modifications. Where there are practical difficulties involved in carrying out the provisions of this code, the code official shall have the authority to grant modifications for individual cases provided that the code official shall first find that one or more special individual reasons make the strict letter of this code impractical, that the modification is in compliance with the intent and purpose of this code, and that such modification does not lessen health, accessibility, life and fire safety or structural requirements. The details of the written request for and action granting modifications shall be recorded and entered in the files of the department of building safety.

[A] 104.2.4.1 Flood hazard areas. The code official shall not grant modifications to any provision required in flood hazard areas as established by Section 1612.3 unless a determination has been made that:

1. A showing of good and sufficient cause that the unique characteristics of the size, configuration or topography of the site render the elevation standards of Section 1612 inappropriate.
2. A determination that failure to grant the variance would result in exceptional hardship by rendering the lot undevelopable.
3. A determination that the granting of a variance will not result in increased flood heights, additional threats to public safety, extraordinary public expense, cause fraud on or victimization of the public, or conflict with existing laws or ordinances.
4. A determination that the variance is the minimum necessary to afford relief, considering the flood hazard.
5. Submission to the applicant of written notice specifying the difference between the design flood elevation and the elevation to which the building is to be built, stating that the cost of flood insurance will be commensurate with the increased risk resulting from the reduced floor elevation, and stating that construction below the design flood elevation increases risks to life and property.

[A] 104.3 Applications and permits. The code official shall receive applications, review construction documents and issue permits for the erection, and alteration, demolition and moving of buildings and structures, inspect the premises for which such permits have been issued and enforce compliance with the provisions of this code.

[A] 104.3.1 Determination of substantially damaged existing buildings and structures in flood hazard areas. For applications for reconstruction, rehabilitation, repair, alteration, addition or other improvement of existing buildings or structures located in flood hazard areas, the code official shall determine if the proposed work constitutes substantial improvement or repair of substantial damage. Where the code official determines that the proposed work constitutes substantial improvement or repair of substantial damage, and where required by this code, the code official shall require the building to meet the requirements of Section 1612 or Section R322 of the International Residential Code, as applicable.

[A] 104.4 Right of entry. Where it is necessary to make an inspection to enforce the provisions of this code, or where the code official has reasonable cause to believe that there exists in a structure or on a premises a condition that is contrary to or in violation of this code that makes the structure or premises unsafe, dangerous or hazardous, the code official is authorized to enter the structure or premises at all reasonable times to inspect or to perform the duties imposed by this code. If such structure or premises is occupied, the code official shall present credentials to the occupant and request entry. If such structure or premises is unoccupied, the code official shall first make a reasonable effort to locate the owner, the owner's authorized agent or other person having charge or control of the structure or premises and request entry. If entry is refused, the code official shall have recourse to every remedy provided by law to secure entry.

[A] 104.4.1 Warrant. Where the code official has first obtained a proper inspection warrant or other remedy provided by law to secure entry, an owner, the owner's authorized agent or occupant or person having charge, care or control of the building or premises shall not fail or neglect, after proper request is made as herein provided, to permit entry therein by the code official for the purpose of inspection and examination pursuant to this code.

[A] 104.5 Identification. The code official shall carry proper identification when inspecting structures or premises in the performance of duties under this code.

[A] 104.6 Notice and orders. The code official shall issue necessary notices or orders to ensure compliance with this code in accordance with Section 114.

[A] 104.7 Official records. The code official shall keep official records as required by Sections 104.7.1 through 104.7.5. Such official records shall be retained for not less than 5 years or for as long as the building or structure to which such records relate remains in existence, unless otherwise provided by other regulations.

[A] 104.7.1 Approvals. A record of approvals shall be maintained by the code official and shall be available for public inspection during business hours in accordance with applicable laws.

[A] 104.7.2 Inspections. The code official shall keep a record of each inspection made, including notices and orders issued, showing the findings and disposition of each.

[A] 104.7.3 Code alternatives and modifications. Application for alternative materials, design and methods of construction and equipment in accordance with Section 104.2.3; modifications in accordance with Section 104.2.4; and documentation of the final decision of the code official for either shall be in writing and shall be retained in the official records.

[A] 104.7.4 Tests. The code official shall keep a record of tests conducted to comply with Sections 104.2.2.4 and 104.2.3.5.

[A] 104.7.5 Fees. The code official shall keep a record of fees collected and refunded in accordance with Section 109.

[A] 104.8 Liability. The code official, member of the board of appeals or employee charged with the enforcement of this code, while acting for the jurisdiction in good faith and without malice in the discharge of the duties required by this code or other pertinent law or ordinance, shall not thereby be personally liable, either civilly or criminally, and is hereby relieved from personal liability for any damage accruing to persons or property as a result of any act or by reason of an act or omission in the discharge of official duties.

[A] 104.8.1 Legal defense. Any suit or criminal complaint instituted against any officer or employee because of an act performed by that officer or employee in the lawful discharge of duties under the provisions of this code or other laws or ordinances implemented through the enforcement of this code shall be defended by legal representatives of the jurisdiction until the final termination of the proceedings. The code official or any subordinate shall not be liable for costs in any action, suit or proceeding that is instituted in pursuance of the provisions of this code.

[A] 104.9 Approved materials and equipment. Materials, equipment and devices approved by the code official shall be constructed and installed in accordance with such approval.

[A] 104.9.1 Material and equipment reuse. Materials, equipment and devices shall not be reused unless such elements are in good working condition and approved.

2021 International Private Sewage Disposal Code

Add new definition as follows:

APPROVED AGENCY. An established and recognized organization that is regularly engaged in conducting tests, furnishing inspection services or furnishing product evaluation or certification where such organization has been approved by the code official.

PEER REVIEW. An independent and objective technical review conducted by an approved third party.

Revise as follows:

SECTION 104 **DUTIES AND POWERS OF THE CODE OFFICIAL** *(Delete entire section and replace as follows)*

Add new text as follows:

SECTION 104 **DUTIES AND POWERS OF THE CODE OFFICIAL**

[A] 104.1 General. The code official is hereby authorized and directed to enforce the provisions of this code.

[A] 104.2 Determination of compliance. The code official shall have the authority to determine compliance with this code, to render interpretations of this code and to adopt policies, procedures, rules and regulations in order to clarify the application of this code's provisions. Such interpretations, policies, procedures, rules and regulations:

1. Shall be in compliance with the intent and purpose of this code.
2. Shall not have the effect of waiving requirements specifically provided for in this code.

[A] 104.2.1 Listed compliance. Determination of compliance for anything required by this code, or a reference standard, to be listed shall be based on a test standard or approved listing evaluation that is germane to the provision requiring the listing. Anything required by this code, or a reference standard, to be listed shall be installed in accordance with the listing and the manufacturer's instructions. Copies of the listing standard and manufacturer's instructions shall be made available to the code official upon request.

[A] 104.2.2 Technical assistance. To determine compliance with this code, the code official is authorized to require the owner or owner's authorized agent to provide a technical opinion and report.

[A] 104.2.2.1 Cost. A technical opinion and report shall be provided without charge to the jurisdiction.

[A] 104.2.2.2 Preparer qualifications. The technical opinion and report shall be prepared by a qualified engineer, specialist, laboratory or specialty

organization acceptable to the code official. The code official is authorized to require design submittals to be prepared by and bear the stamp of a registered design professional.

[A] 104.2.2.3 Content. The technical opinion and report shall analyze the safety properties of the design, operation or use of the building or premises and the facilities and appurtenances situated thereon, to identify and propose necessary recommendations.

[A] 104.2.2.4 Tests. Where there is insufficient evidence of compliance with the provisions of this code, the code official is authorized to require tests as evidence of compliance. Test methods shall be as specified in this code or by other recognized test standards. In the absence of recognized test standards, the code official shall approve the testing procedures. Tests shall be performed by a party acceptable to the code official.

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[A] 104.2.3.1 Approval authority. An alternative material, design or method of construction shall be approved where the code official finds that the proposed alternative is satisfactory and complies with Sections 104.2.3 through 104.2.3.7, as applicable.

[A] 104.2.3.2 Application and disposition. A request to use an alternative material, design or method of construction shall be submitted in writing to the code official for approval. Where the alternative material, design or method of construction is not approved, the code official shall respond in writing, stating the reasons the alternative was not approved.

[A] 104.2.3.3 Compliance with code intent. An alternative material, design or method of construction shall comply with the intent of the provisions of this code.

[A] 104.2.3.4 Equivalency criteria. An alternative material, design or method of construction shall, for the purpose intended, be not less than the equivalent of that prescribed in this code with respect to all of the following, as applicable:

1. Quality
2. Strength
3. Effectiveness
4. Durability
5. Safety

[A] 104.2.3.4.1 Fire safety equivalency. Determination of safety equivalency, with respect to fire, shall be based on an analysis that includes applicable fire safety performance properties, such as but not limited to ignitability, flame spread, heat release rate, heat of combustion, smoke development, and fire resistance. Determination of safety equivalency, with respect to structural fire safety, shall also include a structural system analysis.

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[A] 104.2.3.6.2 Other reports. Reports not complying with Section 104.2.3.6.1 shall describe criteria, including but not limited to any referenced testing or analysis, used to determine compliance with code intent and justify code equivalence, including but not limited to any referenced testing or analysis. The report shall be prepared by a qualified engineer, specialist, laboratory or specialty organization acceptable to the code official. The code official is authorized to require design submittals to be prepared by, and bear the stamp of, a registered design professional.

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1. A showing of good and sufficient cause that the unique characteristics of the size, configuration or topography of the site render the elevation standards of Section 1612 inappropriate.
2. A determination that failure to grant the variance would result in exceptional hardship by rendering the lot undevelopable.
3. A determination that the granting of a variance will not result in increased flood heights, additional threats to public safety, extraordinary public expense, cause fraud on or victimization of the public, or conflict with existing laws or ordinances.
4. A determination that the variance is the minimum necessary to afford relief, considering the flood hazard.
5. Submission to the applicant of written notice specifying the difference between the design flood elevation and the elevation to which the building is to be built, stating that the cost of flood insurance will be commensurate with the increased risk resulting from the reduced floor elevation, and stating that construction below the design flood elevation increases risks to life and property.

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[A] 104.3.1 Determination of substantially damaged existing buildings and structures in flood hazard areas. For applications for reconstruction, rehabilitation, repair, alteration, addition or other improvement of existing buildings or structures located in flood hazard areas, the code official shall determine if the proposed work constitutes substantial improvement or repair of substantial damage. Where the code official determines that the proposed work constitutes substantial improvement or repair of substantial damage, and where required by this code, the code official shall require the building to meet the requirements of Section 1612 or Section R322 of the International Residential Code, as applicable.

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[A] 104.6 Notices and ordet. The code official shall issue necessary notices or orders to ensure compliance with this code in accordance with Section 114.

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[A] 104.7.5 Fees. The code official shall keep a record of fees collected and refunded in accordance with Section 109.

[A] 104.8 Liability. The code official, member of the board of appeals or employee charged with the enforcement of this code, while acting for the jurisdiction in good faith and without malice in the discharge of the duties required by this code or other pertinent law or ordinance, shall not thereby be personally liable, either civilly or criminally, and is hereby relieved from personal liability for any damage accruing to persons or property as a result of any act or by reason of an act or omission in the discharge of official duties.

[A] 104.8.1 Legal defense. Any suit or criminal complaint instituted against any officer or employee because of an act performed by that officer or employee in the lawful discharge of duties under the provisions of this code or other laws or ordinances implemented through the enforcement of this

code shall be defended by legal representatives of the jurisdiction until the final termination of the proceedings. The code official or any subordinate shall not be liable for costs in any action, suit or proceeding that is instituted in pursuance of the provisions of this code.

[A] 104.9 Approved materials and equipment. Materials, equipment and devices approved by the code official shall be constructed and installed in accordance with such approval.

[A] 104.9.1 Material and equipment reuse. Materials, equipment and devices shall not be reused unless such elements are in good working condition and approved.

Reason: Section 104 appears in the IMC, IFGC, IPC, ISPSC and IPSDC and contains general requirements for the authority and duties of the code official. Among these authorities and duties is the review and approval of alternate methods. The primary purpose of this code change is to update Section 104 to reflect the current manner that alternate methods and materials are evaluated, and to differentiate between evaluations from accredited evaluation agencies and evaluations from others, such as engineers. These provisions have basically been the same since the first edition in 2000, with the exception that the section on “Research Reports” was added in 2003. Industry terminology and methods have evolved over the years.

This proposal revises general code enforcement provisions to improve organization, improve clarity, and supplement existing provisions to better align the code text with how the code is commonly applied. The end goal is to provide the same wording and procedures in all of the I-Codes with regard to the Duties and Responsibilities of the Code Official. Some of the codes contain unique provisions applicable to only that code. Those nuances are retained so there are some slight differences, but the formatting will be the same in each code and the language will generally be the same in each code.

A separate code change proposal was submitted for the IFC, IWUIC, IBC, IEBC, IRC, IgCC and IPMC. The proposals are separate, however, the content and purpose is the same. Time restraints did not allow for this package to be reviewed by the PMG CAC. Therefore, it is submitted separately, however the content and format is identical.

As stated earlier, this section has been in the code a long time, and it is believed that it initially envisioned an alternative product or method review and approval process on a project-by-project basis, with substantiating tests and calculations or analyses provided with each permit application. Currently, a more efficient system has evolved where the same product evaluation reports are used in numerous projects, across many jurisdictions, and for many conditions. This evolution causes the need to revise this section to reflect current procedures.

However, the need for designers to be able to apply for one-time approval needs to be maintained, and that is the reason that “research reports” is maintained. In this case, though, when a method or material is not addressed by the code, the code official needs more information on the process that the evaluator used to determine that the method or material complies with the intent of the code.

To achieve the common format, a template is shown below which includes comments on each of the sections. Since the wording in each code is intended to be the same, the outline is not shown for every code, however there is an underline/strikeout version for each code provided. The code change for each code is provided as delete and substitute. This was done because the autoformatting process in cdpACCESS did not provide a document to easily follow. The underline/strikeout versions show the specific changes.

The following template is from the IBC. The IMC, IFGC, IPC, ISPSC and IPSDC provisions are formatted the same as this template, however some codes have additional unique provisions, and other codes don't contain all of these sections if they are not appropriate for the code content. This is the same template used for the other code change for the remaining I-Codes.

OUTLINE FOR PROPOSED SECTION 104

SECTION 104 DUTIES AND POWERS OF BUILDING OFFICIAL – same title used for each code

104.1 General. – This section has been subdivided with numbered/titled subsections to break up the existing paragraph and specifically state that the code official is authorized to determine compliance with the code. While always implied and applied in this manner, the code never specifically states this important fact.

104.2 Determination of Compliance. – reformatted to identify that when reviewing projects for compliance with the code, the code official can develop policies and procedures. It also specifically states that the developed policies and the project approvals are to be based on the intent of the code.

104.2.1 Listed compliance. – In cases where the code specifies a listing standard, it is common for a code official to accept things listed to that standard without further evaluating whether the standard is germane. When a product listing is appropriate, then the fact that the product is listed and installed in accordance with the listing specifications and the manufacturer's instructions becomes the approval of the product. This section is not included in all codes since not all codes require listed equipment.

104.2.2 Technical assistance. – Nearly all the codes provide for the code official to utilize technical assistance in some form or another. This

section is included as a subsection for determining compliance and will be consistent throughout the I-Codes. It is derived from, and replaces, previous text that was originally developed for and limited to hazardous materials related provisions.

104.2.2.1 Cost. – the cost for technical assistance is borne by the applicant or owner. This was previously included in a preceding paragraph and has been separated into its own subsection.

104.2.2.2 Preparer qualifications. – states that the person or agency providing the technical report must be qualified. The code official has the ability to require that the report is stamped by a registered design professional, since not all reports may need to provide this. For example, a hazardous materials classification report often does not include engineering or design. The definition is added to codes that do not currently contain the definition, such as the IWUIC. This was previously included in a preceding paragraph and has been separated into its own subsection. The new text goes beyond simply recommending changes, recognizing that the report may be a source document, as opposed to a review of documentation prepared by others.

104.2.2.3 Content. – the technical report shall include an analysis and any recommended or necessary changes.

104.2.2.4 Tests. – Tests can often provide valuable information. Where a test standard isn't specified by this code or a reference standard, the code official may wish to conduct further evaluation of the suitability of the test method used as a basis. Testing can be performed by an approved agency or by any other party/organization approved by the code official. Proposed provisions for tests are largely derived from existing code text on this topic.

104.2.3 ~~104.11~~ Alternative materials, design and methods of construction and equipment. – All codes make reference to accepting some type of alternative. This section is placed under the general compliance approval section and revised to state that a proposed alternative cannot be something that is specifically prohibited by the code. If ICC members have previously voted to specifically disallow something, alternative methods should not be a means of avoiding such a prohibition. Nevertheless, a code modification would still provide an option to make exceptions for unique cases, as opposed to the door being open for an applicant to end run the intent of the code by presenting an analysis or alternative that suggests an alternative to a prohibition is OK. It is important to note that something not contemplated by the code would not be impacted by this statement. Not contemplated is not the same as a specific prohibition in the code.

104.2.3.1 Approval authority. – if the alternative is acceptable, then it is to be approved by the code official. This is from existing text.

104.2.3.2 Application and disposition. – the submittal for an alternative must be accomplished in writing. If it is not approved, the code official must so state in writing and provide reasons why it was not acceptable. This is largely from existing text, however, the requirement for a written application for alternatives was not previously located in this section, where it is appropriate to reference.

104.2.3.3 Compliance with code intent. – the alternative must comply with the code's intent.

104.2.3.4 Equivalency criteria. – the alternative must provide equivalency to the code's provisions. The list of characteristics to be addressed is included from the current code. The reference to fire-resistance is removed from the list and fire-resistance is included under safety with additional criteria regarding fire characteristics identified in Section 104.2.3.4.1.

104.2.3.4.1 Fire safety equivalency. – this section was added because "fire-resistance" was removed from the list in Section 104.2.3.4 and recognizing that fire-resistance is not the only fire related characteristic to be addressed. Fire-resistance is only one characteristic of safety with respect to fire. This section is added to clarify that the entire issue of performance under fire conditions is the concern. Previously, aspects of fire safety beyond fire resistance would have been evaluated as part of "safety" in the list with no additional guidance on what to consider. Performance under fire conditions also includes equivalency as to how the alternate will perform structurally when exposed to fire.

104.2.3.5 Tests. – this section is added so the code official can ensure that any testing conducted is performed to a scale that adequately represents the end use of the alternate. This has primarily been added in response to concerns related to Code Change F60-21, which modified Section 2603 to defer alternatives related to fire performance of foam plastics to Section 104.

104.2.3.6 ~~104.11.1~~ Research-Reports. This section is relocated and revised to address two different types of reports currently submitted for alternatives.

104.2.3.6.1 Evaluation reports. – This section is added to address reports generate by an approved agency. The definition of "approved agency" was added to several codes in the 2018 editions. The definition is proposed to be revised, as in the IBC, or added as a new definition codes do not contain this definition, as in the IFC. This evaluation report is conducted by an approved agency that is accredited to conduct the tests or evaluations appropriate for the alternative involved. When the applicant provides a product evaluation from an accredited product evaluation agency that uses publicly developed and available criteria for the evaluation, the code official may have increased confidence that the method used for the evaluation does result in a method or material that meets the intent of the code and is at least equivalent to code-prescribed construction. Public development of criteria allows for input from industry experts, the public, and building officials in determining the methods used to evaluate code intent and equivalence, somewhat similar to the code development process where consensus is important. The accreditation ensures that the organization uses a consistent process to perform the evaluations. This section is meant to reflect the current use of evaluation reports

from accredited evaluation agencies or organizations.

104.2.3.6.2 Other reports. – this section is added to address reports generated by persons or agencies other than an approved agency. It specifies that the person or agency providing the report must be qualified and must be approved by the code official. The code official has the authority to require the stamp of a registered design professional. When an applicant provides an evaluation from other than an accredited agency, or from a source that does not use publicly developed and available criteria, the code official needs more information in order to perform a proper review. Not only does the code official need to evaluate the product, but also evaluate the method that the applicant has used to determine compliance with code intent and code equivalence. So, in that case, it is proposed that the applicant would also have to provide the criteria that was used to do the evaluation, justification for use of that criteria, and data used for the evaluation, so a complete review can be made.

104.2.3.7 Peer review. – this section is added to address a method of review currently utilized by many jurisdictions. The peer review is an outside, third-party review that is submitted to the code official for use in cases where a jurisdiction may not have qualified resource in-house to perform a sufficient review of an alternative compliance proposal. Again, the peer reviewer must be qualified and approved by the code official.

104.2.4 ~~104.10~~ Modifications. – this section is relocated under the section of compliance. Minor edits occurred to provide consistent language throughout the codes.

104.3 ~~104.2~~ Applications and permits. – this section is relocated and revised to provide consistent wording.

~~104.4 Inspections.~~ – this section is relocated to 104.2.2. Some of the language in this section is not relocated since those portions are already covered in Section 110. 104.4 ~~104.6~~ Right of entry. – This section is relocated and revised to provide consistent wording. The issue of right of entry is the same with all enforcement issues.

104.4.1 Warrant. – this section was not found in all codes, so it was added to the IBC to provide the ability to utilize a warrant. This function is allowed by the courts and currently utilized by jurisdictions.

104.5 Identification. – no change

104.6 ~~104.3~~ Notices and orders. – relocated and revised for consistent wording.

104.7 ~~Department~~ Official records. – This section revised to provide consistent wording and is reformatted by creating subsections. Each subsection addresses a different type of record that the is to be retained. This format clarifies that these records are required to be maintained.

104.7.1 Approvals.

104.7.2 Inspections.

104.7.3 Code alternatives and modifications.

104.7.4 Tests.

104.7.5 Fees.

104.8 Liability. – this section deals with protection from liability of the code official. The sections are revised to provide consistent wording throughout all I-Codes.

104.8.1 Legal defense. – this section deals with legal defense for the code official. The sections are revised to provide consistent wording throughout all I-Codes.

104.9 ~~105.5~~ Approved materials and equipment. – no change

104.9.1 ~~105.4~~ Used materials–Material and equipment reuse. – this section addresses the reuse of materials and equipment. The section is revised to provide consistent wording throughout the codes to say that the code official must approve any materials to be reused.

~~104.10 Modifications~~ – this section is relocated to 104.2.4 for formatting.

~~104.11 Alternative materials, design and methods of construction and equipment.~~ – this section is relocated to 104.2.3 for formatting.

~~104.11.1 Research reports.~~ – this section is relocated to 104.2.3.6 for formatting.

~~104.11.2 Tests~~ – this section is relocated 104.2.2.4, 104.2.3.5 and 104.8.4 for formatting.

Additional unique changes are as follows:

1. Sections in IMC 105 are relocated to IMC 104, so Section 105 is deleted. This also occurs in the IFGC and IPSCD.
2. A minor change was made to the definition of “approved agency” which removes the repeat of the word that is to be defined, agency, and replaces it with organization. Another revision allows the agency to furnish product evaluation in addition to certification, since evaluation and certification are two different things. Evaluation is for materials and methods not addressed by the code, and certification is for materials and methods that are addressed by the code.

A strikeout/underline version of each code follows to identify specific revisions.

The proposal in strikeout and underline text format can be viewed here:

<https://www.cdaccess.com/proposal/8835/25768/files/download/3016/>

Cost Impact: The code change proposal will not increase or decrease the cost of construction
This proposal is a reformatting and clarification of the requirements already in the codes.

ADM14-22

Public Hearing Results

Committee Action:

As Modified

Committee Modification:

2021 International Mechanical Code

[A] 104.2 Determination of compliance. The code official shall have the authority to determine compliance with this code, to render interpretations of this code and to adopt policies, ~~and procedures, rules and regulations~~ in order to clarify the application of this code's provisions. Such interpretations, policies, and procedures, ~~rules and regulations~~:

1. Shall be in compliance with the intent and purpose of this code.
2. Shall not have the effect of waiving requirements specifically provided for in this code or other applicable codes and ordinances.

[A] 104.2.1 Listed compliance. ~~Where this code or a referenced standard requires equipment, materials, products or services to be listed and a listing standard is specified, the listing shall be based on the specified standard. Where a listing standard is not specified, the listing shall be based on an approved listing criteria. Listings shall be germane to the provision requiring the listing. Installation shall be in accordance with the listing and the manufacturer's instructions, and where required to verify compliance, the listing standard and manufacturer's instructions shall be made available to the code official.~~

~~Determination of compliance for anything required by this code, or a reference standard, to be listed shall be based on a test standard or approved listing evaluation that is germane to the provision requiring the listing. Anything required by this code, or a reference standard, to be listed shall be installed in accordance with the listing and the manufacturer's instructions. Copies of the listing standard and manufacturer's instructions shall be made available to the code official upon request.~~

[A] 104.2.2.3 Content. The technical opinion and report shall analyze the ~~safety~~ properties of the design, operation or use of the building or premises and the facilities and appurtenances situated thereon, to identify and propose necessary recommendations.

[A] 104.2.2.4 Tests. Where there is insufficient evidence of compliance with the provisions of this code, the code official is authorized to require tests as evidence of compliance. Test methods shall be as specified in this code or by other recognized test standards. In the absence of recognized test standards, the code official shall approve the testing procedures. Such tests shall be performed by a party acceptable to the code official.

[A] 104.2.3.2 Application and disposition. ~~Where required, a~~ request to use an alternative material, design or method of construction shall be submitted in writing to the code official for approval. Where the alternative material, design or method of construction is not approved, the code official shall respond in writing, stating the reasons the alternative was not approved.

[A] 104.2.3.4 Equivalency criteria. An alternative material, design or method of construction shall, for the purpose intended, be not less than the equivalent of that prescribed in this code with respect to all of the following, as applicable:

1. Quality
2. Strength
3. Effectiveness
4. Durability
5. Safety, other than fire safety

6. Fire safety

~~**[A]104.2.3.4.1 Fire safety equivalency.** Determination of safety equivalency, with respect to fire, shall be based on an analysis that includes applicable fire safety performance properties, such as but not limited to ignitability, flame spread, heat release rate, heat of combustion, smoke development, and fire resistance. Determination of safety equivalency, with respect to structural fire safety, shall also include a structural system analysis.~~

[A] 104.2.3.6 Reports. Supporting documentation, where necessary to assist in the approval of materials or assemblies not specifically provided for in this code, shall comply with Sections 104.2.3.6.1 and 104.2.3.6.2.

~~**[A] 104.2.3.6.1 Evaluation reports.** Evaluation reports shall be issued by an approved agency ~~accredited to evaluate or certify products~~ and use of the evaluation report shall require approval by the code official for the installation. The alternate material, design or method of construction and product evaluated shall be within the scope of ~~the code official's recognition accreditation~~ of the approved agency. Criteria used for the evaluation shall be identified within the report and where required, provided to the code official. ~~developed using a process that includes input from the public and made available for review by the public.~~~~

[A] 104.2.3.6.2 Other reports. Reports not complying with Section 104.2.3.6.1 shall describe criteria, including but not limited to any referenced testing or analysis, used to determine compliance with code intent and justify code equivalence, including but not limited to any referenced testing or analysis. The report shall be prepared by a qualified engineer, specialist, laboratory or specialty organization acceptable to the code official. The code official is authorized to require design submittals to be prepared by, and bear the stamp of, a registered design professional.

[A] 104.3 Applications and permits. The code official shall receive applications, review construction documents and issue permits ~~for the erection, and alteration, demolition and moving of buildings and structures,~~ inspect the premises for which such permits have been issued and enforce compliance with the provisions of this code.

~~**[A]104.6 Notices and orders.** The code official shall issue necessary notices or orders to ensure compliance with this code. Notices of violations shall be in accordance with Section 114.~~

[A] 104.7.2 Inspections. ~~The code official shall have the authority to conduct inspections, or shall accept reports of inspection by approved agencies or individuals. Reports of such inspections shall be in writing and be certified by a responsible officer of such approved agency or by the responsible individual.~~ The code official shall keep a record of each inspection made, including notices and orders issued, showing the findings and disposition of each.

2021 International Fuel Gas Code

[A] 104.2 Determination of compliance. The code official shall have the authority to determine compliance with this code, to render interpretations of this code and to adopt policies, ~~and procedures, rules and regulations~~ in order to clarify the application of this code's provisions. Such interpretations, policies, ~~and procedures, rules and regulations~~:

1. Shall be in compliance with the intent and purpose of this code.
2. Shall not have the effect of waiving requirements specifically provided for in this code or other applicable codes and ordinances.

[A] 104.2.1 Listed compliance. Where this code or a reference standard requires equipment, materials, products or services to be listed and a listing standard is specified, the listing shall be based on the specified standard. Where a listing standard is not specified, the listing shall be based on an approved listing criteria. Listings shall be germane to the provision requiring the listing. Installation shall be in accordance with the listing and the manufacturer's instructions, and where required to verify compliance, the listing standard and manufacturer's instructions shall be made available to the code official.

~~Determination of compliance for anything required by this code, or a reference standard, to be listed shall be based on a test standard or approved listing evaluation that is germane to the provision requiring the listing. Anything required by this code, or a reference standard, to be listed shall be installed in accordance with the listing and the manufacturer's instructions. Copies of the listing standard and manufacturer's instructions shall be made available to the code official upon request.~~

[A] 104.2.2.3 Content. The technical opinion and report shall analyze the ~~safety~~ properties of the design, operation or use of the building or premises and the facilities and appurtenances situated thereon, to identify and propose necessary recommendations.

[A] 104.2.2.4 Tests. Where there is insufficient evidence of compliance with the provisions of this code, the code official is authorized to require tests as evidence of compliance. Test methods shall be as specified in this code or by other recognized test standards. In the absence of recognized test standards, the code official shall approve the testing procedures. Such tests shall be performed by a party acceptable to the code official.

[A] 104.2.3.2 Application and disposition. Where required, a request to use an alternative material, design or method of construction shall be submitted in writing to the code official for approval. Where the alternative material, design or method of construction is not approved, the code official shall respond in writing, stating the reasons the alternative was not approved.

[A] 104.2.3.4 Equivalency criteria. An alternative material, design or method of construction shall, for the purpose intended, be not less than the equivalent of that prescribed in this code with respect to all of the following, as applicable:

1. Quality
2. Strength
3. Effectiveness
4. Durability
5. Safety, other than fire safety

6. Fire safety

~~**[A]104.2.3.4.1 Fire safety equivalency.** Determination of safety equivalency, with respect to fire, shall be based on an analysis that includes applicable fire safety performance properties, such as but not limited to ignitability, flame spread, heat release rate, heat of combustion, smoke development, and fire resistance. Determination of safety equivalency, with respect to structural fire safety, shall also include a structural system analysis.~~

[A] 104.2.3.6 Reports. Supporting documentation, where necessary to assist in the approval of materials or assemblies not specifically provided for in this code, shall comply with Sections 104.2.3.6.1 and 104.2.3.6.2.

[A] 104.2.3.6.1 Evaluation reports. Evaluation reports shall be issued by an approved agency ~~accredited to evaluate or certify products and use of the evaluation report shall require approval by the code official for the installation.~~ The alternate material, design or method of construction and product evaluated shall be within the scope of the code official's recognition accreditation of the approved agency. Criteria used for the evaluation shall be identified within the report and where required, provided to the code official, ~~developed using a process that includes input from the public and made available for review by the public.~~

[A] 104.2.3.6.2 Other reports. Reports not complying with Section 104.2.3.6.1 shall describe criteria, including but not limited to any referenced testing or analysis, used to determine compliance with code intent and justify code equivalence, including but not limited to any referenced testing or analysis. The report shall be prepared by a qualified engineer, specialist, laboratory or specialty organization acceptable to the code official. The code official is authorized to require design submittals to be prepared by, and bear the stamp of, a registered design professional.

[A] 104.3 Applications and permits. The code official shall receive applications, review construction documents and issue permits ~~for the erection, and alteration, demolition and moving of buildings and structures,~~ inspect the premises for which such permits have been issued and enforce compliance with the provisions of this code.

[A] 104.6 Notices and orders. The code official shall issue necessary notices or orders to ensure compliance with this code. Notices of violations shall be in accordance with Section 114.

[A] 104.7.2 Inspections. ~~The code official shall have the authority to conduct inspections, or shall accept reports of inspection by approved agencies or individuals. Reports of such inspections shall be in writing and be certified by a responsible officer of such approved agency or by the responsible individual.~~ The code official shall keep a record of each inspection made, including notices and orders issued, showing the findings and disposition of each.

2021 International Plumbing Code

[A] 104.2 Determination of compliance. The code official shall have the authority to determine compliance with this code, to render interpretations of this code and to adopt policies, ~~and procedures, rules and regulations~~ in order to clarify the application of this code's provisions. Such interpretations, policies, ~~and procedures, rules and regulations~~:

1. Shall be in compliance with the intent and purpose of this code.
2. Shall not have the effect of waiving requirements specifically provided for in this code or other applicable codes and ordinances.

[A] 104.2.1 Listed compliance. ~~Where this code or a reference standard requires equipment, materials, products or services to be listed and a listing standard is specified, the listing shall be based on the specified standard. Where a listing standard is not specified, the listing shall be based on an approved listing criteria. Listings shall be germane to the provision requiring the listing. Installation shall be in accordance with the listing and the manufacturer's instructions, and where required to verify compliance, the listing standard and manufacturer's instructions shall be made available to the code official.~~

~~Determination of compliance for anything required by this code, or a reference standard, to be listed shall be based on a test standard or approved listing evaluation that is germane to the provision requiring the listing. Anything required by this code, or a reference standard, to be listed shall be installed in accordance with the listing and the manufacturer's instructions. Copies of the listing standard and manufacturer's instructions shall be made available to the code official upon request.~~

[A] 104.2.2.3 Content. The technical opinion and report shall analyze the ~~safety~~ properties of the design, operation or use of the building or premises and the facilities and appurtenances situated thereon, to identify and propose necessary recommendations.

[A] 104.2.2.4 Tests. Where there is insufficient evidence of compliance with the provisions of this code, the code official is authorized to require tests as evidence of compliance. Test methods shall be as specified in this code or by other recognized test standards. In the absence of recognized test standards, the code official shall approve the testing procedures. Such tests shall be performed by a party acceptable to the code official.

[A] 104.2.3.2 Application and disposition. ~~Where required, a~~ request to use an alternative material, design or method of construction shall be submitted in writing to the code official for approval. Where the alternative material, design or method of construction is not approved, the code official shall respond in writing, stating the reasons the alternative was not approved.

[A] 104.2.3.4 Equivalency criteria. An alternative material, design or method of construction shall, for the purpose intended, be not less than the equivalent of that prescribed in this code with respect to all of the following, as applicable:

1. Quality
2. Strength
3. Effectiveness
4. Durability
5. Safety, other than fire safety

6. Fire safety

~~**[A] 104.2.3.4.1 Fire safety equivalency.** Determination of safety equivalency, with respect to fire, shall be based on an analysis that includes applicable fire safety performance properties, such as but not limited to ignitability, flame spread, heat release rate, heat of combustion, smoke development, and fire resistance. Determination of safety equivalency, with respect to structural fire safety, shall also include a structural system analysis.~~

[A] 104.2.3.6 Reports. Supporting documentation, where necessary to assist in the approval of materials or assemblies not specifically provided for in this code, shall comply with Sections 104.2.3.6.1 and 104.2.3.6.2.

[A] 104.2.3.6.1 Evaluation reports. Evaluation reports shall be issued by an approved agency ~~accredited to evaluate or certify products and use of the evaluation report shall require approval by the code official for the installation.~~ The alternate material, design or method of construction and product evaluated shall be within the scope of the code official's recognition accreditation of the approved agency. Criteria used for the evaluation shall be identified within the report and where required, provided to the code official, ~~developed using a process that includes input from the public and made available for review by the public.~~

[A] 104.2.3.6.2 Other reports. Reports not complying with Section 104.2.3.6.1 shall describe criteria, including but not limited to any referenced testing or analysis, used to determine compliance with code intent and justify code equivalence, including but not limited to any referenced testing or analysis. The report shall be prepared by a qualified engineer, specialist, laboratory or specialty organization acceptable to the code official. The code official is authorized to require design submittals to be prepared by, and bear the stamp of, a registered design professional.

[A] 104.3 Applications and permits. The code official shall receive applications, review construction documents and issue permits ~~for the erection, and alteration, demolition and moving of buildings and structures,~~ inspect the premises for which such permits have been issued and enforce compliance with the provisions of this code.

[A] 104.6 Notices and orders. The code official shall issue necessary notices or orders to ensure compliance with this code. Notices of violations

shall be in accordance with Section 114.

[A] 104.7.2 Inspections. The code official shall have the authority to conduct inspections, or shall accept reports of inspection by approved agencies or individuals. Reports of such inspections shall be in writing and be certified by a responsible officer of such approved agency or by the responsible individual. The code official shall keep a record of each inspection made, including notices and orders issued, showing the findings and disposition of each.

2021 International Swimming Pool and Spa Code

[A] 104.2 Determination of compliance. The code official shall have the authority to determine compliance with this code, to render interpretations of this code and to adopt policies; ~~and procedures, rules and regulations~~ in order to clarify the application of this code's provisions. Such interpretations, policies; ~~and procedures, rules and regulations~~:

1. Shall be in compliance with the intent and purpose of this code.
2. Shall not have the effect of waiving requirements specifically provided for in this code or other applicable codes and ordinances.

[A] 104.2.1 Listed compliance. Where this code or a reference standard requires equipment, materials, products or services to be listed and a listing standard is specified, the listing shall be based on the specified standard. Where a listing standard is not specified, the listing shall be based on an approved listing criteria. Listings shall be germane to the provision requiring the listing. Installation shall be in accordance with the listing and the manufacturer's instructions, and where required to verify compliance, the listing standard and manufacturer's instructions shall be made available to the code official.

~~Determination of compliance for anything required by this code, or a reference standard, to be listed shall be based on a test standard or approved listing evaluation that is germane to the provision requiring the listing. Anything required by this code, or a reference standard, to be listed shall be installed in accordance with the listing and the manufacturer's instructions. Copies of the listing standard and manufacturer's instructions shall be made available to the code official upon request.~~

[A] 104.2.2.3 Content. The technical opinion and report shall analyze the ~~safety~~ properties of the design, operation or use of the building or premises and the facilities and appurtenances situated thereon, to identify and propose necessary recommendations.

[A] 104.2.2.4 Tests. Where there is insufficient evidence of compliance with the provisions of this code, the code official is authorized to require tests as evidence of compliance. Test methods shall be as specified in this code or by other recognized test standards. In the absence of recognized test standards, the code official shall approve the testing procedures. Such tests shall be performed by a party acceptable to the code official.

[A] 104.2.3.2 Application and disposition. Where required, a request to use an alternative material, design or method of construction shall be submitted in writing to the code official for approval. Where the alternative material, design or method of construction is not approved, the code official shall respond in writing, stating the reasons the alternative was not approved.

[A] 104.2.3.4 Equivalency criteria. An alternative material, design or method of construction shall, for the purpose intended, be not less than the equivalent of that prescribed in this code with respect to all of the following, as applicable:

1. Quality
2. Strength
3. Effectiveness
4. Durability
5. Safety, other than fire safety
6. Fire safety

~~[A]104.2.3.4.1 Fire safety equivalency. Determination of safety equivalency, with respect to fire, shall be based on an analysis that includes applicable fire safety performance properties, such as but not limited to ignitability, flame spread, heat release rate, heat of combustion, smoke development, and fire resistance. Determination of safety equivalency, with respect to structural fire safety, shall also include a structural system analysis.~~

[A] 104.2.3.6 Reports. Supporting documentation, where necessary to assist in the approval of materials or assemblies not specifically provided for in this code, shall comply with Sections 104.2.3.6.1 and 104.2.3.6.2.

[A] 104.2.3.6.1 Evaluation reports. Evaluation reports shall be issued by an approved agency ~~accredited to evaluate or certify products~~ and use of the evaluation report shall require approval by the code official for the installation. The alternate material, design or method of construction and product evaluated shall be within the scope of ~~the code official's recognition accreditation~~ of the approved agency. Criteria used for the evaluation shall be identified within the report and where required, provided to the code official. ~~developed using a process that includes input from the public and made available for review by the public.~~

[A] 104.2.3.6.2 Other reports. Reports not complying with Section 104.2.3.6.1 shall describe criteria, including but not limited to any referenced testing or analysis, used to determine compliance with code intent and justify code equivalence, including but not limited to any referenced testing or analysis. The report shall be prepared by a qualified engineer, specialist, laboratory or specialty organization acceptable to the code official. The code official is authorized to require design submittals to be prepared by, and bear the stamp of, a registered design professional.

[A] 104.3 Applications and permits. The code official shall receive applications, review construction documents and issue permits ~~for the erection, and alteration, demolition and moving of buildings and structures,~~ inspect the premises for which such permits have been issued and enforce compliance with the provisions of this code.

[A]104.6 Notices and orders. The code official shall issue necessary notices or orders to ensure compliance with this code. Notices of violations shall be in accordance with Section 114.

[A] 104.7.2 Inspections. The code official shall have the authority to conduct inspections, or shall accept reports of inspection by approved agencies or individuals. Reports of such inspections shall be in writing and be certified by a responsible officer of such approved agency or by the responsible individual. The code official shall keep a record of each inspection made, including notices and orders issued, showing the findings and disposition of each.

2021 International Private Sewage Disposal Code

[A] 104.2 Determination of compliance. The code official shall have the authority to determine compliance with this code, to render interpretations of this code and to adopt policies; ~~and procedures, rules and regulations~~ in order to clarify the application of this code's provisions. Such interpretations, policies; and procedures, rules and regulations:

1. Shall be in compliance with the intent and purpose of this code.
2. Shall not have the effect of waiving requirements specifically provided for in this code or other applicable codes and ordinances.

[A] 104.2.1 Listed compliance. Where this code or a reference standard requires equipment, materials, products or services to be listed and a listing standard is specified, the listing shall be based on the specified standard. Where a listing standard is not specified, the listing shall be based on an approved listing criteria. Listings shall be germane to the provision requiring the listing. Installation shall be in accordance with the listing and the manufacturer's instructions, and where required to verify compliance, the listing standard and manufacturer's instructions shall be made available to the code official.

~~Determination of compliance for anything required by this code, or a reference standard, to be listed shall be based on a test standard or approved listing evaluation that is germane to the provision requiring the listing. Anything required by this code, or a reference standard, to be listed shall be~~

~~installed in accordance with the listing and the manufacturer's instructions. Copies of the listing standard and manufacturer's instructions shall be made available to the code official upon request.~~

[A] 104.2.2.3 Content. The technical opinion and report shall analyze the ~~safety~~ properties of the design, operation or use of the building or premises and the facilities and appurtenances situated thereon, to identify and propose necessary recommendations.

[A] 104.2.2.4 Tests. Where there is insufficient evidence of compliance with the provisions of this code, the code official is authorized to require tests as evidence of compliance. Test methods shall be as specified in this code or by other recognized test standards. In the absence of recognized test standards, the code official shall approve the testing procedures. Such tests shall be performed by a party acceptable to the code official.

[A] 104.2.3.2 Application and disposition. ~~Where required, a~~ request to use an alternative material, design or method of construction shall be submitted in writing to the code official for approval. Where the alternative material, design or method of construction is not approved, the code official shall respond in writing, stating the reasons the alternative was not approved.

[A] 104.2.3.4 Equivalency criteria. An alternative material, design or method of construction shall, for the purpose intended, be not less than the equivalent of that prescribed in this code with respect to all of the following, as applicable:

1. Quality
2. Strength
3. Effectiveness
4. Durability
5. Safety, other than fire safety

6. Fire safety

~~**[A] 104.2.3.4.1 Fire safety equivalency.** Determination of safety equivalency, with respect to fire, shall be based on an analysis that includes applicable fire safety performance properties, such as but not limited to ignitability, flame spread, heat release rate, heat of combustion, smoke development, and fire resistance. Determination of safety equivalency, with respect to structural fire safety, shall also include a structural system analysis.~~

[A] 104.2.3.6 Reports. Supporting documentation, where necessary to assist in the approval of materials or assemblies not specifically provided for in this code, shall comply with Sections 104.2.3.6.1 and 104.2.3.6.2.

[A] 104.2.3.6.1 Evaluation reports. Evaluation reports shall be issued by an approved agency ~~accredited to evaluate or certify products~~ and use of the evaluation report shall require approval by the code official for the installation. The alternate material, design or method of construction and product evaluated shall be within the scope of the code official's recognition accreditation of the approved agency. Criteria used for the evaluation shall be identified within the report and where required, provided to the code official, ~~developed using a process that includes input from the public and made available for review by the public.~~

[A] 104.2.3.6.2 Other reports. Reports not complying with Section 104.2.3.6.1 shall describe criteria, including but not limited to any referenced testing or analysis, used to determine compliance with code intent and justify code equivalence, including but not limited to any referenced testing or analysis. The report shall be prepared by a qualified engineer, specialist, laboratory or specialty organization acceptable to the code official. The code official is authorized to require design submittals to be prepared by, and bear the stamp of, a registered design professional.

[A] 104.3 Applications and permits. The code official shall receive applications, review construction documents and issue permits ~~for the erection, and alteration, demolition and moving of buildings and structures,~~ inspect the premises for which such permits have been issued and enforce compliance with the provisions of this code.

[A]104.6 Notices and orders. The code official shall issue necessary notices or orders to ensure compliance with this code. Notices of violations shall be in accordance with Section 114.

[A] 104.7.2 Inspections. The code official shall have the authority to conduct inspections, or shall accept reports of inspection by approved agencies or individuals. Reports of such inspections shall be in writing and be certified by a responsible officer of such approved agency or by the responsible individual. The code official shall keep a record of each inspection made, including notices and orders issued, showing the findings and disposition of each.

Committee Reason: The committee stated that the reason for the approval of the modifications and proposal was based on correlation and consistency with the action taken on ADM13-22 Part I. (Vote: 9-4)

ADM14-22

Individual Consideration Agenda

Public Comment 1:

IMC: [A] 104.2.3, [A] 104.2.3.1, [A] 104.2.4; **IFGC:** [A] 104.2.3, [A] 104.2.3.1, [A] 104.2.4; **IPC:** [A] 104.2.3, [A] 104.2.3.1, [A] 104.2.4; **ISpsc:** [A] 104.2.3, [A] 104.2.3.1, [A] 104.2.4; **IPSDC:** [A] 104.2.3, [A] 104.2.3.1, [A] 104.2.4

Proponents: Jenifer Gilliland, representing Washington Association of Building Officials (jenifer.gilliland@seattle.gov); Micah Chappell, representing Washington Association of Building Officials Technical Code Development Committee (micah.chappell@seattle.gov) requests As Modified by Public Comment

Further modify as follows:

2021 International Mechanical Code

[A] 104.2.3 Alternative materials, design and methods of construction and equipment. The provisions of this code are not intended to prevent the installation of any material or to prohibit any design or method of construction not specifically prescribed by this code, ~~provided that any such alternative is not specifically prohibited by this code and has been approved~~ the code official has approved and authorized its use

[A] 104.2.3.1 Approval authority. ~~The building official shall be permitted to approve A~~ The building official shall be permitted to approve A ~~an alternative material, design or method of construction shall be approved where the code official finds that~~ provided the proposed alternative is satisfactory and complies with Sections 104.2.3 through 104.2.3.7, as applicable.

[A] 104.2.4 Modifications. Where there are practical difficulties involved in carrying out the provisions of this code, the code official shall have the authority to grant modifications for individual cases provided that the code official shall first find that one or more special individual reasons make the strict letter of this code impractical, that the modification is in compliance with the intent and purpose of this code, and that such modification does not lessen health, accessibility, ~~life and safety,~~ where considered together with other safety features of the building or other relevant circumstances. fire safety or structural requirements ~~where considered together with other safety features of the building or other relevant circumstances.~~ The details of the ~~written~~ request for and action granting modifications shall be recorded and ~~entered in the files of the department of building safety~~ maintained in the official record by the code official.

2021 International Fuel Gas Code

[A] 104.2.3 Alternative materials, design and methods of construction equipment. The provisions of this code are not intended to prevent the installation of any material or to prohibit any design or method of construction not specifically prescribed by this code, provided that ~~any such alternative is not specifically prohibited by this code and has been approved~~ the code official has approved and authorized its use.

[A] 104.2.3.1 ~~Approved~~ Approval authority. ~~The code official shall be permitted to approve A~~ The code official shall be permitted to approve A ~~an alternative material, design or method of construction shall be approved where the code official finds that~~ provided the proposed alternative is satisfactory and complies with Sections 104.2.3 through 104.2.3.7, as applicable.

[A] 104.2.4 Modifications. Where there are practical difficulties involved in carrying out the provisions of this code, the code official shall have the authority to grant modifications for individual cases provided that the code official shall first find that one or more special individual reasons make the strict letter of this code impractical, that the modification is in compliance with the intent and purpose of this code, and that such modification does not

lessen health, accessibility, ~~life and safety~~, fire safety or structural requirements where considered together with other safety features of the building or other relevant circumstances. The details of the ~~written~~ request for and action granting modifications shall be recorded and ~~entered in the files of the department of building safety maintained in the official record by the code official~~.

2021 International Plumbing Code

[A] 104.2.3 Alternative materials, design and methods of construction and equipment. The provisions of this code are not intended to prevent the installation of any material or to prohibit any design or method of construction not specifically prescribed by this code, provided that ~~any such alternative is not specifically prohibited by this code and has been approved~~. the code official has approved and authorized its use.

[A] 104.2.3.1 Approval authority. ~~The code official shall be permitted to approve~~ A an alternative material, design or method of construction ~~shall be approved where the code official finds that~~ provided the proposed alternative is satisfactory and complies with Sections 104.2.3 through 104.2.3.7, as applicable.

[A] 104.2.4 Modifications. Where there are practical difficulties involved in carrying out the provisions of this code, the code official shall have the authority to grant modifications for individual cases provided that the code official shall first find that one or more special individual reasons make the strict letter of this code impractical, that the modification is in compliance with the intent and purpose of this code, and that such modification does not lessen health, accessibility, ~~life and safety~~, fire safety or structural requirements where considered together with other safety features of the building or other relevant circumstances. The details of the ~~written~~ request for and action granting modifications shall be recorded and ~~entered in the files of the department of building safety maintained in the official record by the code official~~.

2021 International Swimming Pool and Spa Code

[A] 104.2.3 Alternative materials, design and methods of construction and equipment. The provisions of this code are not intended to prevent the installation of any material or to prohibit any design or method of construction not specifically prescribed by this code, provided that ~~any such alternative is not specifically prohibited by this code and has been approved~~. the code official has approved and authorized its use.

[A] 104.2.3.1 Approval authority. ~~The building official shall be permitted to approve~~ A an alternative material, design or method of construction ~~shall be approved where the code official finds that~~ provided the proposed alternative is satisfactory and complies with Sections 104.2.3 through 104.2.3.7, as applicable.

[A] 104.2.4 Modifications. Where there are practical difficulties involved in carrying out the provisions of this code, the code official shall have the authority to grant modifications for individual cases provided that the code official shall first find that one or more special individual reasons make the strict letter of this code impractical, that the modification is in compliance with the intent and purpose of this code, and that such modification does not lessen health, accessibility, ~~life and safety~~, fire safety or structural requirements. The details of the ~~written~~ request for and action granting modifications shall be recorded and ~~entered in the files of the department of building safety maintained in the official record by the code official~~.

2021 International Private Sewage Disposal Code

[A] 104.2.3 Alternative materials, design and methods of construction and equipment. The provisions of this code are not intended to prevent the installation of any material or to prohibit any design or method of construction not specifically prescribed by this code, provided that ~~any such alternative is not specifically prohibited by this code and has been approved~~. the building official has approved and authorized its use.

[A] 104.2.3.1 Approval authority. ~~The building official shall be permitted to approve~~ A an alternative material, design or method of construction ~~shall be approved where the code official finds that~~ provided the proposed alternative is satisfactory and complies with Sections 104.2.3 through 104.2.3.7, as applicable.

[A] 104.2.4 Modifications. Where there are practical difficulties involved in carrying out the provisions of this code, the code official shall have the authority to grant modifications for individual cases provided that the code official shall first find that one or more special individual reasons make the strict letter of this code impractical, that the modification is in compliance with the intent and purpose of this code, and that such modification does not lessen health, accessibility, ~~life and safety~~, fire safety or structural requirements. The details of the ~~written~~ request for and action granting modifications shall be recorded and ~~entered in the files of the department of building safety maintained in the official record by the code official~~.

Commenter's Reason: The code proposal as currently written unduly constrains the building official.

This PC restores flexibility for the building official to use judgement when evaluating alternative means, methods, materials and equipment as well as modifications. Controversial language restricting building official approval of items prohibited elsewhere in this code is removed and replaced with a blanket statement giving the building official the ability to approve alternatives as long as the building official authorizes its use. In a newly formed section, Approval authority, the building official is permitted to approve alternatives that are suitable and comply with the equivalency criteria in Sections 104.2.3.4-104.2.3.7.

In modifications, additional flexibility is provided for the building official to first, evaluate a proposal based on the current criteria, ie. health, accessibility, safety and fire safety features of the building and second, consider with other safety features of the building or relevant circumstances if necessary. Modifications are by definition not compliant with the strict letter of the code. For instance, a building official might want to consider other issues when approving a proposal such as how their local fire department stages for a fire and whether or not a building has been voluntarily sprinklered. If fire department policy is to "Run the stairs" rather than use ladder trucks to access an upper story it may impact your approval of a

modification.

This is the third of three proposals addressing the authority of the building official across the ICC Family of Codes.

Cost Impact: The net effect of the public comment and code change proposal will not increase or decrease the cost of construction

This proposal is mainly aimed at delineating the authority of the building official to approve non-conventional approaches to solving code issues. If anything, costs might be reduced because there is more flexibility to approve a creative approach to a code problem.

Public Comment# 3455

Public Comment 2:

IPC: [A] 104.2.3.5, [A] 104.2.3.5.1 (New); **IMC:** [A] 104.2.3.5, [A] 104.2.3.5.1 (New); **IFGC:** [A] 104.2.3.5, [A] 104.2.3.5.1 (New); **ISPSC:** [A] 104.2.3.5, [A] 104.2.3.5.1 (New); **IPSDC:** [A] 104.2.3.5, [A] 104.2.3.5.1 (New)

Proponents: Jenifer Gilliland, representing Washington Association of Building Officials (jenifer.gilliland@seattle.gov); Micah Chappell, representing Washington Association of Building Officials (micah.chappell@seattle.gov) requests As Modified by Public Comment

Further modify as follows:

2021 International Plumbing Code

[A] 104.2.3.5 Tests. Tests conducted to demonstrate equivalency in support of an alternative material, design or method of construction application shall be of a scale that is sufficient to ~~predict~~ simulate performance of in the end use configuration. ~~Tests shall be performed by a party acceptable to the code official.~~

[A] 104.2.3.5.1 Performance. Tests shall be performed by a party acceptable to the code official.

2021 International Mechanical Code

[A] 104.2.3.5 Tests. Tests conducted to demonstrate equivalency in support of an alternative material, design or method of construction application shall be of a scale that is sufficient to ~~predict~~ simulate performance of in the end use configuration. ~~Tests shall be performed by a party acceptable to the code official.~~

[A] 104.2.3.5.1 Performance. Tests shall be performed by a party acceptable to the code official.

2021 International Fuel Gas Code

[A] 104.2.3.5 Tests. Tests conducted to demonstrate equivalency in support of an alternative material, design or method of construction application shall be of a scale that is sufficient to ~~predict~~ simulate performance of in the end use configuration. ~~Tests shall be performed by a party acceptable to the code official.~~

[A] 104.2.3.5.1 Performance. Tests shall be performed by a party acceptable to the code official.

2021 International Swimming Pool and Spa Code

[A] 104.2.3.5 Tests. Tests conducted to demonstrate equivalency in support of an alternative material, design or method of construction application shall be of a scale that is sufficient to ~~predict~~ simulate performance of in the end use configuration. ~~Tests shall be performed by a party acceptable to the code official.~~

[A] 104.2.3.5.1 Performance. Tests shall be performed by a party acceptable to the code official.

2021 International Private Sewage Disposal Code

[A] 104.2.3.5 Tests. Tests conducted to demonstrate equivalency in support of an alternative material, design or method of construction application shall be of a scale that is sufficient to ~~predict~~ simulate performance of in the end use configuration. ~~Tests shall be performed by a party acceptable to the code official.~~

[A] 104.2.3.5.1 Performance. Tests shall be performed by a party acceptable to the code official.

Commenter's Reason: This PC seeks to clarify that full-scale testing is not necessary to support an alternative material, design or method of construction. It only needs to be large enough to give confidence to the building official that a product, component or assembly will perform as expected in the end use configuration. We don't want to just "predict" performance—we need more assurance than that—we actually want to simulate performance in testing. If the performance is simulated then this knowledge can be used to determine how the product, component or assembly will perform in situ.

Testing doesn't always occur in a lab. It could be a fire test of the material of a temporary tent that has no labeling witnessed by the fire department. These often consist of burning a tiny piece of the fabric. The language needs to be written in a general manner to cover all situations where testing may be required.

This is the third PC of three identical PC's addressing testing.

Cost Impact: The net effect of the public comment and code change proposal will not increase or decrease the cost of construction. The changes in the PC should not impact costs. If anything the changes would reduce costs because full-scale testing would not be required.

Public Comment# 3387

Public Comment 3:

IMC: [A] 104.2.3.2, [A] 104.2.4, [A] 104.7, [A] 104.7.1, [A] 104.7.2, [A] 104.7.3, [A] 104.7.4, [A] 104.7.5; **IFGC:** [A] 104.2.3.2, [A] 104.2.4, [A] 104.7, [A] 104.7.1, [A] 104.7.2, [A] 104.7.3, [A] 104.7.4; **IPC:** [A] 104.2.3.2, [A] 104.2.4, [A] 104.7, [A] 104.7.1, [A] 104.7.2, [A] 104.7.3, [A] 104.7.4, [A] 104.7.5; **ISPSC:** [A] 104.2.3.2, [A] 104.2.4, [A] 104.7, [A] 104.7.1, [A] 104.7.2, [A] 104.7.3, [A] 104.7.4, [A] 104.7.5; **IPSDC:** [A] 104.2.3.2, [A] 104.2.4, [A] 104.7, [A] 104.7.1, [A] 104.7.2, [A] 104.7.3, [A] 104.7.4, [A] 104.7.5

Proponents: Jenifer Gilliland, representing Washington Association of Building Officials (jenifer.gilliland@seattle.gov); Micah Chappell, representing Washington Association of Building Officials Technical Code Development Committee (micah.chappell@seattle.gov) requests As Modified by Public Comment

Further modify as follows:

2021 International Mechanical Code

[A] 104.2.3.2 Application and disposition. Where required a request to use an alternative material, design or method of construction shall be submitted ~~in writing~~ to the code official for approval. Where the alternative material, design or method of construction is not approved, the code official shall ~~respond in writing~~ provide a response, stating the reasons the alternative was not approved.

[A] 104.2.4 Modifications. Where there are practical difficulties involved in carrying out the provisions of this code, the code official shall have the authority to grant modifications for individual cases provided that the code official shall first find that one or more special individual reasons make the strict letter of this code impractical, that the modification is in compliance with the intent and purpose of this code, and that such modification does not lessen health, accessibility, life and fire safety or structural requirements. The details of the written request for and action granting modifications shall be recorded and maintained ~~entered in the files of the department of building safety~~ in the official record by the code official.

[A] 104.7 Official records. The code official shall keep official records as required by Sections 104.7.1 through 104.7.5. Such official records shall be retained for not less than 5 years or for as long as the building or structure to which such records relate remains in existence, unless otherwise provided by other laws, regulations, or rules. Such records shall be made available for public inspection.

[A] 104.7.1 Approvals-Applications. A record of ~~approvals~~ the status or the final disposition of shall be maintained by the applications submitted to the code official for review and shall be available for public inspection during business hours in accordance with applicable laws. ~~Where required, documentation including construction documents and supporting reports shall be maintained in the official record.~~

[A] 104.7.2 Inspections. The code official shall have the authority to conduct inspections, or shall accept reports of inspection by approved agencies or individuals. Reports of such inspections shall be ~~in writing~~ and be certified by a responsible officer of such approved agency or by the responsible individual. The code official shall keep a record of each inspection made, including notices and orders and notices of violations issued, showing the findings and disposition of each.

[A] 104.7.3 Code alternatives and modifications. Applications for alternative materials, design and methods of construction and equipment in accordance with Section 104.2.3; modifications in accordance with Section 104.2.4; and documentation of the final decision of the code official ~~for either shall be in writing~~ and shall be retained in the official records.

[A] 104.7.4 Tests. The code official shall ~~keep~~ maintain a record of tests conducted to comply with Sections 104.2.2.4 and 104.2.3.5.

[A] 104.7.5 Fees. The code official shall ~~keep~~ maintain a record of fees collected and refunded in accordance with Section 109.

2021 International Fuel Gas Code

[A] 104.2.3.2 Application and disposition. Where required a request to use an alternative material, design or method of construction shall be submitted ~~in writing~~ to the code official for approval. Where the alternative material, design or method of construction is not approved, the code official shall ~~respond in writing~~ provide a response stating the reasons the alternative was not approved.

[A] 104.2.4 Modifications. Where there are practical difficulties involved in carrying out the provisions of this code, the code official shall have the

authority to grant modifications for individual cases provided that the code official shall first find that one or more special individual reasons make the strict letter of this code impractical, that the modification is in compliance with the intent and purpose of this code, and that such modification does not lessen health, accessibility, life and fire safety or structural requirements. The details of the ~~written~~ request for and action granting modifications shall be recorded and maintained entered in the files of the department of building safety in the official record by the building official.

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[A] 104.7.4 Tests. The code official shall ~~keep~~ maintain a record of tests conducted to comply with Sections 104.2.2.4 and 104.2.3.5.

[A] 104.7.4.5 Fees. The code official shall ~~keep~~ maintain a record of fees collected and refunded in accordance with Section 109.

2021 International Plumbing Code

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[A] 104.7.1 Approvals. A record of approvals shall be maintained by the code official and shall be available for public inspection during business hours in accordance with applicable laws.

[A] 104.7.2 Inspections. The code official shall have the authority to conduct inspections, or shall accept reports of inspection by approved agencies or individuals. Reports of such inspections shall be ~~in writing and~~ be certified by a responsible officer of such approved agency or by the responsible individual. The code official shall keep a record of each inspection made, including notices and orders and notices of violations issued, showing the findings and disposition of each.

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[A] 104.7.5 Fees. The code official shall ~~keep~~ maintain a record of fees collected and refunded in accordance with Section 109.

2021 International Swimming Pool and Spa Code

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[A] 104.7.1 Approvals Applications. A record of ~~approvals~~ the status or the final disposition of ~~shall be maintained by~~ applications submitted to the code official and shall be ~~available for public inspection during business hours in accordance with applicable laws~~ maintained. Where required, documentation including *construction documents* and supporting reports shall be retained in the official record.

[A] 104.7.2 Inspections. The code official shall have the authority to conduct inspections, or shall accept reports of inspection by approved agencies or individuals. Reports of such inspections shall be in writing and be certified by a responsible officer of such approved agency or by the responsible individual. The code official shall ~~keep~~ maintain a record of each inspection made, including notices and orders and notices of violation issued, showing the findings and disposition of each.

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[A] 104.7.5 Fees. The code official shall ~~keep~~ maintain a record of fees collected and refunded in accordance with Section 109.

2021 International Private Sewage Disposal Code

[A] 104.2.3.2 Application and disposition. Where required, ~~a request to use an alternative material, design or method of construction shall be submitted in writing to the code official for approval. Where the alternative material, design or method of construction is not approved, the code official shall respond in writing~~ provide a response, stating the reasons the alternative was not approved.

[A] 104.2.4 Modifications. Where there are practical difficulties involved in carrying out the provisions of this code, the code official shall have the authority to grant modifications for individual cases provided that the code official shall first find that one or more special individual reasons make the strict letter of this code impractical, that the modification is in compliance with the intent and purpose of this code, and that such modification does not lessen health, accessibility, life and fire safety or structural requirements. The details of the ~~written~~ request for and action granting modifications shall be recorded and maintained entered in the files of the department of building safety in the official record by the code official.

[A] 104.7 Official records. The code official shall keep official records as required by Sections 104.7.1 through 104.7.5. Such official records shall be retained ~~for not less than 5 years or~~ for as long as the building or structure to which such records relate remains in existence, unless otherwise provided by other laws, regulations, or rules. Such records shall be made available for public inspection.

[A] 104.7.1 Approvals Applications. A record of ~~approvals~~ the status or the final disposition of ~~shall be maintained by the~~ applications submitted to the code official and shall be ~~maintained~~ available for public inspection during business hours in accordance with applicable laws. Where required, documentation including *construction documents* and supporting reports shall be retained in the official record.

[A] 104.7.2 Inspections. The code official shall have the authority to conduct inspections, or shall accept reports of inspection by approved agencies or individuals. Reports of such inspections shall be in writing and be certified by a responsible officer of such approved agency or by the responsible individual. The code official shall ~~keep~~ maintain a record of each inspection made, including notices and orders and notices of violation issued, showing the findings and disposition of each.

[A] 104.7.3 Code alternatives and modifications. Applications for alternative materials, design and methods of construction and equipment in accordance with Section 104.2.3; modifications in accordance with Section 104.2.4; and documentation of the final decision of the code official ~~for either shall be in writing and~~ shall be retained in the official records.

[A] 104.7.4 Tests. The code official shall ~~keep~~ maintain record of tests conducted to comply with Sections 104.2.2.4 and 104.2.3.5.

[A] 104.7.5 Fees. The code official shall ~~keep~~ maintain a record of fees collected and refunded in accordance with Section 109.

Commenter's Reason: This PC attempts to coordinate terms and eliminate dated language, by making the following changes to the original proposal:

· The 5-year minimum time limit for keeping records is eliminated in this PC because public record retention laws vary so much from place to place. There really is no best practice. Some jurisdictions keep permit and inspections records for the life of the building, while others keep no records of residential buildings after a few years. It takes time and money to keep records in a format that allows access to them by the public. Individual jurisdictions will need to customize this section to meet their local conditions.

- More than just approvals need to be kept as part of the official record. Tracking disapprovals of applications and permits is just as important. The requirement to track “status” and “final disposition” makes it clear that records relating to important approval milestones and the final outcome are to be maintained.
- Language is added to make it clear that the building official authority can require the retention of construction documents as part of the public record.
- Language about maintaining construction documents and supporting reports as part of the official record is added but only “where required”. This again allows the building official to keep the records based on local and state retention requirements as well as department capacity.
- All records should be subject to “public inspection”, not just the inspection records. This language has been relocated 104.7.2 inspections from the charging statement to 104.7 Official Records.
- Notices of violation are added to the list of inspection items in 104.7.2 that need to be maintained as the part of the public record.
- Plan review and inspection results are now recorded and maintained almost entirely electronically in most building departments. There is no need to keep outdated language that requires a department to maintain records “in writing” or a “written response”.
- Also, the word “kept” is replaced by “maintained” in this PC. “Kept” implies that the record is being saved “as is”. “Maintained” implies more effort to include actions like moving the record from paper to microfiche and finally to a digitized record. “Maintain” might also include sorting, storing and indexing documents in an organized manner.

This is the third of three public comments submitted to make changes to the record keeping sections in the ICC family of codes.

Cost Impact: The net effect of the public comment and code change proposal will not increase or decrease the cost of construction. This PC just describes the official record that is being kept by the building official. It should not increase the costs for a department as most of the records, outside of the inspection and plan review results, are permitted to be kept by the code official rather than required.

Public Comment# 3417

Public Comment 4:

IMC: [A] 104.2.3.4; IFGC: [A] 104.2.3.4; IPC: [A] 104.2.3.4; ISPSC: [A] 104.2.3.4; IPSDC: [A] 104.2.3.4

Proponents: Bill McHugh, representing National Fireproofing Contractors Association, Firestop Contractors International Association (bill@mc-hugh.us) requests As Modified by Public Comment

Further modify as follows:

2021 International Mechanical Code

[A] 104.2.3.4 Equivalency criteria. An alternative material, design or method of construction shall, for the purpose intended, be not less than the equivalent of that prescribed in this code with respect to all of the following, as applicable:

1. Quality
2. Strength
3. Effectiveness
4. Durability
5. Safety, other than fire safety
6. Fire safety
7. Fire resistance

2021 International Fuel Gas Code

[A] 104.2.3.4 Equivalency criteria. An alternative material, design or method of construction shall, for the purpose intended, be not less than the equivalent of that prescribed in this code with respect to all of the following, as applicable:

1. Quality
2. Strength
3. Effectiveness
4. Durability
5. Safety, other than fire safety
6. Fire safety
7. Fire resistance

2021 International Plumbing Code

[A] 104.2.3.4 Equivalency criteria. An alternative material, design or method of construction shall, for the purpose intended, be not less than the equivalent of that prescribed in this code with respect to all of the following, as applicable:

1. Quality
2. Strength
3. Effectiveness
4. Durability
5. Safety, other than fire safety
6. Fire safety
7. Fire resistance

2021 International Swimming Pool and Spa Code

[A] 104.2.3.4 Equivalency criteria. An alternative material, design or method of construction shall, for the purpose intended, be not less than the equivalent of that prescribed in this code with respect to all of the following, as applicable:

1. Quality
2. Strength
3. Effectiveness
4. Durability
5. Safety, other than fire safety
6. Fire safety
7. Fire resistance

2021 International Private Sewage Disposal Code

[A] 104.2.3.4 Equivalency criteria. An alternative material, design or method of construction shall, for the purpose intended, be not less than the equivalent of that prescribed in this code with respect to all of the following, as applicable:

1. Quality
2. Strength
3. Effectiveness
4. Durability
5. Safety, other than fire safety
6. Fire safety
7. Fire resistance

Commenter's Reason: The reason for this public comment is to re-insert the words 'Fire Resistance'. Fire Resistance has been in the BOCA National Building Code 104.11 ('96 and before), the Uniform Building Code ('97 and before), and for a reason. Fire Resistance is a critical part of the building's fire and life safety protection package. Any alternative to fire-resistance needs to be equal to the fire resistance provided. During the Committee Action Hearings, a list of items explaining what's in 'Fire Safety' including Fire Resistance was deleted, leaving 'Fire Safety' with no definition. Because the term Fire-Resistance has in the International Building Code since the 2000 version, and in the BOCA National

Building Code, Uniform Building Code - as a stand alone item - we believe it needs to remain a stand alone item in this section.

Cost Impact: The net effect of the public comment and code change proposal will not increase or decrease the cost of construction. This code proposal would put a term back in the code that was removed. Therefore, it is cost neutral.

Public Comment# 3546

Public Comment 5:

IMC: [A] 104.1 , [A] 104.2, [A] 104.2.2; **IFGC:** [A] 104.1, [A] 104.2, [A] 104.2.2; **IPC:** [A] 104.1, [A] 104.2, [A] 104.2.2; **ISPC:** [A] 104.1, [A] 104.2, [A] 104.2.2; **IPSDC:** [A] 104.1, [A] 104.2, [A] 104.2.2

Proponents: Shane Nilles, representing Self (snilles@cityofcheney.org) requests As Modified by Public Comment

Further modify as follows:

2021 International Mechanical Code

[A] 104.1 General. The building official is hereby authorized and directed to enforce the provisions of this code- and shall have the authority to render interpretations of this code and to adopt policies and procedures in order to clarify the application of this code's provisions. Such interpretations, policies and procedures:

1. Shall be in compliance with the intent and purpose of this code.
2. Shall not have the effect of waiving requirements specifically provided for in this code.

[A] 104.2 ~~Determination of~~ Evaluate for Compliance. The building official shall ~~have the authority to determine~~ evaluate for compliance with this code in accordance with this section and the, ~~to render interpretations of this code and to adopt ed~~ policies and procedures as authorized by Section 104.1 ~~in order to clarify the application of this code's provisions. Such interpretations, policies and procedures:-~~

1. ~~Shall be in compliance with the intent and purpose of this code.~~
2. ~~Shall not have the effect of waiving requirements specifically provided for in this code.~~

[A] 104.2.2 Technical assistance. To ~~determine~~ evaluate for compliance with this code, the building official is authorized to require the owner or owner's authorized agent to provide a technical opinion and report.

2021 International Fuel Gas Code

[A] 104.1 General. The building official is hereby authorized and directed to enforce the provisions of this code- and shall have the authority to render interpretations of this code and to adopt policies and procedures in order to clarify the application of this code's provisions. Such interpretations, policies and procedures:

1. Shall be in compliance with the intent and purpose of this code.
2. Shall not have the effect of waiving requirements specifically provided for in this code.

[A] 104.2 ~~Determination of~~ Evaluate for Compliance. The building official shall ~~have the authority to determine~~ evaluate for compliance with this code in accordance with this section and the, ~~to render interpretations of this code and to adopt ed~~ policies and procedures as authorized by Section 104.1 ~~in order to clarify the application of this code's provisions. Such interpretations, policies and procedures:-~~

1. ~~Shall be in compliance with the intent and purpose of this code.~~
2. ~~Shall not have the effect of waiving requirements specifically provided for in this code.~~

[A] 104.2.2 Technical assistance. To ~~determine~~ evaluate for compliance with this code, the building official is authorized to require the owner or owner's authorized agent to provide a technical opinion and report.

2021 International Plumbing Code

[A] 104.1 General. The building official is hereby authorized and directed to enforce the provisions of this code- and shall have the authority to render interpretations of this code and to adopt policies and procedures in order to clarify the application of this code's provisions. Such interpretations, policies and procedures:

1. Shall be in compliance with the intent and purpose of this code.

2. Shall not have the effect of waiving requirements specifically provided for in this code.

[A] 104.2 ~~Determination of~~ Evaluate for compliance. The building official shall ~~have the authority to determine~~ evaluate for compliance with this code in accordance with this section and the, ~~to render interpretations of this code and to adopt ed~~ policies and procedures as authorized by Section 104.1 ~~in order to clarify the application of this code's provisions. Such interpretations, policies and procedures:-~~

1. ~~Shall be in compliance with the intent and purpose of this code.~~
2. ~~Shall not have the effect of waiving requirements specifically provided for in this code.~~

[A] 104.2.2 Technical assistance. To ~~determine~~ evaluate for compliance with this code, the building official is authorized to require the owner or owner's authorized agent to provide a technical opinion and report.

2021 International Swimming Pool and Spa Code

[A] 104.1 General. The building official is hereby authorized and directed to enforce the provisions of this code: and shall have the authority to render interpretations of this code and to adopt policies and procedures in order to clarify the application of this code's provisions. Such interpretations, policies and procedures:

1. Shall be in compliance with the intent and purpose of this code.
2. Shall not have the effect of waiving requirements specifically provided for in this code.

[A] 104.2 ~~Determination of~~ Evaluate for compliance. The building official shall ~~have the authority to determine~~ evaluate for compliance with this code in accordance with this section and the, ~~to render interpretations of this code and to adopt ed~~ policies and procedures as authorized by Section 104.1 ~~in order to clarify the application of this code's provisions. Such interpretations, policies and procedures:-~~

1. ~~Shall be in compliance with the intent and purpose of this code.~~
2. ~~Shall not have the effect of waiving requirements specifically provided for in this code.~~

[A] 104.2.2 Technical assistance. To ~~determine~~ evaluate for compliance with this code, the building official is authorized to require the owner or owner's authorized agent to provide a technical opinion and report.

2021 International Private Sewage Disposal Code

[A] 104.1 General. The building official is hereby authorized and directed to enforce the provisions of this code: and shall have the authority to render interpretations of this code and to adopt policies and procedures in order to clarify the application of this code's provisions. Such interpretations, policies and procedures:

1. Shall be in compliance with the intent and purpose of this code.
2. Shall not have the effect of waiving requirements specifically provided for in this code.

[A] 104.2 ~~Determination of~~ Evaluate for compliance. The building official shall ~~have the authority to determine~~ evaluate for compliance with this code in accordance with this section and the, ~~to render interpretations of this code and to adopt ed~~ policies and procedures as authorized by Section 104.1 ~~in order to clarify the application of this code's provisions. Such interpretations, policies and procedures:-~~

1. ~~Shall be in compliance with the intent and purpose of this code.~~
2. ~~Shall not have the effect of waiving requirements specifically provided for in this code.~~

[A] 104.2.2 Technical assistance. To ~~determine~~ evaluate for compliance with this code, the building official is authorized to require the owner or owner's authorized agent to provide a technical opinion and report.

Commenter's Reason: Currently the code does not grant the code official the authority to determine that any work fully complies with the code, but rather the authority to enforce the code by reviewing, inspecting, and evaluating for compliance with the code. This is an important distinction because it is not the responsibility of the code official to guarantee that there are no violations when they complete plan reviews or inspections. If that were the case, then contractors, designers, and owners would be able to be absolved of all responsibility for any violations that were not caught by the code official. This public comment corrects that critical oversight that was made by the original proposal and maintains the current intent of the administrative authorities while supporting the original proposal's effort to clarify these sections.

Cost Impact: The net effect of the public comment and code change proposal will not increase or decrease the cost of construction. The proposal and this public comment only clarifies the current intent of the code and does not directly affect the cost of construction.

Public Comment 6:

IMC: 104.2.1; IFGC: [A] 104.2.1; IPC: [A] 104.2.1; ISPSC: [A] 104.2.1; IPSDC: [A] 104.2.1

Proponents: John Woestman, representing Composite Lumber Manufacturers Association (CLMA) (jwoestman@kellencompany.com) requests As Modified by Public Comment

Further modify as follows:

2021 International Mechanical Code

[A] 104.2.1 Listed compliance. Where this code or a referenced standard requires equipment, materials, products or services to be listed and a listing standard is specified, the listing shall be based on the specified standard. Where a listing standard is not specified, the listing shall be based on an approved listing criteria. Listings shall be germane to the provision requiring the listing. Installation shall be in accordance with the listing and the manufacturer's instructions, and where required to verify compliance, the listing ~~standard~~ and the manufacturer's instructions shall be made available to the code official.

2021 International Fuel Gas Code

[A] 104.2.1 Listed compliance. Where this code or a reference standard requires equipment, materials, products or services to be listed and a listing standard is specified, the listing shall be based on the specified standard. Where a listing standard is not specified, the listing shall be based on an approved listing criteria. Listings shall be germane to the provision requiring the listing. Installation shall be in accordance with the listing and the manufacturer's instructions, and where required to verify compliance, the listing ~~standard~~ and the manufacturer's instructions shall be made available to the code official.

2021 International Plumbing Code

[A] 104.2.1 Listed compliance. Where this code or a reference standard requires equipment, materials, products or services to be listed and a listing standard is specified, the listing shall be based on the specified standard. Where a listing standard is not specified, the listing shall be based on an approved listing criteria. Listings shall be germane to the provision requiring the listing. Installation shall be in accordance with the listing and the manufacturer's instructions, and where required to verify compliance, the listing ~~standard~~ and the manufacturer's instructions shall be made available to the code official.

2021 International Swimming Pool and Spa Code

[A] 104.2.1 Listed compliance. Where this code or a reference standard requires equipment, materials, products or services to be listed and a listing standard is specified, the listing shall be based on the specified standard. Where a listing standard is not specified, the listing shall be based on an approved listing criteria. Listings shall be germane to the provision requiring the listing. Installation shall be in accordance with the listing and the manufacturer's instructions, and where required to verify compliance, the listing ~~standard~~ and the manufacturer's instructions shall be made available to the code official.

2021 International Private Sewage Disposal Code

[A] 104.2.1 Listed compliance. Where this code or a reference standard requires equipment, materials, products or services to be listed and a listing standard is specified, the listing shall be based on the specified standard. Where a listing standard is not specified, the listing shall be based on an approved listing criteria. Listings shall be germane to the provision requiring the listing. Installation shall be in accordance with the listing and the manufacturer's instructions, and where required to verify compliance, the listing ~~standard~~ and the manufacturer's instructions shall be made available to the code official.

Commenter's Reason: We recommend revising the last sentence in this section for consistency between the installation requirements and the information required to be made available to the code official. That is: install per the listing and the manufacturer's instructions, and to make this same information available to the code official if needed to verify compliance.

We agree with the intent of the provisions in Section 104.2.1. However, we have concerns with the ambiguity of part of the last sentence of 104.2.1 and the likelihood of job-by-job and product-by-product interpretation and enforcement of this particular part of the that sentence: ". . . and where required to verify compliance, the listing standard . . . shall be made available to the building official."

Regarding ambiguity of ". . . shall be made available . . .", we anticipate some code officials will ask for a printed copy of a specific standard for a specific product on specific projects. Other code officials will consider the standard available if the standard can be viewed online. And, other code officials may interpret this phrase different than either of these examples.

Standards to which products are listed are typically available from the standards development organization (SDO), or from their authorized agent (e.g. techstreet.com). Some standards are posted online by the SDO for downloading at no cost. Some standards are available from the SDO for viewing online at no cost, but have document protection that prevents copying / pasting and / or downloading, and may be purchased for downloading and printing. And, some standards are available online and require purchasing to view, download, or print.

The standard to which a product is listed is almost always a copyrighted document. Typically, only the copyright owner of a standard, the SDO, can make available copyrighted material. The current language implies the party responsible for complying with the code would be responsible for making available an SDO's copyrighted material, which would likely infringe on the copyright.

Unlike the copyrighted standard, the listing is typically publicly available, With these concerns in mind, we recommend revising Section 104.2.1 as proposed in this public comment.

Cost Impact: The net effect of the public comment and code change proposal will not increase or decrease the cost of construction. This public comment will not increase the cost of construction. On the other hand, this public comment may, or may not, decrease the cost of construction. Without this public comment, standards which are referenced in the code could be requested to be made available by the project owner - and that may require purchase of the standard.

ADM17-22 Part I

IBC: [A] 104.1; IEBC: [A] 104.1; IFC: [A] 104.1; IFGC: [A] 104.1; IMC: [A] 104.1; IPC: [A] 104.1; IPMC: [A] 105.1; IPSDC: [A] 104.1; ISPSC: [A] 104.1; IWUIC: [A] 104.1; IGCC: 104.1

Proposed Change as Submitted

Proponents: John-Jozef Proczka, representing Self (john-jozef.proczka@phoenix.gov)

THIS IS A 2 PART CODE CHANGE. PART I WILL BE HEARD BY THE ADMINISTRATIVE CODE COMMITTEE. PART II WILL BE HEARD BY THE IRC-BUILDING CODE COMMITTEE. SEE THE TENTATIVE HEARING ORDER FOR THESE COMMITTEES.

2021 International Building Code

Revise as follows:

[A] 104.1 General. The *building official* is hereby authorized and directed to enforce the provisions of this code. The *building official* shall have the authority to render interpretations of this code and to adopt policies and procedures in order to clarify the application of its provisions. Such interpretations, policies and procedures shall be in compliance with the intent and purpose of this code. Such interpretations, policies and procedures shall not have the effect of waiving requirements specifically provided for in this code.

2021 International Existing Building Code

Revise as follows:

[A] 104.1 General. The *code official* is hereby authorized and directed to enforce the provisions of this code. The *code official* shall have the authority to render interpretations of this code and to adopt policies and procedures in order to clarify the application of its provisions. Such interpretations, policies and procedures shall be in compliance with the intent and purpose of this code. Such interpretations, policies and procedures shall not have the effect of waiving requirements specifically provided for in this code.

2021 International Fire Code

Revise as follows:

[A] 104.1 General. The *fire code official* is hereby authorized to enforce the provisions of this code. The *fire code official* shall have the authority to render interpretations of this code and to adopt policies, procedures, rules and regulations in order to clarify the application of its provisions. Such interpretations, policies, procedures, rules and regulations shall be in compliance with the intent and purpose of this code. Such interpretations, policies, procedures, rules and regulations shall not have the effect of waiving requirements specifically provided for in this code.

2021 International Fuel Gas Code

Revise as follows:

[A] 104.1 General. The *code official* is hereby authorized and directed to enforce the provisions of this code. The *code official* shall have the authority to render interpretations of this code and to adopt policies and procedures in order to clarify the application of its provisions. Such interpretations, policies and procedures shall be in compliance with the intent and purpose of this code. Such interpretations, policies and procedures shall not have the effect of waiving requirements specifically provided in this code.

2021 International Mechanical Code

Revise as follows:

[A] 104.1 General. The code official is hereby authorized and directed to enforce the provisions of this code. The code official shall have the authority to render interpretations of this code and to adopt policies and procedures in order to clarify the application of its provisions. Such interpretations, policies and procedures shall be in compliance with the intent and purpose of this code. Such interpretations, policies and procedures shall not have the effect of waiving requirements specifically provided for in this code.

2021 International Plumbing Code

Revise as follows:

[A] 104.1 General. The code official is hereby authorized and directed to enforce the provisions of this code. The code official shall have the authority to render interpretations of this code and to adopt policies and procedures in order to clarify the application of its provisions. Such interpretations, policies and procedures shall be in compliance with the intent and purpose of this code. Such interpretations, policies and procedures shall not have the effect of waiving requirements specifically provided for in this code.

2021 International Property Maintenance Code

Revise as follows:

[A] 105.1 General. The *code official* is hereby authorized and directed to enforce the provisions of this code. The *code official* shall have the authority to render interpretations of this code and to adopt policies and procedures in order to clarify the application of its provisions. Such interpretations, policies and procedures shall be in compliance with the intent and purpose of this code. Such interpretations, policies and procedures shall not have the effect of waiving requirements specifically provided for in this code.

2021 International Private Sewage Disposal Code

Revise as follows:

[A] 104.1 General. The *code official* is hereby authorized and directed to enforce the provisions of this code. The *code official* shall have the authority to render interpretations of this code and to adopt policies and procedures in order to clarify the application of its provisions. Such interpretations, policies and procedures shall be in compliance with the intent and purpose of this code. Such interpretations, policies and procedures shall not have the effect of waiving requirements specifically provided for in this code.

2021 International Swimming Pool and Spa Code

Revise as follows:

[A] 104.1 General. The *code official* is hereby authorized and directed to enforce the provisions of this code. The *code official* shall have the authority to render interpretations of this code and to adopt policies and procedures in order to clarify the application of its provisions. Such interpretations, policies and procedures shall be in compliance with the intent and purpose of this code. Such interpretations, policies and procedures shall not have the effect of waiving requirements specifically provided for in this code.

2021 International Wildland-Urban Interface Code

Revise as follows:

[A] 104.1 Powers and duties of the code official. The *code official* is hereby authorized to enforce the provisions of this code. The *code official* shall have the authority to render interpretations of this code and to adopt policies and procedures in order to clarify the application of its provisions. Such interpretation s, polic ies and procedures shall not have the effect of waiving requirements specifically provided for in this code.

2021 International Green Construction Code

Revise as follows:

104.1 General. The authority having jurisdiction is hereby authorized and directed to enforce the provisions of this code. The authority having jurisdiction shall have the authority to render interpretations of this code and to adopt policies and procedures in order to clarify the application of its provisions and how this code relates to other applicable codes and ordinances. Such interpretations, policies and procedures shall be in compliance with the intent and purpose of this code and other applicable codes and ordinances. Such interpretations, policies and procedures shall not have the effect of waiving requirements specifically provided for in this code or other applicable codes and ordinances.

Reason: Not only can policies and procedures not waive requirements of the code, but it is also the intent that individual case-by-case interpretations not waive the specific requirements of the code. The current absence of this word leaves an odd situation where it is potentially OK for a building or code official to waive code requirements on case-by-case situations, but not in policies. This type of approach could leave to favoritism in enforcement of the code and every code section being optional and up to the discretion of the building or code official. Code modifications and alternatives are already present in the code, and as such when those provisions are used code requirements are not being waived.

This one word change is already present in the International Wildland-Urban Interface Code (good job IWUIC!) and this proposal only slightly changes the wording in that code to exactly agree.

Cost Impact: The code change proposal will not increase or decrease the cost of construction
There is no cost impact since the proposed word addition is only clarifying what is already stated and required by the code section.

ADM17-22 Part I

Public Hearing Results

Committee Action:

Disapproved

Committee Reason: The committee stated that the reason for the disapproval was that the change focuses on the use of the adding the word

interpretations throughout and that seems to create some conflicts. Additionally, it was stated that a code official can wave code requirements in certain situations with an example provided by the committee in response to the concern about arbitrary and capricious enforcement. (Vote: 9-3)

Individual Consideration Agenda

Public Comment 1:

Proponents: John-Jozef Proczka, representing Self (john-jozef.proczka@phoenix.gov) requests As Submitted

Commenter's Reason: This one word addition is to make it crystal clear that you can't waive a specific code requirement. The current absence of this word leaves an odd situation where it is potentially OK for a code official to waive code requirements on a case-by-case basis, but not in policies. When a requirement is impractical there is already a code provision for how to deal with that situation - code modification - where an impracticality of the code provision is demonstrated for that case. Note that there is no requirement that a separate application has to be filed every time a code modification approach is used.

Voluntary enforcement of some of the provisions of the building code while waiving other requirements on a case-by-case basis doesn't make for an International Building Code or any other base code, it makes for the code only according to the specific building official. That is not the overall intent of having a base code. As stated in the original proposal's reason statement the lack of this one word can lead to favoritism in enforcement of building codes.

Cost Impact: The net effect of the public comment and code change proposal will not increase or decrease the cost of construction
This is a clarification only.

ADM17-22 Part II

IRC: R104.1

Proposed Change as Submitted

Proponents: John-Jozef Proczka, representing Self (john-jozef.proczka@phoenix.gov)

2021 International Residential Code

Revise as follows:

R104.1 General. The *building official* is hereby authorized and directed to enforce the provisions of this code. The *building official* shall have the authority to render interpretations of this code and to adopt policies and procedures in order to clarify the application of its provisions. Such interpretations, policies and procedures shall be in compliance with the intent and purpose of this code. Such interpretations, policies and procedures shall not have the effect of waiving requirements specifically provided for in this code.

Reason: Not only can policies and procedures not waive requirements of the code, but it is also the intent that individual case-by-case interpretations not waive the specific requirements of the code. The current absence of this word leaves an odd situation where it is potentially OK for a building or code official to waive code requirements on case-by-case situations, but not in policies. This type of approach could leave to favoritism in enforcement of the code and every code section being optional and up to the discretion of the building or code official. Code modifications and alternatives are already present in the code, and as such when those provisions are used code requirements are not being waived.

This one word change is already present in the International Wildland-Urban Interface Code (good job IWUIC!) and this proposal only slightly changes the wording in that code to exactly agree.

Cost Impact: The code change proposal will not increase or decrease the cost of construction
There is no cost impact since the proposed word addition is only clarifying what is already stated and required by the code section.

ADM17-22 Part II

Public Hearing Results

Committee Action:

Disapproved

Committee Reason: This proposal was disapproved for consistency with the Administrative committee action on ADM17-22 Part 1. Adding 'interpretation' could be read to waive code requirements. (Vote: 10-0)

ADM17-22 Part II

Individual Consideration Agenda

Public Comment 1:

Proponents: John-Jozef Proczka, representing Self (john-jozef.proczka@phoenix.gov) requests As Submitted

Commenter's Reason: This one word addition is to make it crystal clear that you can't waive a specific code requirement. The current absence of this word leaves an odd situation where it is potentially OK for a building official to waive code requirements on a case-by-case basis, but not in policies. When a requirement is impractical there is already a code provision for how to deal with that situation - code modification - where an impracticality of the code provision is demonstrated for that case. Note that there is no requirement that a separate application has to be filed every time a code modification approach is used.

Voluntary enforcement of some of the provisions of the building code while waiving other requirements on a case-by-case basis doesn't make for an International Residential Code or any other base code, it makes for the code only according to the specific building official. That is not the overall intent of having a base code. As stated in the original proposal's reason statement the lack of this one word can lead to favoritism in enforcement of building codes.

Cost Impact: The net effect of the public comment and code change proposal will not increase or decrease the cost of construction
This is a clarification only.

ADM18-22

IFC: [A] 104.1, [A] 104.9, [A] 104.9.1 (New), [A] 104.9.2 (New)

Proposed Change as Submitted

Proponents: Jeffrey Shapiro, Lake Travis Fire Rescue, representing Lake Travis Fire Rescue (jshapiro@ltfr.org)

2021 International Fire Code

Revise as follows:

[A] 104.1 General. The *fire code official* is hereby authorized to enforce the provisions of this code. The *fire code official* shall have the authority to render interpretations of this code and to adopt policies, procedures, rules and regulations in order to clarify the application of its provisions. Such interpretations, policies, procedures, rules and regulations shall be in compliance with the intent and purpose of this code. Such policies, procedures, rules and regulations shall not have the effect of waiving requirements specifically provided for in this code, except as provided in Section 104.9.

[A] 104.9 Modifications. Where there are practical difficulties involved in carrying out the provisions of this code, the *fire code official* shall have the authority to grant modifications. ~~The *fire code official* shall have the authority to grant modifications for individual cases, provided that the *fire code official* shall first find that special individual reason makes the strict letter of this code impractical and the modification is in compliance with the intent and purpose of this code and that such modification does not lessen health, life and fire safety requirements. The details of action granting modifications shall be recorded and entered in the files of the department of fire prevention.~~

Add new text as follows:

[A] 104.9.1 Individual cases. The *fire code official* shall have the authority to grant modifications for individual cases, provided that the *fire code official* shall first find that special individual reason makes the strict letter of this code impractical and the modification is in compliance with the intent and purpose of this code and that such modification does not lessen health, life and fire safety requirements. The details of action granting modifications shall be recorded and entered in the files of the department of fire prevention.

[A] 104.9.2 Natural disasters. In preparation for, during and after a natural disaster event, as determined by the *fire code official*, the *fire code official* shall have the authority to issue written policies, procedures, rules or regulations that modify this code as necessary to protect life and property. Such policies, procedures, rules or regulations shall be made available to the public and shall include start and end dates, which can be extended at the *fire code official's* discretion.

Reason: Winter Storm Uri in 2021 is a good example demonstrating the need for granting authority to the fire code official to allow, by policy, conditions that would otherwise constitute code violations. For example, long-term power outages will eventually render many alarm systems non-functional, and extended loss of heat in buildings can lead to catastrophic freezing of fire suppression systems. Shutting down such systems and draining them can prevent catastrophic damage, allowing a system that might otherwise take months to repair to be placed back into service more quickly. If water remains in a system and freezing occurs, the system is non-functional anyway, so whether drained or not, protection is going to be impaired for some period of time. But, allowing more of a system to freeze vs. draining can be expected to result in increased water damage when the system thaws and much more extensive and time consuming repairs, This section could also be used to allow temporary emergency shelters that may not fully meet code requirements for a congregate residential use.

By adding text to the code that specifically addresses this concern, the fire code official will be guided to develop written documentation that should globally address special allowances that will be permitted during a disaster event, and as written, the authority to make any such allowances will remain solely in the hands of the fire code official.

This text is proposed only for the IFC because the IFC is unique among ICC codes with respect to its application to operation of existing buildings and to emergency response.

Cost Impact: The code change proposal will decrease the cost of construction

This proposal does not apply to construction, except to the possible extent that it might influence construction of emergency shelters or similar uses, in which case costs would presumably be reduced by allowing what might otherwise constitute non-compliant uses. There is no way to quantitatively measure any such cost impact.

ADM18-22

Public Hearing Results

Committee Action:

As Modified

Committee Modification:

[A] 104.9 Modifications. Where there are practical difficulties involved in carrying out the provisions of this code, the *fire code official* shall have the authority to grant modifications in accordance with Section 104.9.1 or 104.9.2.

[A] 104.9.1 Individual cases. The *fire code official* shall have the authority to grant modifications for individual cases, provided that the *fire code official* shall first find that special individual reason makes the strict letter of this code impractical and the modification is in compliance with the intent and purpose of this code and that such modification does not lessen health, life and fire safety requirements. The details of action granting modifications shall be recorded and entered in the files of the ~~department of fire prevention~~ code compliance agency.

[A] 104.9.2 Natural disasters. In preparation for, during and after a natural disaster event, as determined by the fire code official, the fire code official shall have the authority to issue written policies, procedures, ~~or rules or regulations~~ that modify this code as necessary to protect life and property. Such policies, procedures, ~~or rules or regulations~~ shall be made available to the public and shall include start and end dates, which can be extended at the fire code official's discretion.

Committee Reason: The committee stated that the reason for the approval of the modifications were the improvement of the language to clarify the requirements and consistency with existing language and terms. The committee stated multiple reasons for approval as well as opposition to the proposal. It was noted that it is important that some authority beyond one individual person be able to make these decisions. This could be the mayor of the city or the City Council or the governing body of the county. This would give more meaning to the declaration rather than leaving it up to the fire code official to make the only determination. However, there was acknowledgement that this is something that has already been done during emergencies in Texas and over the last couple years with COVID. Inspection requirements and procedures have had to be modified within the codes and jurisdictions or allowed entities to not have inspections in order to not send somebody who could possibly be infected into an assisted living facility as a result of emergencies. (Vote: 7-6)

ADM18-22

Individual Consideration Agenda

Public Comment 1:

IFC: [A] 104.9, [A] 104.9.1, [A] 104.9.2, [A] 104.9.2.1 (New), [A] 104.9.2 (New)

Proponents: Kota Wharton, representing City of Grove City (kwharton@grovecityohio.gov) requests As Modified by Public Comment

Further modify as follows:

2021 International Fire Code

[A] 104.9 Modifications. Where there are practical difficulties involved in carrying out the provisions of this code, the *fire code official* shall have the authority to grant modifications in accordance with Section 104.9.1 ~~or~~ and 104.9.2.

[A] 104.9.1 Individual cases. The *fire code official* shall have the authority to grant modifications for individual cases, upon application of the owner or the owner's authorized agent, provided that the *fire code official* shall first find that special individual reason makes the strict letter of this code impractical and the modification is in compliance with the intent and purpose of this code and that such modification does not lessen health, life and fire safety requirements. The details of action granting modifications shall be recorded and entered in the files of the code compliance agency.

[A] 104.9.2 Natural disasters. ~~In preparation for~~ Imminently before, during and reasonably after a natural disaster event, as determined by the ~~fire code official~~ chief executive officer of the jurisdiction, the ~~fire code official~~ fire code official shall have the authority to issue written policies, procedures ~~or~~ and rules that modify this code as necessary to protect life and property. Such policies, procedures ~~or~~ and rules shall be made available to the public, and shall include ~~start~~ effective and ~~end~~ expiration dates and shall recorded and entered into the files of the code compliance agency, ~~which can be extended at the fire code official's discretion.~~

[A] 104.9.2.1 Extensions. The fire code official shall have the authority to reasonably extend policies, rules and procedures issued pursuant to Section 104.9.2. Such extensions shall be made available to the public, shall include the original effective date and new expiration date and shall be recorded and entered into the files of the code compliance agency.

[A] 104.9.2 Notification to the building official. The fire code official, prior to issuing or extending any policies, procedures or rules shall notify the building official in writing.

Commenter's Reason: The reason statement from the original proposal stands with exception to the uniqueness of the IFC from the other iCodes. The following modifications were made:

- **International Fire Code Section 104.9.** Replace *or* with *and* for clarity.
- **International Fire Code Section 104.9.1.** Added *upon application of the owner or the owner's authorized agent* for clarity of process.
- **International Fire Code Section 104.9.2.**

- Replaced *In preparation for* with *Imminently before* to limit the authority of the *fire code official*.
- Added *reasonably to after* to read *reasonably after* to limit the *fire code official's* authority to the disaster's span (including recovery). Modifications to the code made under this section should be confined.
- Replaced *fire code official* to *chief executive officer of the jurisdiction* to vest the power to declare a natural disaster, as it relates to this code. *Chief executive officer* is not defined in this code or any other code, however should be defined in the adopting body's charter, constitution or similar founding document. For this modification, the *chief executive officer* may refer to City's mayor, County's commissioner, State's governor, Tribe's chieftain, Country's president or another elected person of the like.
- Replaced *or* with *and* for clarity.
- Struck *and* for clarity of next.
- Expanded the requirements for policies, procedures and rules.
 - Replaced *start* with *effective* and *end* with *expiration* for clarity. An order should not start, stop, and start; it should be effective and subsequently, once need is met, expire. If needed again it should be recreated.
 - Added *and shall be recorded...* to require documentation for accountability.
- **International Fire Code Section 104.9.2.1 Extensions.** Subsection added to clarify the intent of the initial proposals "which can be extended at the fire code official's discretion". The term *reasonably* is used to restrict any extension of policies, procedures and rules relevant. The requirements of publication are maintained to maintain transparency and accountability.
- **International Fire Code Section 104.9.2.2 Notification to the building official.** Added to ensure the building official is aware the policies, procedures and rules prior to their enactment and to give the building official the opportunity to make comments to the fire code official.
- **International Building Code and International Residential Code.** The IRC and IBC should be considered for correlation in the next code cycle.

The terms *imminently* and *reasonably* are throughout intentionally as a check on the *fire code official's* authority. Where wide interpretation is an issue, either jurisdictional legislation or case law shall be used to determine each term's extent.

Cost Impact: The net effect of the public comment and code change proposal will decrease the cost of construction
No change to the initial proposals cost statement.

ADM19-22

IFC: SECTION 202 (New)

Proposed Change as Submitted

Proponents: Manny Muniz, representing Representing self (mannymuniz.mm@gmail.com)

2021 International Fire Code

Add new definition as follows:

APPROVED AGENCY. An established and recognized agency that is regularly engaged in conducting tests, furnishing inspection services or furnishing product certification where such agency has been approved by the fire code official.

Reason: The term "approved agency" appears in the IFC and should, therefore, be defined in Chapter 2. This will provide consistency with the IBC and the IRC which already have this definition.

Cost Impact: The code change proposal will not increase or decrease the cost of construction
This is only defining a term used in the IFC.

ADM19-22

Public Hearing Results

Committee Action:

Disapproved

Committee Reason: The committee stated that the reasons for disapproval were language issues, it should be across codes and the preference for other code change proposals specifically including ADM13. (Vote: 10-3)

ADM19-22

Individual Consideration Agenda

Public Comment 1:

IFC: SECTION 202; IBC: SECTION 202; IPMC: SECTION 202 (New); IWUIC: SECTION 202 (New)

Proponents: Manny Muniz, representing Representing self (mannymuniz.mm@gmail.com); Kristen Owen, representing Myself (kowen4568@gmail.com) requests As Modified by Public Comment

Modify as follows:

2021 International Fire Code

APPROVED AGENCY. An established and recognized ~~agency~~ organization that is regularly engaged in conducting tests, furnishing inspection services or furnishing product evaluation or certification where such ~~agency~~ organization has been *approved* by the *building official*.

2021 International Building Code

[A] APPROVED AGENCY. An established and recognized ~~agency~~ organization that is regularly engaged in conducting tests, furnishing inspection services or furnishing product evaluation or certification where such ~~agency~~ organization has been *approved* by the *building official*.

2021 International Property Maintenance Code

APPROVED AGENCY. An established and recognized organization that is regularly engaged in conducting tests, furnishing inspection services or furnishing product evaluation or certification where such organization has been approved by the building official.

2021 International Wildland-Urban Interface Code

APPROVED AGENCY. An established and recognized organization that is regularly engaged in conducting tests, furnishing inspection services or furnishing product evaluation or certification where such organization has been approved by the building official.

Commenter's Reason: In response to the committee reason for disapproval which preferred the language in ADM13, the proposed modification now uses the same language as ADM13 and now applies across the codes. If ADM13 is not approved, this proposed modification will allow this single code change to be considered on its own for approval.

Cost Impact: The net effect of the public comment and code change proposal will not increase or decrease the cost of construction. This is only defining a term already used in the codes.

Public Comment# 3428

ADM20-22

IEBC: SECTION 202 (New)

Proposed Change as Submitted

Proponents: Manny Muniz, representing Representing self (mannymuniz.mm@gmail.com)

2021 International Existing Building Code

Add new definition as follows:

[A] APPROVED AGENCY. An established and recognized agency that is regularly engaged in conducting tests, furnishing inspection services or furnishing product certification where such agency has been approved by the fire code official.

Reason: The term "approved agency" appears in the IEBC and should, therefore, be defined in Chapter 2. This will provide consistency with the IBC and the IRC which already have this definition.

Cost Impact: The code change proposal will not increase or decrease the cost of construction
This is only defining a term in the IEBC to be consistent with the IBC and IRC.

ADM20-22

Public Hearing Results

Committee Action:

Disapproved

Committee Reason: The committee stated that the reason for disapproval was consistency with the action taken on ADM19. (Vote: 11-2)

ADM20-22

Individual Consideration Agenda

Public Comment 1:

Proponents: Manny Muniz, representing Representing self (mannymuniz.mm@gmail.com); Kristen Owen, representing Myself (kowen4568@gmail.com) requests As Submitted

Commenter's Reason: In response to the committee reason for disapproval which preferred the language in ADM13, the proposed modification now uses the same language as ADM13 and now applies across the codes. If ADM13 is not approved, this proposed modification will allow this single code change to be considered on its own for approval.

Cost Impact: The net effect of the public comment and code change proposal will not increase or decrease the cost of construction
This only defines a term already in the codes.

Public Comment# 3436

ADM21-22

IBC: [A] 104.1

Proposed Change as Submitted

Proponents: Manny Muniz, representing Representing self (mannymuniz.mm@gmail.com)

2021 International Building Code

Add new text as follows:

[A] 104.1.1 Listed compliance. Listings required by this code shall be based on a test standard or approved listing evaluation that is germane to the provision requiring the listing. Anything required by this code, or a reference standard, to be listed shall be installed in accordance with the listing and the manufacturer's instructions. Copies of the listing standard and manufacturer's instructions shall be made available to the building official upon request.

Reason: When the code requires something to be listed, the test standard used or the listing evaluation must be germane to the code provision that is requiring the listing. Additionally, the installation must be in accordance with the manufacturer's instructions and copies of the listing standard and manufacturer's instructions must be made available to the code official.

Cost Impact: The code change proposal will not increase or decrease the cost of construction

This only clarifies that when something is required to be listed, the test standard used or the listing evaluation must be germane to the code provision that is requiring the listing. As with any listing, the installation must be in accordance with the manufacturer's instructions and the building official must have access to the listing standard and manufacturer's instructions.

ADM21-22

Public Hearing Results

Committee Action:

Disapproved

Committee Reason: The committee stated that the reasons for disapproval were that it is not clear where the listing is currently problematic, there is no approved listing evaluation and the language is just not what it should be and not achieving what it is trying to do. Additionally, it was noted that the use of the language of "anything required by this code" is confusing. (Vote: 13-0)

ADM21-22

Individual Consideration Agenda

Public Comment 1:

IBC: 104.1.1 (New)

Proponents: Manny Muniz, representing Representing self (mannymuniz.mm@gmail.com); Kristen Owen, representing Myself (kowen4568@gmail.com) requests As Modified by Public Comment

Replace as follows:

2021 International Building Code

104.1.1 Listed compliance. Where this code or a referenced standard requires equipment, materials, products or services to be listed and a listing standard is specified, the listing shall be based on the specified standard. Where a listing standard is not specified, the listing shall be based on an approved listing criteria. Listings shall be germane to the provision requiring the listing. Installation shall be in accordance with the listing and the manufacturer's instructions, and where required to verify compliance, the listing standard and manufacturer's instructions shall be made available to the building official.

Commenter's Reason: In response to the committee reason for disapproval, the proposed modification now uses the same language as ADM13 and now applies across the codes. If ADM13 is not approved, this proposed modification will allow this single code change to be considered on its own for approval.

Cost Impact: The net effect of the public comment and code change proposal will not increase or decrease the cost of construction. The proposal does not require new listings other than what is already required.

Public Comment# 3438

ADM25-22

IFC: [A] 104.10

Proposed Change as Submitted

Proponents: Manny Muniz, representing Representing self (mannymuniz.mm@gmail.com)

2021 International Fire Code

Revise as follows:

[A] 104.10 Alternative materials, design and methods of construction and equipment. The provisions of this code are not intended to prevent the installation of any material or to prohibit any design or method of construction not specifically prescribed by this code, provided that any such alternative has been *approved*. An alternative material, design or method of construction shall be *approved* where the *fire code official* finds that the proposed alternate meets all of the following:

1. The alternate material, design or method of construction is satisfactory and complies with the intent of the provisions of this code, ~~and that~~
2. The the material, method or work offered is, for the purpose intended, not less than the equivalent of that prescribed in this code in as it pertains to the following:
 - 2.1. Quality equality;
 - 2.2. Strength strength;
 - 2.3. Effectiveness effectiveness;
 - 2.4. Fire fire-resistance;
 - 2.5. Durability durability and
 - 2.6. Safety safety.

Where the alternative material, design or method of construction is not *approved*, the *fire code official* shall respond in writing, stating the reasons why the alternative was not *approved*.

Reason: This section can be written more clearly as to the various criteria that must be met in order to be approved as an alternate material, design or method of construction. This will make it easier for the building official to make the necessary evaluation and decision. Should the alternate not be approved, it will also make it easier for the building official to cite the reasons for disapproval. There are no changes to the various requirements that the building official or fire code official must consider. During the last code cycle, this change was approved in the IBC and was well received by the committee and membership who agreed that it made it easier to read.

Cost Impact: The code change proposal will not increase or decrease the cost of construction
There are no changes to the requirements in this section.

ADM25-22

Public Hearing Results

Committee Action:

As Submitted

Committee Reason: The committee stated that the reason for approval was that the change provides clarity in the code. (Vote: 11-2)

ADM25-22

Individual Consideration Agenda

Public Comment 1:

Proponents: Jeffrey Shapiro, representing Self (jeff.shapiro@intlcodeconsultants.com) requests Disapprove

Commenter's Reason: The text of ADM13 and ADM14 is preferred.

Cost Impact: The net effect of the public comment and code change proposal will not increase or decrease the cost of construction
No change to code.

Public Comment# 3394

ADM26-22

IEBC: [A] 104.11

Proposed Change as Submitted

Proponents: Manny Muniz, representing Representing self (mannymuniz.mm@gmail.com)

2021 International Existing Building Code

Revise as follows:

[A] 104.11 Alternative materials, design and methods of construction, and equipment. The provisions of this code are not intended to prevent the installation of any material or to prohibit any design or method of construction not specifically prescribed by this code, provided that any such alternative has been *approved*. An alternative material, design or method of construction shall be *approved* where the *code official* finds that the proposed alternate meets all of the following:

1. The alternate material, design or method of construction is satisfactory and complies with the intent of the provisions of this code, ~~and that~~
2. The the material, method or work offered is, for the purpose intended, not less than the equivalent of that prescribed in this code in as it pertains to the following:
 - 2.1. Quality equality;
 - 2.2. Strength strength;
 - 2.3. Effectiveness effectiveness;
 - 2.4. Fire fire-resistance;
 - 2.5. Durability durability and
 - 2.6. Safety safety.

Where the alternative material, design or method of construction is not *approved*, the *code official* shall respond in writing, stating the reasons why the alternative was not *approved*.

Reason: This section can be written more clearly as to the various criteria that must be met in order to be approved as an alternate material, design or method of construction. This will make it easier for the building official to make the necessary evaluation and decision. Should the alternate not be approved, it will also make it easier for the building official to cite the reasons for disapproval. There are no changes to the various requirements that the building official must consider. During the last code cycle, this change was approved in the IBC and was well received by the committee and membership who agreed that it made it easier to read.

Cost Impact: The code change proposal will not increase or decrease the cost of construction
There are no changes to the existing requirements.

ADM26-22

Public Hearing Results

Committee Action:

As Submitted

Committee Reason: The committee stated that the reason for approval was the same as ADM25. (Vote: 12-1)

ADM26-22

Individual Consideration Agenda

Public Comment 1:

Proponents: Jeffrey Shapiro, representing Self (jeff.shapiro@intlcodeconsultants.com) requests Disapprove

Commenter's Reason: The text of ADM13 and ADM14 is preferred.

Cost Impact: The net effect of the public comment and code change proposal will not increase or decrease the cost of construction
No change to code.

Public Comment# 3395

ADM27-22

IWUIC: [A] 105.3

Proposed Change as Submitted

Proponents: Manny Muniz, representing Representing self (mannymuniz.mm@gmail.com)

2021 International Wildland-Urban Interface Code

Revise as follows:

[A] 105.3 Alternative materials, design and methods of construction and equipment. The provisions of this code are not intended to prevent the installation of any material or to prohibit any design or method of construction not specifically prescribed by this code, provided that any such alternative has been *approved*. An alternative material, design or method of construction shall be *approved* where the *building official* in concurrence with the fire chief finds that the proposed alternate meets all of the following:

1. The alternate material, design or method of construction is satisfactory and complies with the intent of the provisions of this code, ~~and that~~
2. The the material, method or work offered is, for the purpose intended, not less than the equivalent of that prescribed in this code in as it pertains to the following:
 - 2.1. Quality equality;
 - 2.2. Strength strength;
 - 2.3. Effectiveness effectiveness;
 - 2.4. Fire fire-resistance;
 - 2.5. Durability durability and
 - 2.6. Safety safety.

Where the alternative material, design or method of construction is not *approved*, the *building official* shall respond in writing, stating the reasons why the alternative was not *approved*.

Reason: This section can be written more clearly as to the various criteria that must be met in order to be approved as an alternate material, design or method of construction. This will make it easier for the building official to make the necessary evaluation and decision. Should the alternate not be approved, it will also make it easier for the building official to cite the reasons for disapproval. The word "construction" has been added after the word "method" and the word "equipment" has been added in the heading so it is consistent with the IBC, IEBC, IFC, and IRC. There are no changes to the various requirements that the building official or fire code official must consider. During the last code cycle, this change was approved in the IBC and was well received by the committee and membership who agreed that it made it easier to read.

Cost Impact: The code change proposal will not increase or decrease the cost of construction
There are no changes to the requirements in this section.

ADM27-22

Public Hearing Results

Committee Action:

As Submitted

Committee Reason: The committee stated that the reason for approval was the same as ADM25. (Vote: 12-1)

ADM27-22

Individual Consideration Agenda

Public Comment 1:

Proponents: Jeffrey Shapiro, representing Self (jeff.shapiro@intlcodeconsultants.com) requests Disapprove

Commenter's Reason: The text of ADM13 and ADM14 is preferred.

Cost Impact: The net effect of the public comment and code change proposal will not increase or decrease the cost of construction
No change to code.

Public Comment# 3396

ADM28-22

IWUIC: [A] 105.3

Proposed Change as Submitted

Proponents: Manny Muniz, representing Representing self (mannymuniz.mm@gmail.com)

2021 International Wildland-Urban Interface Code

Revise as follows:

[A] 105.3 Alternative materials, design and methods. The provisions of this code are not intended to prevent the installation of any material or to prohibit any design or method not specifically prescribed by this code, provided that any such alternative has been *approved*. An alternative material, design or method shall be submitted in writing and be approved where the *building official* in concurrence with the fire chief finds that the proposed design is satisfactory and complies with the intent of the provisions of this code, and that the material, method or work offered is, for the purpose intended, not less than the equivalent of that prescribed in this code in quality, strength, effectiveness, *fire resistance*, durability and safety. Where the alternative material, design or method is not *approved*, the *building official* shall respond in writing, stating the reasons why the alternative was not *approved*.

Reason: A request to use an alternative material, design or method of construction must be explained and documented in writing so a proper evaluation can be made. Placing this requirement in this section makes it clear that a request for an alternate must be submitted in writing.

Cost Impact: The code change proposal will not increase or decrease the cost of construction. This will avoid needless delays and misunderstandings over a verbal request for an alternate.

ADM28-22

Public Hearing Results

Committee Action:

Disapproved

Committee Reason: The committee stated that the reasons for disapproval were that it is inconsistent with the other codes to make the change to just the proposed code, it is not necessarily something that always has to be in writing, and it could restrict code officials by making it a requirement. (Vote: 11-2)

ADM28-22

Individual Consideration Agenda

Public Comment 1:

IWUIC: [A] 105.3

Proponents: Manny Muniz, representing Representing self (mannymuniz.mm@gmail.com); Kristen Owen, representing Myself (kowen4568@gmail.com) requests As Submitted

Commenter's Reason: ADM28-22 for the IWUIC and ADM29-22 for the IEBC was also discussed in ADM13-22. Towards the end of the ADMIN hearings and after considerable discussions with various stake holders, ADM13 was approved with a requirement that a request to use an alternative material, design or method of construction shall be submitted in writing to the building official for approval. If ADM13 is not approved, this proposed modification will allow this single code change to be considered on its own for approval.

Cost Impact: The net effect of the public comment and code change proposal will not increase or decrease the cost of construction. It will avoid confusion and misunderstandings as to what the alternate is.

Public Comment# 3443

ADM29-22

IEBC: [A] 104.11

Proposed Change as Submitted

Proponents: Manny Muniz, representing Representing self (mannymuniz.mm@gmail.com)

2021 International Existing Building Code

Revise as follows:

[A] 104.11 Alternative materials, design and methods of construction, and equipment. The provisions of this code are not intended to prevent the installation of any material or to prohibit any design or method of construction not specifically prescribed by this code, provided that any such alternative has been *approved*. An alternative material, design or method of construction shall be submitted in writing and be approved where the *code official* finds that the proposed design is satisfactory and complies with the intent of the provisions of this code, and that the material, method or work offered is, for the purpose intended, not less than the equivalent of that prescribed in this code in quality, strength, effectiveness, fire resistance, durability and safety. Where the alternative material, design or method of construction is not *approved*, the *code official* shall respond in writing, stating the reasons why the alternative was not *approved*.

Reason: A request to use an alternative material, design or method of construction must be explained and documented in writing so a proper evaluation can be made. Placing this requirement in this section makes it clear that a request for an alternate must be submitted in writing.

Cost Impact: The code change proposal will not increase or decrease the cost of construction
This will avoid needless delays and misunderstandings over a verbal request for an alternate

ADM29-22

Public Hearing Results

Committee Action:

Disapproved

Committee Reason: The committee stated that the reason for disapproval was based on the action taken on ADM28. (Vote: 11-2)

ADM29-22

Individual Consideration Agenda

Public Comment 1:

Proponents: Manny Muniz, representing Representing self (mannymuniz.mm@gmail.com); Kristen Owen, representing Myself (kowen4568@gmail.com) requests As Submitted

Commenter's Reason: ADM28-22 for the IWUIC and ADM29-22 for the IEBC was also discussed in ADM13-22. At the end of the ADMIN hearings and after considerable discussions with various stake holders, ADM13 was approved with a requirement that a request to use an alternative material, design or method of construction shall be submitted in writing to the building official for approval. The proposed modification now uses the same language as ADM13. If ADM13 is not approved, this proposed modification will allow this single code change to be considered on its own for approval.

Cost Impact: The net effect of the public comment and code change proposal will not increase or decrease the cost of construction
It will avoid confusion and misunderstandings as to what the alternate is.

Public Comment# 3444

ADM30-22

IBC: [A] 104.11.1

Proposed Change as Submitted

Proponents: Manny Muniz, representing Representing self (mannymuniz.mm@gmail.com)

2021 International Building Code

Revise as follows:

[A] 104.11.1 Research reports. Supporting data, where necessary to assist in the approval of materials or assemblies not specifically provided for in this code, shall consist of valid research reports from an approved source agency accredited to evaluate or certify products. The alternative material, design or method of construction and product evaluated shall be within the scope of accreditation and the criteria used for the evaluation shall be referenced within the report.

Reason: It is sometimes difficult to determine the legitimacy of a research report. Agency accreditation is an excellent way to determine the legitimacy and reliability of research reports issued by such agencies. This will be valuable when the building official reviews a research report.

Cost Impact: The code change proposal will not increase or decrease the cost of construction
The new language only requires that the approved agency be accredited to evaluate or certify products.

ADM30-22

Public Hearing Results

Committee Action:

Disapproved

Committee Reason: The committee stated that the reason for disapproval was that it limits the flexibility of both design professionals and building officials. (Vote: 13-0)

ADM30-22

Individual Consideration Agenda

Public Comment 1:

IBC: 104.11.1 (New), 104.11.1.1 (New), 104.11.1.2 (New)

Proponents: Manny Muniz, representing Representing self (mannymuniz.mm@gmail.com); Kristen Owen, representing Myself (kowen4568@gmail.com) requests As Modified by Public Comment

Replace as follows:

2021 International Building Code

104.11.1 Reports. Supporting documentation, where necessary to assist in the approval of materials or assemblies not specifically provided for in this code, shall comply with Sections 104.11.1.1 and 104.11.1.2.

104.11.1.1 Evaluation reports. Evaluation reports shall be issued by an approved agency accredited to evaluate or certify products and use of the evaluation report shall require approval by the building official for the installation. The alternate material, design or method of construction and product evaluated shall be within the scope of the building official's recognition accreditation of the approved agency . Criteria used for the evaluation shall be identified within the report and where required, provided to the building official., developed using a process that includes input from the public and made available for review by the public.

104.11.1.2 Other reports. Reports not complying with Section 104.11.1.1 shall describe criteria, including but not limited to any referenced testing or analysis, used to determine compliance with code intent and justify code equivalence, including but not limited to any referenced testing or analysis. The report shall be prepared by a qualified engineer, specialist, laboratory or specialty organization acceptable to the building official. The building official is authorized to require design submittals to be prepared by, and bear the stamp of, a registered design professional.

Commenter's Reason: ADM30-22 for the IBC, ADM31-22 for the IEBC, ADM32-22 for the IFC, ADM33-22 for the IWUIC saw discussions regarding the difficulties of determining the legitimacy of research reports. This was also discussed in ADM13-22. At the end of the ADMIN hearings and after considerable discussions with various stake holders, ADM13 was approved with specific requirements for reports and supporting documentation.

The proposed modification now uses the same language as ADM13 and now applies across the codes. If ADM13 is not approved, this proposed modification will allow this single code change to be considered on its own for approval.

Cost Impact: The net effect of the public comment and code change proposal will not increase or decrease the cost of construction. The proposal clarifies the requirements for reports.

NOTE: ADM34-22 PART I DID NOT RECEIVE A PUBLIC COMMENT AND IS REPRODUCED FOR INFORMATIONAL PURPOSES ONLY

ADM34-22 Part I

IEBC: [A] 104.11, [A] 104.11.1; IFC: [A] 104.10, [A] 104.10.1; IFGC: [A] 105.2, [A] 105.2.1; IMC: [A] 105.2, [A] 105.2.1; IPC: [A] 105.2, [A] 105.2.1; IPMC: [A] 106.2, [A] 106.6; IPSDC: [A] 105.2, [A] 105.2.1; ISPSC: [A] 104.10, 104.10.1 (New); IWUIC: [A] 105.3, 105.3.1 (New); IGCC: 105.4, 105.4.1

Proposed Change as Submitted

Proponents: Mike Nugent, representing Building Code Action Committee (bcac@iccsafe.org); Robert Marshall, representing FCAC (fcac@iccsafe.org)

THIS IS A 2 PART CODE CHANGE. PART I WILL BE HEARD BY THE ADMINISTRATIVE CODE COMMITTEE. PART II WILL BE HEARD BY THE IRC-BUILDING CODE COMMITTEE. SEE THE TENTATIVE HEARING ORDER FOR THESE COMMITTEES.

2021 International Existing Building Code

Revise as follows:

[A] 104.11 Alternative materials, design and methods of construction, and equipment. The provisions of this code are not intended to prevent the installation of any material or to prohibit any design or method of construction not specifically prescribed by this code, provided that any such alternative has been *approved*. An alternative material, design or method of construction shall be *approved* where the *code official* finds that the proposed alternative meets all of the following:

1. The alternative material, design or method of construction is satisfactory and complies with the intent of the provisions of this code, ~~and that~~
2. The material, method or work offered is, for the purpose intended, not less than the equivalent of that prescribed in this code ~~in~~ as it pertains to the following:
 - 2.1. Quality,
 - 2.2. Strength,
 - 2.3. Effectiveness,
 - 2.4. Fire resistance,
 - 2.5. Durability, ~~and~~
 - 2.6. Safety.

Where the alternative material, design or method of construction is not *approved*, the *code official* shall respond in writing, stating the reasons why the alternative was not *approved*.

[A] 104.11.1 Research reports. Supporting data, where necessary to assist in the approval of materials or assemblies not specifically provided for in this code, shall consist of valid research reports from *approved* sources.

2021 International Fire Code

Revise as follows:

[A] 104.10 Alternative materials, design and methods of construction and equipment. The provisions of this code are not intended to prevent the installation of any material or to prohibit any design or method of construction not specifically prescribed by this code, provided that any such alternative has been *approved*. An alternative material, design or method of construction shall be *approved* where the *fire code official* finds that the proposed alternative meets all of the following:

1. The alternative material, design or method of construction is satisfactory and complies with the intent of the provisions of this code, ~~and that~~

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2. The material, method or work offered is, for the purpose intended, not less than the equivalent of that prescribed in this code ~~in~~ as it pertains to the following:
 - 2.1. Quality;
 - 2.2. Strength;
 - 2.3. Effectiveness;
 - 2.4. Fire resistance;
 - 2.5. Durability; ~~and~~
 - 2.6. Safety.

Where the alternative material, design or method of construction is not *approved*, the *fire code official* shall respond in writing, stating the reasons why the alternative was not *approved*.

[A] 104.10.1 Research reports. Supporting data, where necessary to assist in the approval of materials or assemblies not specifically provided for in this code, shall consist of valid research reports from *approved* sources.

2021 International Fuel Gas Code

Revise as follows:

[A] 105.2 Alternative materials, design and methods of construction and equipment. The provisions of this code are not intended to prevent the installation of any material or to prohibit any design or method of construction not specifically prescribed by this code, provided that any such alternative has been *approved*. An alternative material, design or method of construction shall be *approved* where the *code official* finds that the proposed alternative meets all of the following:

1. The alternative material, design or method of construction is satisfactory and complies with the intent of the provisions of this code, ~~and that~~
2. The material, method or work offered is, for the purpose intended, not less than the equivalent of that prescribed in this code ~~in~~ as it pertains to the following:
 - 2.1. Quality;
 - 2.2. Strength;
 - 2.3. Effectiveness;
 - 2.4. Fire effectiveness;
 - 2.5. Durability ~~and~~
 - 2.6. Safety.

Where the alternative material, design or method of construction is not *approved*, the *code official* shall respond in writing, stating the reasons why the alternative was not *approved*.

[A] 105.2.1 Research reports. Supporting data, where necessary to assist in the approval of materials or assemblies not specifically provided for in this code, shall consist of valid research reports from *approved* sources.

2021 International Mechanical Code

Revise as follows:

[A] 105.2 Alternative materials, design and methods of construction and equipment. The provisions of this code are not intended to prevent the installation of any material or to prohibit any design or method of construction not specifically prescribed by this code, provided that any such alternative has been *approved*. An alternative material, design or method of construction shall be *approved* where the *code official* finds that the proposed alternative meets all of the following:

1. The alternative material, design or method of construction is satisfactory and complies with the intent of the provisions of this code, ~~and that~~

2. The material, method or work offered is, for the purpose intended, not less than the equivalent of that prescribed in this code ~~in~~ as it pertains to the following:
 - 2.1. Quality;
 - 2.2. Strength;
 - 2.3. Effectiveness;
 - 2.4. Fire effectiveness;
 - 2.5. Durability ~~and~~
 - 2.6. Safety.

Where the alternative material, design or method of construction is not *approved*, the *code official* shall respond in writing, stating the reasons why the alternative was not *approved*.

[A] 105.2.1 Research reports. Supporting data, where necessary to assist in the approval of materials or assemblies not specifically provided for in this code, shall consist of valid research reports from *approved* sources.

2021 International Plumbing Code

Revise as follows:

[A] 105.2 Alternative materials, design and methods of construction and equipment. The provisions of this code are not intended to prevent the installation of any material or to prohibit any design or method of construction not specifically prescribed by this code, provided that any such alternative has been *approved*. An alternative material, design or method of construction shall be *approved* where the *code official* finds that the proposed alternative meets all of the following:

1. The alternative material, design or method of construction is satisfactory and complies with the intent of the provisions of this code, ~~and that~~
2. The material, method or work offered is, for the purpose intended, not less than the equivalent of that prescribed in this code ~~in~~ as it pertains to the following:
 - 2.1. Quality;
 - 2.2. Strength;
 - 2.3. Effectiveness;
 - 2.4. Fire effectiveness;
 - 2.5. Durability ~~and~~
 - 2.6. Safety.

Where the alternative material, design or method of construction is not *approved*, the *code official* shall respond in writing, stating the reasons why the alternative was not *approved*.

[A] 105.2.1 Research reports. Supporting data, where necessary to assist in the approval of materials or assemblies not specifically provided for in this code, shall consist of valid research reports from *approved* sources.

2021 International Property Maintenance Code

Revise as follows:

[A] 106.2 Alternative materials, design and methods of construction and equipment. The provisions of this code are not intended to prevent the installation of any material or to prohibit any design or method of construction not specifically prescribed by this code, provided that any such alternative has been *approved*. An alternative material, design or method of construction shall be *approved* where the *code official* finds that the proposed alternative meets all of the following:

1. The alternative material, design or method of construction is satisfactory and complies with the intent of the provisions of this code, ~~and that~~

2. The material, method or work offered is, for the purpose intended, not less than the equivalent of that prescribed in this code ~~in~~ as it pertains to the following:
 - 2.1. Quality;
 - 2.2. Strength;
 - 2.3. Effectiveness;
 - 2.4. Fire effectiveness;
 - 2.5. Durability ~~and~~
 - 2.6. Safety.

Where the alternative material, design or method of construction is not *approved*, the *code official* shall respond in writing, stating the reasons why the alternative was not *approved*.

[A] ~~106.6-106.2.1~~ **Research reports.** Supporting data, where necessary to assist in the approval of materials or assemblies not specifically provided for in this code, shall consist of valid research reports from *approved* sources.

2021 International Private Sewage Disposal Code

Revise as follows:

[A] **105.2 Alternative materials, design and methods of construction and equipment.** The provisions of this code are not intended to prevent the installation of any material or to prohibit any design or method of construction not specifically prescribed by this code, provided that any such alternative has been *approved*. An alternative material, design or method of construction shall be *approved* where the *code official* finds that the proposed alternative meets all of the following:

1. The alternative material, design or method of construction is satisfactory and complies with the intent of the provisions of this code, ~~and that~~
2. The material, method or work offered is, for the purpose intended, not less than the equivalent of that prescribed in this code ~~in~~ as it pertains to the following:
 - 2.1. Quality;
 - 2.2. Strength;
 - 2.3. Effectiveness;
 - 2.4. Fire effectiveness;
 - 2.5. Durability ~~and~~
 - 2.6. Safety.

Where the alternative material, design or method of construction is not *approved*, the *code official* shall respond in writing, stating the reasons why the alternative was not *approved*.

[A] **105.2.1 Research reports.** Supporting data, where necessary to assist in the approval of materials or assemblies not specifically provided for in this code, shall consist of valid research reports from *approved* sources.

2021 International Swimming Pool and Spa Code

Revise as follows:

[A] **104.10 Alternative materials, design and methods of construction and equipment.** The provisions of this code are not intended to prevent the installation of any material or to prohibit any design or method of construction not specifically prescribed by this code, provided that any such alternative has been *approved*. An alternative material, design or method of construction shall be *approved* where the *code official* finds that the proposed alternative meets all of the following:

1. The alternative material, design or method of construction is satisfactory and complies with the intent of the provisions of this code, ~~and that~~

2. The material, method or work offered is, for the purpose intended, not less than the equivalent of that prescribed in this code ~~in~~ as it pertains to the following:
 - 2.1. Quality;
 - 2.2. Strength;
 - 2.3. Effectiveness;
 - 2.4. Fire effectiveness;
 - 2.5. Durability ~~and~~
 - 2.6. Safety.

Where the alternative material, design or method of construction is not *approved*, the *code official* shall respond in writing, stating the reasons why the alternative was not *approved*.

Add new text as follows:

104.10.1 Research reports. Supporting data, where necessary to assist in the approval of materials or assemblies not specifically provided for in this code, shall consist of valid research reports from approved sources.

2021 International Wildland-Urban Interface Code

Revise as follows:

[A] 105.3 Alternative materials, design and methods. The provisions of this code are not intended to prevent the installation of any material or to prohibit any design or method not specifically prescribed by this code, provided that any such alternative has been *approved*. An alternative material, design or method shall be *approved* where the *building official* in concurrence with the fire chief finds that the proposed design is satisfactory and complies with the intent of the provisions of this code, and that the material, method or work offered is, for the purpose intended, not less than the equivalent of that prescribed in this code in quality, strength, effectiveness, *fire resistance*, durability and safety.

The provisions of this code are not intended to prevent the installation of any material or to prohibit any design or method of construction not specifically prescribed by this code, provided that any such alternative has been *approved*. An alternative material, design or method of construction shall be *approved* where the

building official in concurrence with the fire chief finds that the proposed alternative meets all of the following:

1. The alternative material, design or method of construction is satisfactory and complies with the intent of the provisions of this code, ~~and that~~
2. The material, method or work offered is, for the purpose intended, not less than the equivalent of that prescribed in this code ~~in~~ as it pertains to the following:
 - 2.1. Quality;
 - 2.2. Strength;
 - 2.3. Effectiveness;
 - 2.4. Fire effectiveness;
 - 2.5. Durability ~~and~~
 - 2.6. Safety.

Where the alternative material, design or method of construction is not *approved*, the *code official* shall respond in writing, stating the reasons why the alternative was not *approved*.

Add new text as follows:

105.3.1 Research reports. Supporting data, where necessary to assist in the approval of materials or assemblies not specifically provided for in this code, shall consist of valid research reports from approved sources.

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2021 International Green Construction Code

Revise as follows:

105.4 ~~Innovative approaches and alternative~~ Alternative materials, design, and methods of construction and equipment. The provisions

of this code are not intended to prevent the installation of any material or to prohibit any design, ~~innovative approach~~, or method of construction not specifically prescribed by this code, provided that any such alternative has been *approved*. An alternative material, design, ~~innovative approach~~ or method of construction shall be reviewed and *approved* where the authority having jurisdiction finds that the proposed alternative meets all of the following:

1. The alternative material, design or method of construction is satisfactory and complies with the intent of the provisions of this code, ~~and that~~
2. The material, ~~design~~, method or work offered is, for the purpose intended, not less than at least the equivalent of that prescribed in this code.

~~The details of granting the use of alternative materials, designs, innovative approach and methods of construction shall be recorded and entered in the files of the department.~~

Where the alternative material, design or method of construction is not approved, the building official shall respond in writing, stating the reasons the alternative was not approved.

105.4.1 Research reports. Supporting data, where necessary to assist in the approval of materials or assemblies not specifically provided for in this code, shall consist of valid research reports from *approved* sources.

Reason: ADM19-19 modified IBC Section 104.11, but did not make the same suggestion across all the codes. The changes to this section were primarily formatting, with some slight reordering. This same change to be applicable to all the codes. It was also noted that not all of the codes included a subsection on research reports as an aid to alternative approval.

This proposal is submitted by the ICC Building Code Action Committee (BCAC), ICC Fire Code Action Committee (FCAC) and . ICC Plumbing/Mechanical/Gas Code Action Committee (PMGCAC).

BCAC was established by the ICC Board of Directors in July 2011 to pursue opportunities to improve and enhance assigned International Codes or portions thereof. In 2020 and 2021 the BCAC has held several virtual meetings open to any interested party. In addition, there were numerous virtual Working Group meetings for the current code development cycle, which included members of the committee as well as interested parties. Related documents and reports are posted on the BCAC website at <https://www.iccsafe.org/products-and-services/i-codes/code-development/cs/building-code-action-committee-bcac/>.

The FCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance assigned International Codes with regard to fire and life safety in new and existing buildings and facilities as well as the protection of life and property in wildland urban interface areas. In 2020 and 2021 the Fire-CAC held multiple virtual meetings that were open to any interested party. In addition, there were numerous virtual specific working group meetings that were also open to any interested parties, to develop, discuss and debate the proposed changes. Related documentation and reports are posted on the FCAC website at: <https://www.iccsafe.org/products-and-services/i-codes/code-development/cs/fire-code-action-committee-fcac/>

The PMG CAC was established by the ICC Board of Directors in July 2011 to pursue opportunities to improve and enhance assigned International Codes or portions thereof. In 2020 and 2021, the PMGCAC has held several virtual meetings open to any interested party. Numerous interested parties attended the committee meetings and offered their input.

Cost Impact: The code change proposal will not increase or decrease the cost of construction
This is primarily a format change.

ADM34-22 Part I

Public Hearing Results

Committee Action:

As Submitted

Committee Reason: The committee stated that the reason for approval was that it is very similar to the previous changes made in Section 104.11 for alternate materials and it provides consistency in the codes. (Vote: 11-2)

ADM34-22 Part I

ADM34-22 Part II

IRC: R104.11, R104.11.1 (New)

Proposed Change as Submitted

Proponents: Mike Nugent, representing Building Code Action Committee (bcac@iccsafe.org); Robert Marshall, representing FCAC (fcac@iccsafe.org)

2021 International Residential Code

Revise as follows:

R104.11 Alternative materials, design and methods of construction and equipment. The provisions of this code are not intended to prevent the installation of any material or to prohibit any design or method of construction not specifically prescribed by this code. ~~The building official shall have the authority to approve an~~ An alternative material, design or method of construction upon application of the owner or the owner's authorized agent. The shall be approved where the building official shall first find finds that the proposed alternative meets all of the following:

1. The alternative material, design or method of construction is satisfactory and complies with the intent of the provisions of this code, ~~and that~~
2. The material, method or work offered is, for the purpose intended, not less than the equivalent of that prescribed in this code ~~in~~ as it pertains to the following:
 - 2.1. Quality;
 - 2.2. Strength;
 - 2.3. Effectiveness;
 - 2.4. Fire effectiveness;
 - 2.5. Durability and
 - 2.6. Safety.

~~Compliance with the specific performance-based provisions of the International Codes shall be an alternative to the specific requirements of this code. Where the alternative material, design or method of construction is not approved, the building official shall respond in writing, stating the reasons why the alternative was not approved.~~

Add new text as follows:

R104.11.1 Research reports. Supporting data, where necessary to assist in the approval of materials or assemblies not specifically provided for in this code, shall consist of valid research reports from approved sources.

-

Reason: ADM19-19 modified IBC Section 104.11, but did not make the same suggestion across all the codes. The changes to this section were primarily formatting, with some slight reordering. This same change to be applicable to all the codes. It was also noted that not all of the codes included a subsection on research reports as an aid to alternative approval.

This proposal is submitted by the ICC Building Code Action Committee (BCAC), ICC Fire Code Action Committee (FCAC) and . ICC Plumbing/Mechanical/Gas Code Action Committee (PMGCAC).

BCAC was established by the ICC Board of Directors in July 2011 to pursue opportunities to improve and enhance assigned International Codes or portions thereof. In 2020 and 2021 the BCAC has held several virtual meetings open to any interested party. In addition, there were numerous virtual Working Group meetings for the current code development cycle, which included members of the committee as well as interested parties. Related documents and reports are posted on the BCAC website at <https://www.iccsafe.org/products-and-services/i-codes/code-development/cs/building-code-action-committee-bcac/>.

The FCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance assigned International Codes with regard to fire and life safety in new and existing buildings and facilities as well as the protection of life and property in wildland urban interface areas. In 2020 and 2021 the Fire-CAC held multiple virtual meetings that were open to any interested party. In addition, there were numerous virtual specific working group meetings that were also open to any interested parties, to develop, discuss and debate the proposed changes. Related documentation and reports are posted on the FCAC website at: <https://www.iccsafe.org/products-and-services/i-codes/code-development/cs/fire-code-action-committee-fcac/>

The PMG CAC was established by the ICC Board of Directors in July 2011 to pursue opportunities to improve and enhance assigned International Codes or portions thereof. In 2020 and 2021, the PMGCAC has held several virtual meetings open to any interested party. Numerous interested parties attended the committee meetings and offered their input.

Cost Impact: The code change proposal will not increase or decrease the cost of construction
This is primarily a format change.

ADM34-22 Part II

Public Hearing Results

Committee Action:

Disapproved

Committee Reason: The proposal was disapproved because there was concern about a list not being all inclusive. Building officials should be 'granted authority' rather than 'shall' approve alternative means. There were concerns that the IRC does not currently appear to allow research reports as part of a justification. (Vote: 8-2)

ADM34-22 Part II

Individual Consideration Agenda

Public Comment 1:

IRC: R104.11.1

Proponents: Mike Nugent, representing Building Code Action Committee (bcac@iccsafe.org) requests As Modified by Public Comment

Modify as follows:

2021 International Residential Code

R104.11.1 Research reports. Supporting ~~data documentation~~, where necessary to assist in the approval of materials or assemblies not specifically provided for in this code, shall consist of valid research reports from approved sources.

Commenter's Reason: The committee disapproved this proposal because they did not like the laundry list. This change is not adding a laundry list. It is simply reformatting the existing text for consistency with the other codes.
The committee supported an allowance for research reports, which is currently not specifically addressed in the IRC. This proposal should be approved so that research reports are permitted as an option in the IRC.

It is also the intent of this proposal to be consistent with the ADM13-22 Part 2. If ADM13-22 Part 2 is approved, this section would be replaced with the more extensive information for reports in that proposal for reports.

Cost Impact: The net effect of the public comment and code change proposal will not increase or decrease the cost of construction
The change to alternative means is editorial only. Adding an allowance for research reports increases options to provide information on alternative means.

Public Comment# 3019

ADM35-22

IBC: [A] 104.11; IEBC: [A] 104.11; IFC: [A] 104.10; IFGC: [A] 105.2; IMC: [A] 105.2; IPC: [A] 105.2; IPSDC: [A] 105.2

Proposed Change as Submitted

Proponents: David Collins, representing Self (dcollins@preview-group.com); Ronald Geren, representing The American Institute of Architects (ron@specsandcodes.com); Paul Karrer, representing The American Institute of Architects (paulkarrer@aia.org)

2021 International Building Code

Revise as follows:

[A] 104.11 Alternative materials, design and methods of construction and equipment. The provisions of this code are not intended to prevent the installation of any material or to prohibit any design or method of construction not specifically prescribed by this code, provided that any such alternative has been *approved*. An alternative material, design or method of construction shall be *approved* where the *building official* finds that the proposed alternative meets all of the following:

1. The alternative material, design or method of construction is satisfactory and complies with the intent of the provisions of this code,
2. The material, method or work offered is, for the purpose intended, not less than the equivalent of that prescribed in this code as it pertains to the following:
 - 2.1. Quality.
 - 2.2. Strength.
 - 2.3. Effectiveness.
 - 2.4. *Fire resistance*.
 - 2.5. Durability.
 - 2.6. Safety.

Where the alternative material, design or method of construction is not approved, the *building official* shall respond in writing, stating the reasons why the alternative was not approved.

Exception: Performance-based alternative materials, designs or methods of construction complying with the *ICC Performance Code*.

2021 International Existing Building Code

Revise as follows:

[A] 104.11 Alternative materials, design and methods of construction, and equipment. The provisions of this code are not intended to prevent the installation of any material or to prohibit any design or method of construction not specifically prescribed by this code, provided that any such alternative has been *approved*. An alternative material, design or method of construction shall be *approved* where the *code official* finds that the proposed design is satisfactory and complies with the intent of the provisions of this code, and that the material, method or work offered is, for the purpose intended, not less than the equivalent of that prescribed in this code in quality, strength, effectiveness, fire resistance, durability and safety. Where the alternative material, design or method of construction is not *approved*, the *code official* shall respond in writing, stating the reasons why the alternative was not *approved*.

Exception: Performance-based alternative materials, designs or methods of construction complying with the *ICC Performance Code*

2021 International Fire Code

Revise as follows:

[A] 104.10 Alternative materials, design and methods of construction and equipment. The provisions of this code are not intended to prevent the installation of any material or to prohibit any design or method of construction not specifically prescribed by this code, provided that any such alternative has been *approved*. An alternative material, design or method of construction shall be *approved* where the *fire code official* finds that the proposed design is satisfactory and complies with the intent of the provisions of this code, and that the material, method or work offered is, for the purpose intended, not less than the equivalent of that prescribed in this code in quality, strength, effectiveness, *fire resistance*, durability and safety. Where the alternative material, design or method of construction is not *approved*, the *fire code official* shall respond in writing, stating the reasons why the alternative was not *approved*.

Exception: Performance-based alternative materials, designs or methods of construction and equipment complying with the *ICC Performance Code*.

2021 International Fuel Gas Code

Revise as follows:

[A] 105.2 Alternative materials, design and methods of construction and equipment. The provisions of this code are not intended to prevent the installation of any material or to prohibit any design or method of construction not specifically prescribed by this code, provided that any such alternative has been *approved*. An alternative material, design or method of construction shall be *approved* where the *code official* finds that the proposed design is satisfactory and complies with the intent of the provisions of this code, and that the material, method or work offered is, for the purpose intended, not less than the equivalent of that prescribed in this code in quality, strength, effectiveness, fire resistance, durability and safety. Where the alternative material, design or method of construction is not *approved*, the *code official* shall respond in writing, stating the reasons why the alternative was not *approved*.

Exception: Performance-based alternative materials, designs or methods of construction and equipment complying with the *ICC Performance Code*.

2021 International Mechanical Code

Revise as follows:

[A] 105.2 Alternative materials, design and methods of construction and equipment. The provisions of this code are not intended to prevent the installation of any material or to prohibit any design or method of construction not specifically prescribed by this code, provided that any such alternative has been *approved*. An alternative material, design or method of construction shall be *approved* where the *code official* finds that the proposed design is satisfactory and complies with the intent of the provisions of this code, and that the material, method or work offered is, for the purpose intended, not less than the equivalent of that prescribed in this code in quality, strength, effectiveness, fire resistance, durability and safety. Where the alternative material, design or method of construction is not *approved*, the *code official* shall respond in writing, stating the reasons why the alternative was not *approved*.

Exception: Performance-based alternative materials, designs or methods of construction and equipment complying with the *ICC Performance Code*.

2021 International Plumbing Code

Revise as follows:

[A] 105.2 Alternative materials, design and methods of construction and equipment. The provisions of this code are not intended to prevent the installation of any material or to prohibit any design or method of construction not specifically prescribed by this code, provided that any such alternative has been *approved*. An alternative material or method of construction shall be *approved* where the *code official* finds that the proposed design is satisfactory and complies with the intent of the provisions of this code, and that the material, method or work offered is, for the purpose intended, not less than the equivalent of that prescribed in this code in quality, strength, effectiveness, fire resistance, durability and safety. Where the alternative material, design or method of construction is not *approved*, the *code official* shall respond in writing, stating the reasons why the alternative was not *approved*.

Exception: Performance-based alternative materials, designs or methods of construction and equipment complying with the *ICC Performance Code*.

2021 International Private Sewage Disposal Code

Revise as follows:

[A] 105.2 Alternative materials, design and methods of construction and equipment. The provisions of this code are not intended to prevent the installation of any material or to prohibit any design or method of construction not specifically prescribed by this code, provided that any such alternative has been *approved*. An alternative material, design or method of construction shall be *approved* where the *code official* finds that the proposed design is satisfactory and complies with the intent of the provisions of this code, and that the material, method or work offered is, for the purpose intended, not less than the equivalent of that prescribed in this code in quality, strength, effectiveness, fire resistance, durability and safety. Where the alternative material, design or method of construction is not *approved*, the *code official* shall respond in writing, stating the reasons why the alternative was not *approved*.

Exception: Performance-based alternative materials, designs or methods of construction and equipment complying with the *ICC Performance Code*.

Reason: The ICC Performance Code (ICCPC) should not be considered solely for whole building designs, but also as another pathway for evaluating alternative materials, designs, and methods of construction. When projects are designed per the prescriptive requirements of any ICC code, there are situations where a single material, element, or system cannot conform to the prescriptive requirements. Also, new materials, elements, or systems are entering the construction market at a pace that the prescriptive codes cannot keep up. This provision will allow owners, designers and building officials to consider such advances in such materials, elements of designs using the Performance Code for guidance. Although the prescriptive provisions in each of the codes provides one pathway for approval of alternative materials, designs, and methods of construction, the ICCPC should not be overlooked as an alternative pathway. The ICCPC may be considered by the building official as an alternative method in and of itself per any of the sections listed, by including it within the text of each section will draw much greater attention to the ICCPC and thereby increase its use and adoption.

Cost Impact: The code change proposal will not increase or decrease the cost of construction

This change to the above mentioned codes do not add a requirement that individual projects must comply with. It provides an additional option for those projects that wish to pursue more performance-based solutions. ICC's Cost Impact Guide cites code change proposals that modify the design requirements (e.g. greater number of design options, design process efficiencies) as recognized instance of proposals that do not affect the construction or construction cost. Providing projects a route to use the ICC Performance Code to evaluate materials, designs and methods of construction does not impact the cost of construction.

ADM35-22

Public Hearing Results

Committee Action:

As Modified

Committee Modification:

2021 International Building Code

[A]104.11 Alternative materials, design and methods of construction and equipment. The provisions of this code are not intended to prevent the installation of any material or to prohibit any design or method of construction not specifically prescribed by this code, provided that any such alternative has been *approved*. An alternative material, design or method of construction shall be *approved* where the *building official* finds that the proposed alternative meets all of the following:

1. The alternative material, design or method of construction is satisfactory and complies with the intent of the provisions of this code,
2. The material, method or work offered is, for the purpose intended, not less than the equivalent of that prescribed in this code as it pertains to the following:
 - 2.1. Quality.
 - 2.2. Strength.
 - 2.3. Effectiveness.
 - 2.4. *Fire resistance*.
 - 2.5. Durability.
 - 2.6. Safety.

Where the alternative material, design or method of construction is not approved, the *building official* shall respond in writing, stating the reasons why the alternative was not approved.

Exception: Performance-based alternative materials, designs or methods of construction and equipment complying with the *ICC Performance Code*. This exception shall not apply to alternative structural materials or to alternative structural designs.

2021 International Existing Building Code

[A]104.11 Alternative materials, design and methods of construction, and equipment. The provisions of this code are not intended to prevent the installation of any material or to prohibit any design or method of construction not specifically prescribed by this code, provided that any such alternative has been *approved*. An alternative material, design or method of construction shall be *approved* where the *code official* finds that the proposed design is satisfactory and complies with the intent of the provisions of this code, and that the material, method or work offered is, for the purpose intended, not less than the equivalent of that prescribed in this code in quality, strength, effectiveness, fire resistance, durability and safety. Where the alternative material, design or method of construction is not *approved*, the *code official* shall respond in writing, stating the reasons why the alternative was not *approved*.

Exception: Performance-based alternative materials, designs or methods of construction and equipment complying with the *ICC Performance Code*. This exception shall not apply to alternative structural materials or to alternative structural designs.

Committee Reason: The committee stated that the reason for the approval of the modification was that since the exception is referring to the performance code and if the performance code is not ready for structural type situations you need to have this exception in there to make sure that somebody doesn't try to use it for that purpose. The stated reasons for the approval were that this is another tool in the toolbox and owners can take advantage of this requirement and it brings more attention to it and this path especially with the modification. It was additionally stated that this

proposal and the modification are critical as it brings another type of alternative that is performance based. (Vote: 7-6)

ADM35-22

Individual Consideration Agenda

Public Comment 1:

Proponents: Bill McHugh, representing Firestop Contractors International Assn., National Fireproofing Contractors Assn. (bill@mc-hugh.us) requests Disapprove

Commenter's Reason: This new addition to the administrative section of the code is not needed, because the code already allows this to occur. Also, Proposal S134-22 was Disapproved by the structural committee, heard later in the week in Rochester, NY. This is a similar performance based design proposal. The same reason was provided for that disapproval, that I propose above.

Cost Impact: The net effect of the public comment and code change proposal will not increase or decrease the cost of construction
No change to code.

Public Comment# 3331

ADM36-22 Part I

IBC: [A] 104.11, [A] 104.11.1 (New), [A] 104.11.2 (New), [A] 104.11.1, [A] 104.11.2; IEBC: [A] 104.11, [A] 104.11.1 (New), [A] 104.11.2 (New), [A] 104.11.1, [A] 104.11.2; IFC: [A] 104.10, [A] 104.10.1 (New), [A] 104.10.2 (New), [A] 104.10.1, [A] 104.10.2; IFGC: [A] 105.2, [A] 105.2.1 (New), [A] 105.2.2 (New), [A] 105.2.1; IMC: [A] 105.2, [A] 105.2.1 (New), [A] 105.2.2 (New), [A] 105.2.1; IPC: [A] 105.2, [A] 105.2.1 (New), [A] 105.2.2 (New), [A] 105.2.1; IPMC: [A] 106.2, [A] 106.2.1 (New), [A] 106.2.2 (New); IWUIC: [A] 105.3, [A] 105.3.1 (New), [A] 105.3.2 (New)

Proposed Change as Submitted

Proponents: Marcelo Hirschler, representing GBH International (mmh@gbhint.com)

THIS IS A 2 PART CODE CHANGE. PART I WILL BE HEARD BY THE ADMINISTRATIVE CODE COMMITTEE. PART II WILL BE HEARD BY THE IRC-BUILDING CODE COMMITTEE. SEE THE TENTATIVE HEARING ORDER FOR THESE COMMITTEES.

2021 International Building Code

Revise as follows:

[A] 104.11 Alternative materials, design and methods of construction and equipment. The provisions of this code are not intended to prevent the installation of any material or to prohibit any design or method of construction not specifically prescribed by this code, provided that any such alternative has been *approved*. An alternative material, design or method of construction shall be *approved* where the *building official* finds that the proposed alternative meets all of the following:

1. The alternative material, design or method of construction is satisfactory and complies with the intent of the provisions of this code,
2. The material, method or work offered is, for the purpose intended, not less than the equivalent of that prescribed in this code as it pertains to the following:
 - 2.1. Quality.
 - 2.2. Strength.
 - 2.3. Effectiveness.
 - 2.4. ~~Fire resistance.~~
 - ~~2-5~~ 2.4. Durability.
 - ~~2-6~~ 2.5. Safety.

Where the alternative material, design or method of construction is not approved, the *building official* shall respond in writing, stating the reasons why the alternative was not approved.

Add new text as follows:

[A] 104.11.1 Fire safety equivalency. Determination of safety equivalency, with respect to fire, shall be based on an analysis that includes applicable fire safety performance properties, such as but not limited to ignitability, flame spread, heat release rate, heat of combustion, smoke development, and fire resistance. Determination of safety equivalency, with respect to structural fire safety, shall also include a structural system analysis.

[A] 104.11.2 Fire Tests. Tests conducted to demonstrate equivalent fire safety in support of an alternative material, design or method of construction application shall be of a scale that is sufficient to predict fire safety performance of the end use configuration. Tests shall be performed by a party acceptable to the code official.

Revise as follows:

[A] ~~104.11.1~~ 104.11.3 Research reports. Supporting data, where necessary to assist in the approval of materials or assemblies not specifically provided for in this code, shall consist of valid research reports from *approved* sources.

[A] ~~104.11.2~~ 104.11.4 Tests. Whenever there is insufficient evidence of compliance with the provisions of this code, or evidence that a material or method does not conform to the requirements of this code, or in order to substantiate claims for alternative materials or methods, the *building official* shall have the authority to require tests as evidence of compliance to be made without expense to the jurisdiction. Test methods shall be as specified in this code or by other recognized test standards. In the absence of recognized and accepted test methods, the *building official* shall approve the testing procedures. Tests shall be performed by an *approved agency*. Reports of such tests shall be retained by the *building official* for the period required for retention of public records.

2021 International Existing Building Code

Revise as follows:

[A] 104.11 Alternative materials, design and methods of construction, and equipment. The provisions of this code are not intended to prevent the installation of any material or to prohibit any design or method of construction not specifically prescribed by this code, provided that any such alternative has been *approved*. An alternative material, design or method of construction shall be *approved* where the *code official* finds that the proposed design is satisfactory and complies with the intent of the provisions of this code, and that the material, method or work offered is, for the purpose intended, not less than the equivalent of that prescribed in this code in quality, strength, effectiveness, ~~fire resistance~~, durability and safety. Where the alternative material, design or method of construction is not *approved*, the *code official* shall respond in writing, stating the reasons why the alternative was not *approved*.

Add new text as follows:

[A] 104.11.1 Fire safety equivalency. Determination of safety equivalency, with respect to fire, shall be based on an analysis that includes applicable fire safety performance properties, such as but not limited to ignitability, flame spread, heat release rate, heat of combustion, smoke development, and fire resistance. Determination of safety equivalency, with respect to structural fire safety, shall also include a structural system analysis.

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Revise as follows:

[A] ~~104.11.1~~ 104.11.3 Research reports. Supporting data, where necessary to assist in the approval of materials or assemblies not specifically provided for in this code, shall consist of valid research reports from *approved* sources.

[A] ~~104.11.2~~ 104.11.4 Tests. Where there is insufficient evidence of compliance with the provisions of this code or evidence that a material or method does not conform to the requirements of this code, or in order to substantiate claims for alternative materials or methods, the *code official* shall have the authority to require tests as evidence of compliance to be made without expense to the jurisdiction. Test methods shall be as specified in this code or by other recognized test standards. In the absence of recognized and accepted test methods, the *code official* shall approve the testing procedures. Tests shall be performed by an *approved* agency. Reports of such tests shall be retained by the *code official* for the period required for retention.

2021 International Fire Code

Revise as follows:

[A] 104.10 Alternative materials, design and methods of construction and equipment. The provisions of this code are not intended to prevent the installation of any material or to prohibit any design or method of construction not specifically prescribed by this code, provided that any such alternative has been *approved*. An alternative material, design or method of construction shall be *approved* where the *fire code official* finds that the proposed design is satisfactory and complies with the intent of the provisions of this code, and that the material, method or work offered is, for the purpose intended, not less than the equivalent of that prescribed in this code in quality, strength, effectiveness, ~~fire resistance~~, durability and safety. Where the alternative material, design or method of construction is not *approved*, the *fire code official* shall respond in writing, stating the reasons why the alternative was not *approved*.

Add new text as follows:

[A] 104.10.1 Fire safety equivalency. Determination of safety equivalency, with respect to fire, shall be based on an analysis that includes applicable fire safety performance properties, such as but not limited to ignitability, flame spread, heat release rate, heat of combustion, smoke development, and fire resistance. Determination of safety equivalency, with respect to structural fire safety, shall also include a structural system analysis.

[A] 104.10.2 Fire tests. Tests conducted to demonstrate equivalent fire safety in support of an alternative material, design or method of construction application shall be of a scale that is sufficient to predict fire safety performance of the end use configuration. Tests shall be performed by a party acceptable to the fire code official.

Revise as follows:

[A] ~~104.10.1~~ 104.10.3 Research reports. Supporting data, where necessary to assist in the approval of materials or assemblies not specifically provided for in this code, shall consist of valid research reports from *approved* sources.

[A] ~~104.10.2~~ 104.10.4 Tests. Where there is insufficient evidence of compliance with the provisions of this code, or evidence that a material or method does not conform to the requirements of this code, or in order to substantiate claims for alternative materials or methods, the *fire code official* shall have the authority to require tests as evidence of compliance to be made without expense to the jurisdiction. Test methods shall be as specified in this code or by other recognized test standards. In the absence of recognized and accepted test methods, the *fire code official* shall approve the testing procedures. Tests shall be performed by an *approved* agency. Reports of such tests shall be retained by the *fire code official* for the period required for retention of public records.

2021 International Fuel Gas Code

Revise as follows:

[A] 105.2 Alternative materials, design and methods of construction and equipment. The provisions of this code are not intended to prevent the installation of any material or to prohibit any design or method of construction not specifically prescribed by this code, provided that any such alternative has been *approved*. An alternative material, design or method of construction shall be *approved* where the *code official* finds that the proposed design is satisfactory and complies with the intent of the provisions of this code, and that the material, method or work offered is, for the purpose intended, not less than the equivalent of that prescribed in this code in quality, strength, effectiveness, ~~fire resistance~~, durability and safety. Where the alternative material, design or method of construction is not *approved*, the *code official* shall respond in writing, stating the reasons why the alternative was not *approved*.

Add new text as follows:

[A] 105.2.1 Fire safety equivalency. Determination of safety equivalency, with respect to fire, shall be based on an analysis that includes applicable fire safety performance properties, such as but not limited to ignitability, flame spread, heat release rate, heat of combustion, smoke development, and fire resistance. Determination of safety equivalency, with respect to structural fire safety, shall also include a structural system analysis.

[A] 105.2.2 Fire tests. Tests conducted to demonstrate equivalent fire safety in support of an alternative material, design or method of construction application shall be of a scale that is sufficient to predict fire safety performance of the end use configuration. Tests shall be performed by a party acceptable to the code official.

Revise as follows:

[A] ~~105.2.1~~ 105.2.3 Research reports. Supporting data, where necessary to assist in the approval of materials or assemblies not specifically provided for in this code, shall consist of valid research reports from *approved* sources.

2021 International Mechanical Code

Revise as follows:

[A] 105.2 Alternative materials, design and methods of construction and equipment. The provisions of this code are not intended to prevent the installation of any material or to prohibit any design or method of construction not specifically prescribed by this code, provided that any such alternative has been *approved*. An alternative material, design or method of construction shall be *approved* where the *code official* finds that the proposed design is satisfactory and complies with the intent of the provisions of this code, and that the material, method or work offered is, for the purpose intended, not less than the equivalent of that prescribed in this code in quality, strength, effectiveness, ~~fire resistance~~, durability and safety. Where the alternative material, design or method of construction is not *approved*, the *code official* shall respond in writing, stating the reasons why the alternative was not *approved*.

Add new text as follows:

[A] 105.2.1 Fire safety equivalency. Determination of safety equivalency, with respect to fire, shall be based on an analysis that includes applicable fire safety performance properties, such as but not limited to ignitability, flame spread, heat release rate, heat of combustion, smoke development, and fire resistance. Determination of safety equivalency, with respect to structural fire safety, shall also include a structural system analysis.

[A] 105.2.2 Fire tests. Tests conducted to demonstrate equivalent fire safety in support of an alternative material, design or method of construction application shall be of a scale that is sufficient to predict fire safety performance of the end use configuration. Tests shall be performed by a party acceptable to the code official.

Revise as follows:

[A] ~~105.2.1~~ 105.2.3 Research reports. Supporting data, where necessary to assist in the approval of materials or assemblies not specifically provided for in this code, shall consist of valid research reports from *approved* sources.

2021 International Plumbing Code

Revise as follows:

[A] 105.2 Alternative materials, design and methods of construction and equipment. The provisions of this code are not intended to prevent the installation of any material or to prohibit any design or method of construction not specifically prescribed by this code, provided that any such alternative has been *approved*. An alternative material or method of construction shall be *approved* where the *code official* finds that the proposed design is satisfactory and complies with the intent of the provisions of this code, and that the material, method or work offered is, for the purpose intended, not less than the equivalent of that prescribed in this code in quality, strength, effectiveness, ~~fire resistance~~, durability and safety. Where the alternative material, design or method of construction is not *approved*, the *code official* shall respond in writing, stating the reasons why the alternative was not *approved*.

Add new text as follows:

[A] 105.2.1 Fire safety equivalency. Determination of safety equivalency, with respect to fire, shall be based on an analysis that includes applicable fire safety performance properties, such as but not limited to ignitability, flame spread, heat release rate, heat of combustion, smoke development, and fire resistance. Determination of safety equivalency, with respect to structural fire safety, shall also include a structural system analysis.

[A] 105.2.2 Fire tests. Tests conducted to demonstrate equivalent fire safety in support of an alternative material, design or method of construction application shall be of a scale that is sufficient to predict fire safety performance of the end use configuration. Tests shall be performed by a party acceptable to the code official.

Revise as follows:

[A] ~~105.2.1~~ 105.2.3 Research reports. Supporting data, where necessary to assist in the approval of materials or assemblies not specifically provided for in this code, shall consist of valid research reports from *approved* sources.

2021 International Property Maintenance Code

Revise as follows:

[A] 106.2 Alternative materials, design and methods of construction and equipment. The provisions of this code are not intended to prevent the installation of any material or to prohibit any design or method of construction not specifically prescribed by this code, provided that any such alternative has been *approved*. An alternative material, design or method of construction shall be *approved* where the *code official* finds that the proposed design is satisfactory and complies with the intent of the provisions of this code, and that the material, method or work offered is, for the purpose intended, not less than the equivalent of that prescribed in this code in quality, strength, effectiveness, ~~fire resistance~~, durability and safety. Where the alternative material, design or method of construction is not *approved*, the *code official* shall respond in writing, stating the reasons why the alternative was not *approved*.

Add new text as follows:

[A] 106.2.1 Fire safety equivalency. Determination of safety equivalency, with respect to fire, shall be based on an analysis that includes applicable fire safety performance properties, such as but not limited to ignitability, flame spread, heat release rate, heat of combustion, smoke development, and fire resistance. Determination of safety equivalency, with respect to structural fire safety, shall also include a structural system analysis.

[A] 106.2.2 Fire tests. Tests conducted to demonstrate equivalent fire safety in support of an alternative material, design or method of construction application shall be of a scale that is sufficient to predict fire safety performance of the end use configuration. Tests shall be performed by a party acceptable to the code official.

2021 International Wildland-Urban Interface Code

Revise as follows:

[A] 105.3 Alternative materials, design and methods. The provisions of this code are not intended to prevent the installation of any material or to prohibit any design or method not specifically prescribed by this code, provided that any such alternative has been *approved*. An alternative material, design or method shall be *approved* where the *building official* in concurrence with the fire chief finds that the proposed design is satisfactory and complies with the intent of the provisions of this code, and that the material, method or work offered is, for the purpose intended, not less than the equivalent of that prescribed in this code in quality, strength, effectiveness, ~~fire resistance~~, durability and safety. Where the alternative material, design or method is not *approved*, the *building official* shall respond in writing, stating the reasons why the alternative was not *approved*.

Add new text as follows:

[A] 105.3.1 Fire safety equivalency. Determination of safety equivalency, with respect to fire, shall be based on an analysis that includes applicable fire safety performance properties, such as but not limited to ignitability, flame spread, heat release rate, heat of combustion, smoke development, and fire resistance. Determination of safety equivalency, with respect to structural fire safety, shall also include a structural system analysis.

[A] 105.3.2 Fire tests. Tests conducted to demonstrate equivalent fire safety in support of an alternative material, design or method of construction application shall be of a scale that is sufficient to predict fire safety performance of the end use configuration. Tests shall be performed by a party acceptable to the building official.

Reason: The intent of this code proposal is to clarify equivalency in terms of fire safety, which is incorrect and misleading as described simply in terms of fire resistance at present. In fact, fire resistance is only a subset of all aspects of fire safety. Therefore, it is better to have a safety analysis look at the issue of fire safety more comprehensively.

As revised, fire resistance would be deleted from the list, and a separate section added that more fully addresses fire safety. A proper fire safety analysis performed under this section should always have taken these considerations into account, but having them specifically stated, and removing the incorrect term "fire resistance" item from the list will help code officials and code users by providing more thorough guidance for preparation of alternative method proposals. Additional guidance has also been provided to ensure that fire testing done in support of an alternative

method proposal is of a sufficient scale to be relevant to the end use application.

This proposal is a portion of a more wide-ranging proposal that revises the entire section 104. The language relating to the fire safety aspects is identical to that agreed to for that proposal.

Equivalent changes are being proposed to all 9 ICC codes for which fire safety is a relevant issue in terms of alternate materials and methods.

Cost Impact: The code change proposal will not increase or decrease the cost of construction

There is no cost impact since this code proposal only clarifies the intent of the section and provides clearer guidance to the building, fire or code official.

ADM36-22 Part I

Public Hearing Results

Committee Action:

As Modified

Committee Modification:

2021 International Building Code

[A]104.11 Alternative materials, design and methods of construction and equipment. The provisions of this code are not intended to prevent the installation of any material or to prohibit any design or method of construction not specifically prescribed by this code, provided that any such alternative has been *approved*. An alternative material, design or method of construction shall be *approved* where the *building official* finds that the proposed alternative meets all of the following:

1. The alternative material, design or method of construction is satisfactory and complies with the intent of the provisions of this code,
2. The material, method or work offered is, for the purpose intended, not less than the equivalent of that prescribed in this code as it pertains to the following:
 - 2.1. Quality.
 - 2.2. Strength.
 - 2.3. Effectiveness.
 - 2.4. Durability.
 - 2.5. Safety, other than fire safety
 - 2.6 Fire Safety

Where the alternative material, design or method of construction is not approved, the *building official* shall respond in writing, stating the reasons why the alternative was not approved.

~~**[A] 104.11.1 Fire safety equivalency.** Determination of safety equivalency, with respect to fire, shall be based on an analysis that includes applicable fire safety performance properties, such as but not limited to ignitability, flame spread, heat release rate, heat of combustion, smoke development, and fire resistance. Determination of safety equivalency, with respect to structural fire safety, shall also include a structural system analysis.~~

2021 International Existing Building Code

[A] 104.11 Alternative materials, design and methods of construction, and equipment. The provisions of this code are not intended to prevent the installation of any material or to prohibit any design or method of construction not specifically prescribed by this code, provided that any such alternative has been *approved*. An alternative material, design or method of construction shall be *approved* where the *code official* finds that the proposed design is satisfactory and complies with the intent of the provisions of this code, and that the material, method or work offered is, for the purpose intended, not less than the equivalent of that prescribed in this code in quality, strength, effectiveness, durability, fire safety, and safety. Where the alternative material, design or method of construction is not *approved*, the *code official* shall respond in writing, stating the reasons why the alternative was not *approved*.

~~**[A] 104.11.1 Fire safety equivalency.** Determination of safety equivalency, with respect to fire, shall be based on an analysis that includes applicable fire safety performance properties, such as but not limited to ignitability, flame spread, heat release rate, heat of combustion, smoke~~

development, and fire resistance. Determination of safety equivalency, with respect to structural fire safety, shall also include a structural system analysis.

2021 International Fire Code

[A] 104.10 Alternative materials, design and methods of construction and equipment. The provisions of this code are not intended to prevent the installation of any material or to prohibit any design or method of construction not specifically prescribed by this code, provided that any such alternative has been *approved*. An alternative material, design or method of construction shall be *approved* where the *fire code official* finds that the proposed design is satisfactory and complies with the intent of the provisions of this code, and that the material, method or work offered is, for the purpose intended, not less than the equivalent of that prescribed in this code in quality, strength, effectiveness, durability, fire safety, and safety. Where the alternative material, design or method of construction is not *approved*, the *fire code official* shall respond in writing, stating the reasons why the alternative was not *approved*.

~~**[A] 104.10.1 Fire safety equivalency.** Determination of safety equivalency, with respect to fire, shall be based on an analysis that includes applicable fire safety performance properties, such as but not limited to ignitability, flame spread, heat release rate, heat of combustion, smoke development, and fire resistance. Determination of safety equivalency, with respect to structural fire safety, shall also include a structural system analysis.~~

2021 International Fuel Gas Code

[A] 105.2 Alternative materials, design and methods of construction and equipment. The provisions of this code are not intended to prevent the installation of any material or to prohibit any design or method of construction not specifically prescribed by this code, provided that any such alternative has been *approved*. An alternative material, design or method of construction shall be *approved* where the *code official* finds that the proposed design is satisfactory and complies with the intent of the provisions of this code, and that the material, method or work offered is, for the purpose intended, not less than the equivalent of that prescribed in this code in quality, strength, effectiveness, durability, fire safety, and safety. Where the alternative material, design or method of construction is not *approved*, the *code official* shall respond in writing, stating the reasons why the alternative was not *approved*.

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2021 International Mechanical Code

[A] 105.2 Alternative materials, design and methods of construction and equipment. The provisions of this code are not intended to prevent the installation of any material or to prohibit any design or method of construction not specifically prescribed by this code, provided that any such alternative has been *approved*. An alternative material, design or method of construction shall be *approved* where the code official finds that the proposed design is satisfactory and complies with the intent of the provisions of this code, and that the material, method or work offered is, for the purpose intended, not less than the equivalent of that prescribed in this code in quality, strength, effectiveness, durability, fire safety, and safety. Where the alternative material, design or method of construction is not *approved*, the *code official* shall respond in writing, stating the reasons why the alternative was not *approved*.

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2021 International Plumbing Code

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~~development, and fire resistance. Determination of safety equivalency, with respect to structural fire safety, shall also include a structural system analysis.~~

2021 International Property Maintenance Code

[A] 106.2 Alternative materials, design and methods of construction and equipment. The provisions of this code are not intended to prevent the installation of any material or to prohibit any design or method of construction not specifically prescribed by this code, provided that any such alternative has been *approved*. An alternative material, design or method of construction shall be *approved* where the *code official* finds that the proposed design is satisfactory and complies with the intent of the provisions of this code, and that the material, method or work offered is, for the purpose intended, not less than the equivalent of that prescribed in this code in quality, strength, effectiveness, durability, fire safety, and safety. Where the alternative material, design or method of construction is not *approved*, the *code official* shall respond in writing, stating the reasons why the alternative was not *approved*.

~~**[A] 106.2.1 Fire safety equivalency.** Determination of safety equivalency, with respect to fire, shall be based on an analysis that includes applicable fire safety performance properties, such as but not limited to ignitability, flame spread, heat release rate, heat of combustion, smoke development, and fire resistance. Determination of safety equivalency, with respect to structural fire safety, shall also include a structural system analysis.~~

2021 International Wildland-Urban Interface Code

[A] 105.3 Alternative materials, design and methods. The provisions of this code are not intended to prevent the installation of any material or to prohibit any design or method not specifically prescribed by this code, provided that any such alternative has been *approved*. An alternative material, design or method shall be *approved* where the *building official* in concurrence with the fire chief finds that the proposed design is satisfactory and complies with the intent of the provisions of this code, and that the material, method or work offered is, for the purpose intended, not less than the equivalent of that prescribed in this code in quality, strength, effectiveness, durability, fire safety, and safety. Where the alternative material, design or method is not *approved*, the *building official* shall respond in writing, stating the reasons why the alternative was not *approved*.

~~**[A] 105.3.1 Fire safety equivalency.** Determination of safety equivalency, with respect to fire, shall be based on an analysis that includes applicable fire safety performance properties, such as but not limited to ignitability, flame spread, heat release rate, heat of combustion, smoke development, and fire resistance. Determination of safety equivalency, with respect to structural fire safety, shall also include a structural system analysis.~~

Committee Reason: The committee stated that the reason for the approval of the modification was that proposed fire safety equivalency section is not needed in the code. The stated reason for the approval of the proposal is that it correlates with the other code changes that were previously approved. (Vote: 13-0)

ADM36-22 Part I

Individual Consideration Agenda

Public Comment 1:

IBC: [A] 104.11.2; IEBC: [A] 104.11.2; IFC: [A] 104.10.2; IFGC: [A] 105.2.2; IMC: [A] 105.2.2; IPC: [A] 105.2.2; IPMC: [A] 106.2.2; IWUIC: [A] 105.3.2

Proponents: Mike Nugent, representing Building Code Action Committee (bcac@iccsafe.org) requests As Modified by Public Comment

Further modify as follows:

2021 International Building Code

~~**[A] 104.11.2 Fire-Tests.** Tests conducted to demonstrate equivalent fire safety in support of an alternative material, design or method of construction application shall be of a scale that is sufficient to predict fire safety performance of the end use configuration. Where there is insufficient evidence of compliance with the provisions of this code, the building official is authorized to require tests as evidence of compliance. Test methods shall be as specified in this code or by other recognized test standards. In the absence of recognized test standards, the building official shall approve the testing procedures. Such Tests shall be performed by a party acceptable to the code official.~~

2021 International Existing Building Code

~~**[A] 104.11.2 Fire-Tests..** Tests conducted to demonstrate equivalent fire safety in support of an alternative material, design or method of construction application shall be of a scale that is sufficient to predict fire safety performance of the end use configuration. Where there is~~

insufficient evidence of compliance with the provisions of this code, the building official is authorized to require tests as evidence of compliance. Test methods shall be as specified in this code or by other recognized test standards. In the absence of recognized test standards, the building official shall approve the testing procedures. Such Tests shall be performed by a party acceptable to the code official.

2021 International Fire Code

~~[A] 104.10.2 Fire tests. Tests conducted to demonstrate equivalent fire safety in support of an alternative material, design or method of construction application shall be of a scale that is sufficient to predict fire safety performance of the end use configuration. Where there is insufficient evidence of compliance with the provisions of this code, the building official is authorized to require tests as evidence of compliance. Test methods shall be as specified in this code or by other recognized test standards. In the absence of recognized test standards, the building official shall approve the testing procedures. Such Tests shall be performed by a party acceptable to the fire code official.~~

2021 International Fuel Gas Code

~~[A] 105.2.2 Fire tests. Tests conducted to demonstrate equivalent fire safety in support of an alternative material, design or method of construction application shall be of a scale that is sufficient to predict fire safety performance of the end use configuration. Where there is insufficient evidence of compliance with the provisions of this code, the building official is authorized to require tests as evidence of compliance. Test methods shall be as specified in this code or by other recognized test standards. In the absence of recognized test standards, the building official shall approve the testing procedures. Such Tests shall be performed by a party acceptable to the code official.~~

2021 International Mechanical Code

~~[A] 105.2.2 Fire tests. Tests conducted to demonstrate equivalent fire safety in support of an alternative material, design or method of construction application shall be of a scale that is sufficient to predict fire safety performance of the end use configuration. Where there is insufficient evidence of compliance with the provisions of this code, the building official is authorized to require tests as evidence of compliance. Test methods shall be as specified in this code or by other recognized test standards. In the absence of recognized test standards, the building official shall approve the testing procedures. Such Tests shall be performed by a party acceptable to the code official.~~

2021 International Plumbing Code

~~[A] 105.2.2 Fire tests. Tests conducted to demonstrate equivalent fire safety in support of an alternative material, design or method of construction application shall be of a scale that is sufficient to predict fire safety performance of the end use configuration. Where there is insufficient evidence of compliance with the provisions of this code, the building official is authorized to require tests as evidence of compliance. Test methods shall be as specified in this code or by other recognized test standards. In the absence of recognized test standards, the building official shall approve the testing procedures. Such Tests shall be performed by a party acceptable to the code official.~~

2021 International Property Maintenance Code

~~[A] 106.2.2 Fire tests. Tests conducted to demonstrate equivalent fire safety in support of an alternative material, design or method of construction application shall be of a scale that is sufficient to predict fire safety performance of the end use configuration. Where there is insufficient evidence of compliance with the provisions of this code, the building official is authorized to require tests as evidence of compliance. Test methods shall be as specified in this code or by other recognized test standards. In the absence of recognized test standards, the building official shall approve the testing procedures. Such Tests shall be performed by a party acceptable to the code official.~~

2021 International Wildland-Urban Interface Code

~~[A] 105.3.2 Fire tests. Tests conducted to demonstrate equivalent fire safety in support of an alternative material, design or method of construction application shall be of a scale that is sufficient to predict fire safety performance of the end use configuration. Where there is insufficient evidence of compliance with the provisions of this code, the building official is authorized to require tests as evidence of compliance. Test methods shall be as specified in this code or by other recognized test standards. In the absence of recognized test standards, the building official shall approve the testing procedures. Such Tests shall be performed by a party acceptable to the building official.~~

Commenter's Reason: This proposal provides testing for fire safety only. This could be read that only fire safety can use testing, rather than everything in the list for alternative means. The public comment language is to allow for testing for any requirements. The public comment language would be consistent with the approved language in ADM13-22 and ADM14-22.

BCAC was established by the ICC Board of Directors in July 2011 to pursue opportunities to improve and enhance assigned International Codes or portions thereof. In 2020, 2021 and 2022 the BCAC has held several virtual meetings open to any interested party. In addition, there were numerous virtual Working Group meetings for the current code development cycle, which included members of the committee as well as interested parties. Related documents and reports are posted on the BCAC website at <https://www.iccsafe.org/products-and-services/i-codes/code-development/cs/building-code-action-committee-bcac/>.

Cost Impact: The net effect of the public comment and code change proposal will not increase or decrease the cost of construction. This modification allows testing as an option for alternative means, therefore, by increasing options, which could reduce costs.

ADM36-22 Part II

IRC: R104.11, R104.11.1 (New), R104.11.2 (New), R104.11.1

Proposed Change as Submitted

Proponents: Marcelo Hirschler, representing GBH International (mmh@gbhint.com)

2021 International Residential Code

Revise as follows:

R104.11 Alternative materials, design and methods of construction and equipment. The provisions of this code are not intended to prevent the installation of any material or to prohibit any design or method of construction not specifically prescribed by this code. The *building official* shall have the authority to approve an alternative material, design or method of construction upon application of the *owner* or the owner's authorized agent. The *building official* shall first find that the proposed design is satisfactory and complies with the intent of the provisions of this code, and that the material, method or work offered is, for the purpose intended, not less than the equivalent of that prescribed in this code in quality, strength, effectiveness, ~~fire resistance~~, durability and safety. Compliance with the specific performance-based provisions of the International Codes shall be an alternative to the specific requirements of this code. Where the alternative material, design or method of construction is not *approved*, the *building official* shall respond in writing, stating the reasons why the alternative was not *approved*.

Add new text as follows:

R104.11.1 Fire safety equivalency. Determination of safety equivalency, with respect to fire, shall be based on an analysis that includes applicable fire safety performance properties, such as but not limited to ignitability, flame spread, heat release rate, heat of combustion, smoke development, and fire resistance. Determination of safety equivalency, with respect to structural fire safety, shall also include a structural system analysis.

R104.11.2 Fire tests. Tests conducted to demonstrate equivalent fire safety in support of an alternative material, design or method of construction application shall be of a scale that is sufficient to predict fire safety performance of the end use configuration. Tests shall be performed by a party acceptable to the building official.

Revise as follows:

~~R104.11.1~~ **R104.11.3 Tests.** Where there is insufficient evidence of compliance with the provisions of this code, or evidence that a material or method does not conform to the requirements of this code, or in order to substantiate claims for alternative materials or methods, the *building official* shall have the authority to require tests as evidence of compliance to be made at no expense to the *jurisdiction*. Test methods shall be as specified in this code or by other recognized test standards. In the absence of recognized and accepted test methods, the *building official* shall approve the testing procedures. Tests shall be performed by an *approved* agency. Reports of such tests shall be retained by the *building official* for the period required for retention of public records.

Reason: The intent of this code proposal is to clarify equivalency in terms of fire safety, which is incorrect and misleading as described simply in terms of fire resistance at present. In fact, fire resistance is only a subset of all aspects of fire safety. Therefore, it is better to have a safety analysis look at the issue of fire safety more comprehensively.

As revised, fire resistance would be deleted from the list, and a separate section added that more fully addresses fire safety. A proper fire safety analysis performed under this section should always have taken these considerations into account, but having them specifically stated, and removing the incorrect term "fire resistance" item from the list will help code officials and code users by providing more thorough guidance for preparation of alternative method proposals. Additional guidance has also been provided to ensure that fire testing done in support of an alternative method proposal is of a sufficient scale to be relevant to the end use application.

This proposal is a portion of a more wide-ranging proposal that revises the entire section 104. The language relating to the fire safety aspects is identical to that agreed to for that proposal.

Equivalent changes are being proposed to all 9 ICC codes for which fire safety is a relevant issue in terms of alternate materials and methods.

Cost Impact: The code change proposal will not increase or decrease the cost of construction

There is no cost impact since this code proposal only clarifies the intent of the section and provides clearer guidance to the building official.

ADM36-22 Part II

Public Hearing Results

Committee Action:

Disapproved

Committee Reason: The proposal was disapproved because the committee felt that fire safety equivalency and fire tests should not be pulled out and described separately. This appears to set this as a higher priority over the other items considered for equivalency. The committee preferred the modifications approved in ADM13-22. (Vote: 10-0)

Individual Consideration Agenda

Public Comment 1:

IRC: R104.11

Proponents: Marcelo Hirschler, representing GBH International (mmh@gbhint.com) requests As Modified by Public Comment

Modify as follows:

2021 International Residential Code

R104.11 Alternative materials, design and methods of construction and equipment. The provisions of this code are not intended to prevent the installation of any material or to prohibit any design or method of construction not specifically prescribed by this code. The *building official* shall have the authority to approve an alternative material, design or method of construction upon application of the *owner* or the owner's authorized agent. The *building official* shall first find that the proposed design is satisfactory and complies with the intent of the provisions of this code, and that the material, method or work offered is, for the purpose intended, not less than the equivalent of that prescribed in this code in quality, strength, effectiveness, ~~fire resistance~~, durability, and safety (other than fire safety) and fire safety. Compliance with the specific performance-based provisions of the International Codes shall be an alternative to the specific requirements of this code. Where the alternative material, design or method of construction is not *approved*, the *building official* shall respond in writing, stating the reasons why the alternative was not *approved*.

Commenter's Reason: The proposed language in the public comment is equivalent to the language approved in ADM 13 and ADM 14 for the section dealing with the equivalency properties without dealing with any other section of chapter 1. It is also equivalent to what the committee approved for ADM 36 part I for all other codes dealing with fire issues. It simply deletes the incorrect term "fire resistance" (because fire resistance is simply one aspect of fire safety) and replaces it with "fire safety". In order to clarify further, the proposal (just like ADM 13, ADM 14 and ADM 36 part I) replaces "safety" with "safety (other than fire safety)".

If ADM 13 Part II is approved as the committee approved it, this proposal becomes moot but will not create a conflict.

Cost Impact: The net effect of the public comment and code change proposal will not increase or decrease the cost of construction. This proposal and public comment clarifies the intent of the section.

ADM40-22

IPSDC: SECTION 107 (New), [A] 106.4, 107.2 (New), [A] 106.4.2, 107.3 (New), [A] 106.4.1, [A] 106.4.3, 107.5 (New), 107.6 (New)

Proposed Change as Submitted

Proponents: Mike Nugent, representing Building Code Action Committee (bcac@iccsafe.org); Joseph J. Summers, representing Plumbing, Mechanical and Fuel Gas Code Action Committee (pmgcac@iccsafe.org)

2021 International Private Sewage Disposal Code

Add new text as follows:

SECTION 107 FEES

Revise as follows:

~~[A] 106.4 107.1 Fees Payment of fees.~~ A permit shall not be issued valid until the fees prescribed in Section 106.4.2 by law have been paid, and an amendment to a permit shall not be released until the additional fee, if any, due to an increase of the private sewage disposal system, has been paid.

Add new text as follows:

107.2 Schedule of permit fees. Where work requires a permit, a fee for each permit shall be paid as required, in accordance with the schedule as established by the applicable governing authority.

Delete without substitution:

~~[A] 106.4.2 Fee schedule.~~ The fees for all private sewage disposal work shall be as indicated in the following schedule:
{JURISDICTION TO INSERT APPROPRIATE SCHEDULE}.

Add new text as follows:

107.3 Permit valuations. The applicant for a permit shall provide an estimated value of the work for which the permit is being issued at time of application. Such estimated valuations shall include the total value of work, including materials and labor, for which the permit is being issued, such as electrical, gas, mechanical, plumbing equipment and permanent systems. Where, in the opinion of the building official, the valuation is underestimated, the permit shall be denied, unless the applicant can show detailed estimates acceptable to the building official. The building official shall have the authority to adjust the final valuation for permit fees.

Revise as follows:

~~[A] 106.4.1 107.4 Work commencing before permit issuance.~~ Any person who commences any work on a private sewage disposal system before obtaining the necessary permits shall be subject to 100 percent of the usual permit fee a fee established by the code official that shall be in addition to the required permit fees.

Delete without substitution:

~~[A] 106.4.3 Fee refunds.~~ The code official shall authorize the refunding of fees as follows:

- ~~1. The full amount of any fee paid hereunder that was erroneously paid or collected.~~
- ~~2. Not more than [SPECIFY PERCENTAGE] percent of the permit fee paid where no work has been done under a permit issued in accordance with this code.~~
- ~~3. Not more than [SPECIFY PERCENTAGE] percent of the plan review fee paid where an application for a permit for which a plan review fee has been paid is withdrawn or canceled before any plan review effort has been expended.~~

~~The code official shall not authorize the refunding of any fee paid except upon written application filed by the original permittee no later than 180 days after the date of fee payment.~~

Add new text as follows:

107.5 Related fees. The payment of the fee for the construction, alteration, removal or demolition for work done in connection to or concurrently with the work authorized by a permit shall not relieve the applicant or holder of the permit from the payment of other fees that are prescribed by law.

107.6 Refunds. The code official is authorized to establish a refund policy.

Reason: The intent of this proposal is coordination for the section Fees in IPSDC with the other ICC codes. Since one city department will handle

permit fees for construction, the requirements for administration should be the same across codes.

There were two different proposals to address consistency in the Fees section (ADM 27-19 and ADM 33-19) – the end result was coordination between the 2021 codes. for – IBC, IFC, IEBC, IMC, IPC, IPMC, IFGC, ISPSC, IWUIC and IZC. ADM27-19 should have included IPSDC, however it was missed.

The IPSDC required the insertion of a table for fees and sets a policy for refunds. If the jurisdiction is on a code for 3 to 6 years, this would prohibit them from adjusting their fees. What the policy is for refunds should also be determined by the department. ADM27-19 removed similar text in the IMC, IPC, IPMC, IFGC, and ISPSC.

The current text does not address permit valuations or related fees. The more generic language for refunds allows for the department to establish a policy rather than have that set in the codes.

The BCAC is working from the philosophy that ICC is a family of codes, so administrative requirements should be consistent across books. Most administrative and enforcement matters are the same for any code. Those matters unique for a specific code remain unchanged. This is one of a series of proposals being submitted relating to technical, editorial and organizational changes proposed for the Administrative chapters (Chapter 1) in all of the I-Codes.

This proposal is submitted by the ICC Plumbing/Mechanical/Gas Code Action Committee (PMGCAC) in coordination with the ICC Building Code Action Committee (BCAC).

The PMG CAC was established by the ICC Board of Directors in July 2011 to pursue opportunities to improve and enhance assigned International Codes or portions thereof. In 2020 and 2021, the PMGCAC has held several virtual meetings open to any interested party. Numerous interested parties attended the committee meetings and offered their input.

Cost Impact: The code change proposal will not increase or decrease the cost of construction. This is an editorial change that provides consistency between I-codes.

ADM40-22

Public Hearing Results

Committee Action:

As Submitted

Committee Reason: The committee stated that the reason for approval was for consistency across the codes. (Vote: 13-0)

ADM40-22

Individual Consideration Agenda

Public Comment 1:

IPSDC: 107.3

Proponents: Kota Wharton, representing City of Grove City (kwharton@grovecityohio.gov) requests As Modified by Public Comment

Modify as follows:

2021 International Private Sewage Disposal Code

107.3 Permit valuations. The applicant for a *permit* shall provide an estimated value of the work for which the permit is being issued at time of application. Such estimated valuations shall include the total value of work, including materials and labor, for which the *permit* is being issued, such as electrical, gas, mechanical, plumbing equipment and permanent systems. Where, in the opinion of the ~~building code official, the valuation is underestimated~~ the applicant underestimates the valuation of the work on the application, and the applicant fails to provide detailed estimates acceptable to the code official, the *permit* shall be denied ~~the code official shall have the authority to deny the permit, unless the applicant can show detailed estimates acceptable to the building code official.~~ the code official shall have the authority to deny the permit, unless the applicant can show detailed estimates acceptable to the building code official. The building official code official shall have the authority to adjust the final valuation for

permit fees.

Commenter's Reason: Will request that this proposal be heard after ADM43 Part I and Part II.

- Gives authority to the *code official* to deny a permit, rather than requires the *code official* to deny the permit.
- Changes *building official* with *code official* for consistency within this code.

Cost Impact: The net effect of the public comment and code change proposal will not increase or decrease the cost of construction. No net change in cost. This is for coordination and clarity.

ADM41-22 Part II

IRC: SECTION R107, R107.1, R107.2, R107.3, R107.4, SECTION R111, R111.1, R111.2, R111.3

Proposed Change as Submitted

Proponents: Mike Nugent, representing Building Code Action Committee (bcac@iccsafe.org); Joseph J. Summers, representing Chair of PMGCAC (pmgcac@iccsafe.org); Robert Marshall, representing FCAC (fcac@iccsafe.org)

2021 International Residential Code

Revise as follows:

SECTION R107

TEMPORARY STRUCTURES, USES, EQUIPMENT AND USES SYSTEMS

R107.1 General. The *building official* is authorized to issue a *permit* for temporary structures, ~~and temporary uses, equipment or systems~~. Such *permits* shall be limited as to time of service, but shall not be permitted for more than 180 days. The *building official* is authorized to grant extensions for demonstrated cause.

R107.2 Conformance. Temporary structures, ~~and uses, equipment or systems~~ shall conform to the ~~structural strength, fire safety, means of egress, light, ventilation and sanitary~~ requirements of this code as necessary to ensure the public health, safety and general welfare.

R107.3 Temporary power service utilities. The *building official* is authorized to give permission to temporarily supply service utilities in accordance with Section R111, ~~and use power in part of an electric installation before such installation has been fully completed and the final certificate of completion has been issued. The part covered by the temporary certificate shall comply with the requirements specified for temporary lighting, heat or power in NFPA 70.~~

R107.4 Termination of approval. The *building official* is authorized to terminate such *permit* for a temporary structure s, uses, equipment or use systems and to order the ~~temporary structure or use~~ same to be discontinued.

SECTION R111 SERVICE UTILITIES

R111.1 Connection of service utilities. A *person* shall not make connections from a utility, a source of energy, fuel, or power to any building or system that is regulated by this code for which a *permit* is required, until *approved* by the *building official*.

R111.2 Temporary connection. The *building official* shall have the authority to authorize the temporary connection of the building or system to the utility, source of energy, fuel or power.

R111.3 Authority to disconnect service utilities. The *building official* shall have the authority to authorize disconnection of utility service to the building, structure or system regulated by this code and the referenced codes and standards set forth in Section R102.4 in case of emergency where necessary to eliminate an immediate hazard to life or property or where such utility connection has been made without the approval required by Section R111.1 or R111.2. The *building official* shall notify the serving utility and where possible the *owner* or the owner's authorized agent and occupant of the building, structure or service system of the decision to disconnect prior to taking such action. If not notified prior to disconnection, the *owner*, the owner's authorized agent or occupant of the building, structure or service system shall be notified in writing as soon as practical thereafter.

Reason: The purpose of this proposal is coordination between codes for the section on temporary structures. A version was proposed last cycle, ADM32-19. As requested by the development committee, the BCAC worked with FCAC and PMGCAC to develop this proposal.

This proposal modified the section for temporary facilities where it was already in the code. The committee felt that it was very important to add these safety options to the IFC as well, so this proposal adds this section to IFC and ISPSC. When looking for coordination, some of the codes did not include 'structure' and some did. The residential committee felt it was important to keep 'structures', so that is remaining in the proposed text.

Generally - The word use is moved to the front, and the lists are made the same throughout.

Temporary power - The allowances for temporary connection under inspection and testing address more than just utilities, so the language in this section should match. The phrase "certificate of completion" is not defined, so "approved" would be a better choice.

The section on Conformance includes a laundry list " structural strength, fire safety, means of egress, accessibility, light, ventilation and sanitary", that is not needed for the section and includes provisions that are not addressed in all of the codes (e.g. IPC does not address structural strength, means of egress, or light).

The BCAC is working from the philosophy that ICC is a family of codes, so administrative requirements should be consistent across books. Most administrative and enforcement matters are the same for any code. Those matters unique for a specific code remain unchanged. This is one of a

series of proposals being submitted relating to technical, editorial and organizational changes proposed for the Administrative chapters (Chapter 1) in all of the I-Codes.

This proposal is submitted by the ICC Building Code Action Committee (BCAC), ICC Fire Code Action Committee (FCAC) and . ICC Plumbing/Mechanical/Gas Code Action Committee (PMGCAC).

BCAC was established by the ICC Board of Directors in July 2011 to pursue opportunities to improve and enhance assigned International Codes or portions thereof. In 2020 and 2021 the BCAC has held several virtual meetings open to any interested party. In addition, there were numerous virtual Working Group meetings for the current code development cycle, which included members of the committee as well as interested parties. Related documents and reports are posted on the BCAC website at <https://www.iccsafe.org/products-and-services/i-codes/code-development/cs/building-code-action-committee-bcac/>.

The FCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance assigned International Codes with regard to fire and life safety in new and existing buildings and facilities as well as the protection of life and property in wildland urban interface areas. In 2020 and 2021 the Fire-CAC held multiple virtual meetings that were open to any interested party. In addition, there were numerous virtual specific working group meetings that were also open to any interested parties, to develop, discuss and debate the proposed changes. Related documentation and reports are posted on the FCAC website at: <https://www.iccsafe.org/products-and-services/i-codes/code-development/cs/fire-code-action-committee-fcac/>

The PMG CAC was established by the ICC Board of Directors in July 2011 to pursue opportunities to improve and enhance assigned International Codes or portions thereof. In 2020 and 2021, the PMGCAC has held several virtual meetings open to any interested party. Numerous interested parties attended the committee meetings and offered their input.

Cost Impact: The code change proposal will not increase or decrease the cost of construction
This change is only removing repeating requirements, therefore this revision is strictly editorial and will not have any changes to the construction requirements.

ADM41-22 Part II

Public Hearing Results

Committee Action:

Disapproved

Committee Reason: The proposal was disapproved because the revision uses the undefined term 'system'. (Vote: 6-5)

ADM41-22 Part II

Individual Consideration Agenda

Public Comment 1:

Proponents: Mike Nugent, representing Building Code Action Committee (bcac@iccsafe.org) requests As Submitted

Commenter's Reason: We respectively disagree with the decision of the IRC committee. 'Systems' is used throughout the existing text in Section R111 and is a commonly used and understood term. A definition is not needed. Words not defined are addressed in Sections R201.3 and R201.4. Elements of mechanical, electrical, plumbing or other system must be compatible and listed together. BCAC feels that this term is appropriate in this context.

The intent of this proposal is consistent terminology between Section R107 and R111 and with the other I-codes. The deletion in Section R107.3 is strictly to remove redundant language in Section 107.3 and replace it with a reference.

Cost Impact: The net effect of the public comment and code change proposal will not increase or decrease the cost of construction
This change is only removing repeating requirements, therefore this revision is strictly editorial and will not have any changes to the construction requirements.

Public Comment# 3020

NOTE: ADM41-22 PART I DID NOT RECEIVE A PUBLIC COMMENT AND IS REPRODUCED FOR INFORMATIONAL PURPOSES ONLY

ADM41-22 Part I

IBC: SECTION 108, [A] 108.1, [A] 108.2, [A] 108.3, [A] 108.4, SECTION 112, [A] 112.1, [A] 112.2, [A] 112.3; IEBC: SECTION 107, [A] 107.1, [A] 107.2, [A] 107.3, [A] 107.4, SECTION 111, [A] 111.1, [A] 111.2, [A] 111.3; IFC: SECTION 106 (New), 106.1 (New), 106.2 (New), 106.3 (New), 106.4 (New), SECTION 110, [A] 110.1; IFGC: SECTION 110, [A] 110.1, [A] 110.2, 110.3, SECTION 111, [A] 111.1, [A] 111.2, [A] 111.3, [A] 111.4; IMC: SECTION 107, [A] 107.1, [A] 107.2, [A] 107.3, [A] 107.4, SECTION 112, [A] 112.1, [A] 112.2, [A] 112.3; IPC: SECTION 107, [A] 107.1, [A] 107.2, [A] 107.3, [A] 107.4, SECTION 112, [A] 112.1, [A] 112.2, [A] 112.3; IPSDC: SECTION 109, [A] 109.1, [A] 109.2, [A] 109.3, [A] 109.4, SECTION 110, [A] 110.1, [A] 110.2, [A] 110.3; ISPSC: SECTION 106 (New), 106.1 (New), 106.2 (New), 106.3 (New), 106.4 (New), SECTION 109, [A] 109.1, [A] 109.2, [A] 109.3; IWUIC: SECTION 108, [A] 108.1, [A] 108.2, 108.3 (New), [A] 108.3, SECTION 112, [A] 112.1, [A] 112.2, [A] 112.3

Proposed Change as Submitted

Proponents: Mike Nugent, representing Building Code Action Committee (bcac@iccsafe.org); Joseph J. Summers, representing Chair of PMGCAC (pmgcac@iccsafe.org); Robert Marshall, representing FCAC (fcac@iccsafe.org)

THIS IS A 2 PART CODE CHANGE. PART I WILL BE HEARD BY THE ADMINISTRATIVE CODE COMMITTEE. PART II WILL BE HEARD BY THE IRC-BUILDING CODE COMMITTEE. SEE THE TENTATIVE HEARING ORDER FOR THESE COMMITTEES.

2021 International Building Code

Revise as follows:

SECTION 108

TEMPORARY STRUCTURES AND USES, EQUIPMENT AND SYSTEMS

[A] 108.1 **General.** The *building official* is authorized to issue a *permit* for temporary structures ~~and temporary uses, equipment or systems~~. Such *permits* shall be limited as to time of service, but shall not be permitted for more than 180 days. The *building official* is authorized to grant extensions for demonstrated cause.

[A] 108.2 **Conformance.** Temporary structures ~~and uses~~ shall comply with the requirements in Section 3103.

[A] 108.3 **Temporary power service utilities.** The *building official* is authorized to give permission to temporarily supply service utilities in accordance with Section 112, ~~and use power in part of an electric installation before such installation has been fully completed and the final certificate of completion has been issued. The part covered by the temporary certificate shall comply with the requirements specified for temporary lighting, heat or power in NFPA 70.~~

[A] 108.4 **Termination of approval.** The *building official* is authorized to terminate such *permit* for a temporary structure, equipment, or use system and to order the ~~temporary structure or use~~ same to be discontinued.

SECTION 112

SERVICE UTILITIES

[A] 112.1 **Connection of service utilities.** A person shall not make connections from a utility, a source of energy, fuel, or power, or a water system or sewer system to any building or system that is regulated by this code for which a *permit* is required, until approved by the *building official*.

[A] 112.2 **Temporary connection.** The *building official* shall have the authority to authorize the temporary connection of the building or system to the utility, the source of energy, fuel, or power, or the water system or sewer system for the purpose of testing systems or for use under a temporary approval.

[A] 112.3 **Authority to disconnect service utilities.** The *building official* shall have the authority to authorize disconnection of utility service to the building, structure or system regulated by this code and the referenced codes and standards in case of emergency where necessary to eliminate an immediate hazard to life or property or where such utility connection has been made without the approval required by Section 112.1 or 112.2. The *building official* shall notify the serving utility, and wherever possible the *owner* or the owner's authorized agent and occupant of the building, structure or service system of the decision to disconnect prior to taking such action. If not notified prior to disconnecting, the *owner* or the owner's authorized agent or occupant of the building, structure or service system shall be notified in writing, as soon as practical thereafter.

2021 International Existing Building Code

Revise as follows:

SECTION 107

TEMPORARY STRUCTURES AND USES , EQUIPMENT AND SYSTEMS

[A] **107.1 General.** The *code official* is authorized to issue a permit for temporary uses , equipment and systems. Such permits shall be limited as to time of service but shall not be permitted for more than 180 days. The *code official* is authorized to grant extensions for demonstrated cause.

[A] **107.2 Conformance.** Temporary uses shall conform to the ~~structural strength, fire safety, means of egress, accessibility, light, ventilation and sanitary~~ requirements of this code as necessary to ensure ~~the public~~ health, safety and general welfare.

[A] **107.3 Temporary power ~~service utilities.~~** The *code official* is authorized to give permission to temporarily supply service utilities in accordance with Section 111, ~~and use power in part of an electric installation before such installation has been fully completed and the final certificate of completion has been issued. The part covered by the temporary certificate shall comply with the requirements specified for temporary lighting, heat or power in NFPA 70-~~

[A] **107.4 Termination of approval.** The *code official* is authorized to terminate such permit for a temporary use and to order the ~~temporary use same~~ to be discontinued.

SECTION 111

SERVICE UTILITIES

[A] **111.1 Connection of service utilities.** A person shall not make connections from a utility, source of energy, fuel, power, water system or sewer system to any building or system that is regulated by this code for which a permit is required, until *approved by the code official.*

[A] **111.2 Temporary connection.** The *code official* shall have the authority to authorize the temporary connection of the building or system to the utility, source of energy, fuel, power, water system or sewer system for the purpose of testing systems or for use under a temporary approval.

[A] **111.3 Authority to disconnect service utilities.** The *code official* shall have the authority to authorize disconnection of utility service to the building, structure or system regulated by this code and the referenced codes and standards in case of emergency where necessary to eliminate an immediate hazard to life or property or where such utility connection has been made without the approval required by Section 111.1 or 111.2. The *code official* shall notify the serving utility and, wherever possible, the owner or the owner's authorized agent and the occupant of the building, structure or service system of the decision to disconnect prior to taking such action. If not notified prior to disconnecting, the owner, the owner's authorized agent or occupant of the building, structure or service system shall be notified in writing, as soon as practical thereafter.

2021 International Fire Code

Add new text as follows:

SECTION 106

TEMPORARY STRUCTURES, USES, EQUIPMENT AND SYSTEMS

106.1 General. The fire code official is authorized to issue a permit for temporary structures, uses, equipment or systems as required in Sections 105.5 and 105.6. Such permits shall be limited as to time of service, but shall not be permitted for more than 180 days. The fire code official is authorized to grant extensions for demonstrated cause.

106.2 Conformance. Temporary uses, equipment and systems shall conform to the requirements of this code as necessary to ensure health, safety and general welfare.

106.3 Temporary service utilities. The fire code official is authorized to give permission to temporarily supply service utilities in accordance with Section 110.

106.4 Termination of approval. The fire code official is authorized to terminate such permit for a temporary uses, equipment, or system and to order the same to be discontinued.

SECTION 110

SERVICE UTILITIES

[A] **110.1 Authority to disconnect service utilities.** The *fire code official* shall have the authority to authorize disconnection of utility service to the building, structure or system in order to safely execute emergency operations or to eliminate an immediate hazard. The *fire code official* shall notify the serving utility and, where possible, the *owner* or the *owner*'s authorized agent and the occupant of the building, structure or service system of the decision to disconnect prior to taking such action. If not notified prior to disconnection, then the *owner*, the *owner*'s authorized agent or occupant of the building, structure or service system shall be notified in writing as soon as practical thereafter.

2021 International Fuel Gas Code

SECTION 110 SERVICE UTILITIES

[A] 110.1 Connection of service utilities. A person shall not make connections from a utility, source of energy, fuel or power to any building or system that is regulated by this code for which a permit is required until authorized by the *code official*.

[A] 110.2 Temporary connection. The *code official* shall have the authority to authorize the temporary connection of the building or system to the utility, source of energy, fuel, power, water system or sewer system for the purpose of testing the installation or for use under a temporary approval.

110.3 Authority to disconnect service utilities. The *code official* shall have the authority to authorize disconnection of utility service to the building, structure or system regulated by this code and the referenced codes and standards in case of emergency where necessary to eliminate an immediate hazard to life or property or where such utility connection has been made without the approval required by Section 112.1 or 112.2. The *code official* shall notify the serving utility, and wherever possible the owner or the owner's authorized agent and occupant of the building, structure or service system, of the decision to disconnect prior to taking such action. If not notified prior to disconnecting, the owner, the owner's authorized agent or occupant of the building, structure or service system shall be notified in writing, as soon as practical thereafter.

Revise as follows:

SECTION 111 TEMPORARY USES, EQUIPMENT, AND SYSTEMS AND USES

[A] 111.1 General. The *code official* is authorized to issue a permit for temporary uses, equipment, and systems and uses. Such permits shall be limited as to time of service, but shall not be permitted for more than 180 days. The *code official* is authorized to grant extensions for demonstrated cause.

[A] 111.2 Conformance. Temporary uses, equipment, and systems and uses shall conform to the ~~structural strength, fire safety, means of egress, accessibility, light, ventilation and sanitary~~ requirements of this code as necessary to ensure the public health, safety and general welfare.

[A] 111.3 Temporary utilities. The *code official* is authorized to give permission to temporarily supply service utilities in accordance with Section 110, before an installation has been fully completed and the final certificate of completion has been issued. The part covered by the temporary certificate shall comply with the requirements specified for temporary lighting, heat or power in the code.

[A] 111.4 Termination of approval. The *code official* is authorized to terminate such permit for a temporary ~~structure or use~~ uses, equipment or systems and to order the temporary ~~structure or use~~ same to be discontinued.

2021 International Mechanical Code

Revise as follows:

SECTION 107 TEMPORARY USES, EQUIPMENT, AND SYSTEMS AND USES

[A] 107.1 General. The code official is authorized to issue a permit for temporary uses, equipment, and systems and uses. Such permits shall be limited as to time of service, but shall not be permitted for more than 180 days. The code official is authorized to grant extensions for demonstrated cause.

[A] 107.2 Conformance. Temporary uses, equipment, and systems and uses shall conform to the ~~structural strength, fire safety, means of egress, accessibility, light, ventilation and sanitary~~ requirements of this code as necessary to ensure the public health, safety and general welfare.

[A] 107.3 Temporary service utilities. The code official is authorized to give permission to temporarily supply service utilities in accordance with Section 112, before an installation has been fully completed and the final certificate of completion has been issued. The part covered by the temporary certificate shall comply with the requirements specified for temporary lighting, heat or power in the code.

[A] 107.4 Termination of approval. The code official is authorized to terminate such permit for temporary uses, equipment, or systems or uses and to order the temporary ~~equipment, systems or uses~~ same to be discontinued.

SECTION 112 SERVICE UTILITIES

[A] 112.1 Connection of service utilities. A person shall not make connections from a utility, source of energy, fuel or power to any building or system that is regulated by this code for which a permit is required, until authorized by the code official.

[A] 112.2 Temporary connection. The code official shall have the authority to authorize the temporary connection of the building or system to the utility, source of energy, fuel, power, water system or sewer system for the purpose of testing systems or for use under a temporary approval.

[A] 112.3 Authority to disconnect service utilities. The code official shall have the authority to authorize disconnection of utility service to the building, structure or system regulated by this code and the referenced codes and standards in case of emergency where necessary to eliminate an immediate hazard to life or property or where such utility connection has been made without the approval required by Section 112.1 or 112.2. The code official shall notify the serving utility, and wherever possible the owner or the owner's authorized agent and occupant of the building, structure or service system, of the decision to disconnect prior to taking such action. If not notified prior to disconnecting, the owner, the owner's authorized agent or occupant of the building, structure or service system shall be notified in writing as soon as practical thereafter.

2021 International Plumbing Code

Revise as follows:

SECTION 107 TEMPORARY USES, EQUIPMENT, AND SYSTEMS ~~AND USES~~

[A] 107.1 General. The code official is authorized to issue a permit for temporary uses, equipment, and systems ~~and uses~~. Such permits shall be limited as to time of service, but shall not be permitted for more than 180 days. The code official is authorized to grant extensions for demonstrated cause.

[A] 107.2 Conformance. Temporary uses, equipment, and systems ~~and uses~~ shall conform to the ~~structural strength, fire safety, means of egress, accessibility, light, ventilation and sanitary~~ requirements of this code as necessary to ensure the public health, safety and general welfare.

[A] 107.3 Temporary service utilities. The code official is authorized to give permission to temporarily supply service utilities in accordance with Section 112 ~~before an installation has been fully completed and the final certificate of completion has been issued. The part covered by the temporary certificate shall comply with the requirements specified for temporary lighting, heat or power in the code.~~

[A] 107.4 Termination of approval. The code official is authorized to terminate such permit for temporary uses, equipment, or systems ~~or uses~~ and to order the ~~temporary equipment, systems or uses~~ same to be discontinued.

SECTION 112 SERVICE UTILITIES

[A] 112.1 Connection of service utilities. A person shall not make connections from a utility, source of energy, fuel, power, water system or sewer system to any building or system that is regulated by this code for which a permit is required until authorized by the code official.

[A] 112.2 Temporary connection. The code official shall have the authority to authorize the temporary connection of the building or system to the utility, source of energy, fuel, power, water system or sewer system for the purpose of testing plumbing systems or for use under a temporary approval.

[A] 112.3 Authority to disconnect service utilities. The code official shall have the authority to authorize disconnection of utility service to the building, structure or system regulated by this code and the referenced codes and standards in case of emergency where necessary to eliminate an immediate hazard to life or property or where such utility connection has been made without the approval required by Section 112.1 or 112.2. The code official shall notify the serving utility, and wherever possible the owner or the owner's authorized agent and occupant of the building, structure or service system, of the decision to disconnect prior to taking such action. If not notified prior to disconnecting, the owner, the owner's authorized agent or occupant of the building, structure or service system shall be notified in writing as soon as practical thereafter.

2021 International Private Sewage Disposal Code

Revise as follows:

SECTION 109 TEMPORARY USES, EQUIPMENT, AND SYSTEMS ~~AND USES~~

[A] 109.1 General. The *code official* is authorized to issue a permit for temporary uses, equipment, or systems. Such permits shall be limited as to time of service, but shall not be permitted for more than 180 days. The *code official* is authorized to grant extensions for demonstrated cause.

Revise as follows:

[A] 109.2 Conformance. Temporary uses, equipment and systems shall conform to the ~~structural strength, fire safety, means of egress, accessibility, light, ventilation and sanitary~~ requirements of this code as necessary to ensure the health, safety and general welfare.

[A] 109.3 Temporary utilities. The *code official* is authorized to give permission to temporarily supply service utilities in accordance with Section 110 ~~sources of energy, fuel, power, water systems or sewer systems before an installation has been fully completed and the final approval has been issued. The part covered by the temporary approval shall comply with the requirements specified for temporary lighting, heat or power in this code.~~

[A] 109.4 Termination of approval. The *code official* is authorized to terminate such permit for temporary uses, equipment or system and to

order the same to be discontinued.

SECTION 110 SERVICE UTILITIES

[A] 110.1 Connection of service utilities. No person shall make connections from a utility, source of energy, fuel or power to any building or system that is regulated by this code for which a permit is required until authorized by the *code official*.

[A] 110.2 Temporary connection. The *code official* shall have the authority to authorize the temporary connection of the building or system to the utility, source of energy, fuel, water system or sewer system for the purpose of testing systems or for use under a temporary approval.

[A] 110.3 Authority to disconnect service utilities. The *code official* shall have the authority to authorize disconnection of utility service to the building, structure or system regulated by this code and the referenced codes and standards in case of emergency where necessary to eliminate an immediate hazard to life or property or where such utility connection has been made without the approval required by Section 110.1 or 110.2. The *code official* shall notify the serving utility, and wherever possible the owner or the owner's authorized agent and occupant of the building, structure or service system of the decision to disconnect prior to taking such action. If not notified prior to disconnecting, the owner, the owner's authorized agent or occupant of the building, structure or service system shall be notified in writing, as soon as practical thereafter.

2021 International Swimming Pool and Spa Code

Add new text as follows:

SECTION 106 TEMPORARY STRUCTURES, EQUIPMENT AND SYSTEMS

106.1 General. The code official is authorized to issue a permit for temporary structures, equipment or systems. Such permits shall be limited as to time of service, but shall not be permitted for more than 180 days. The code official is authorized to grant extensions for demonstrated cause.

106.2 Conformance. Temporary structures, equipment and systems shall conform to the requirements of this code as necessary to ensure health, safety and general welfare.

106.3 Temporary service utilities. The code official is authorized to give permission to temporarily supply service utilities in accordance with Section 109.

106.4 Termination of approval. The code official is authorized to terminate such permit for a temporary structures, equipment, or system and to order the same to be discontinued.

SECTION 109 SERVICE UTILITIES

[A] 109.1 Connection of service utilities. A person shall not make connections from a utility, source of energy, fuel, power, water system or sewer system to any building or system that is regulated by this code for which a permit is required until authorized by the *code official*.

[A] 109.2 Temporary connection. The *code official* shall have the authority to authorize the temporary connection of the building or system to the utility, source of energy, fuel, power, water system or sewer system for the purpose of testing systems or for use under a temporary approval.

[A] 109.3 Authority to disconnect service utilities. The *code official* shall have the authority to authorize disconnection of utility service to the building, structure or system regulated by this code and the referenced codes and standards in case of emergency where necessary to eliminate an immediate hazard to life or property or where such utility connection has been made without the approval required by Section 108.2 or 108.3. The *code official* shall notify the serving utility, and wherever possible the owner or the owner's authorized agent and occupant of the building, structure or service system of the decision to disconnect prior to taking such action. If not notified prior to disconnecting, the owner, the owner's authorized agent or occupant of the building, structure or service system shall be notified in writing, as soon as practical thereafter.

2021 International Wildland-Urban Interface Code

Revise as follows:

SECTION 108 ~~TEMPORARY STRUCTURES AND USES~~, EQUIPMENT AND SYSTEMS

[A] 108.1 General. The *code official* is authorized to issue a permit for ~~temporary structures and temporary uses~~, equipment and systems. Such permits shall be limited as to time of service, but shall not be permitted for more than 180 days. The *code official* is authorized to grant extensions for demonstrated cause.

[A] 108.2 Conformance. ~~Temporary structures and uses~~, equipment and systems shall conform to the ~~structural strength, fire safety, means of~~

egress, accessibility, light, ventilation and sanitary requirements of this code as necessary to ensure the public health, safety and general welfare.

Add new text as follows:

108.3 Temporary service utilities. The code official is authorized to give permission to temporarily supply service utilities in accordance with Section 112.

Revise as follows:

[A] ~~108.3~~ 108.4 Termination of approval. The code official is authorized to terminate such permit for a temporary ~~structure or use~~ equipment or systems and to order the ~~temporary structure or use same~~ to be discontinued.

SECTION 112 SERVICE UTILITIES

[A] 112.1 Connection of service utilities. A person shall not make connections from a utility, source of energy, fuel, power, water system or sewer system to any building or system that is regulated by this code for which a permit is required until authorized by the code official.

[A] 112.2 Temporary connection. The code official shall have the authority to authorize the temporary connection of the building or system to the utility, source of energy, fuel, power, water system or sewer system for the purpose of testing systems or for use under a temporary approval.

[A] 112.3 Authority to disconnect service utilities. The code official shall have the authority to authorize disconnection of utility service to the building, structure or system regulated by this code and the referenced codes and standards in case of emergency where necessary to eliminate an immediate hazard to life or property or where such utility connection has been made without the approval required by Sections 112.1 and 112.2. The code official shall notify the serving utility and, where possible, the owner or the owner's authorized agent and the occupant of the building, structure or service system of the decision to disconnect prior to taking such action. If not notified prior to disconnection, the owner, the owner's authorized agent or the occupant of the building, structure or service system shall be notified in writing as soon as practical thereafter.

Reason: The purpose of this proposal is coordination between codes for the section on temporary structures. A version was proposed last cycle, ADM32-19. As requested by the development committee, the BCAC worked with FCAC and PMGCAC to develop this proposal.

This proposal modified the section for temporary facilities where it was already in the code. The committee felt that it was very important to add these safety options to the IFC as well, so this proposal adds this section to IFC and ISPSC. When looking for coordination, some of the codes did not include 'structure' and some did. The residential committee felt it was important to keep 'structures', so that is remaining in the proposed text.

Generally - The word use is moved to the front, and the lists are made the same throughout.

Temporary power - The allowances for temporary connection under inspection and testing address more than just utilities, so the language in this section should match. The phrase "certificate of completion" is not defined, so "approved" would be a better choice.

The section on Conformance includes a laundry list " structural strength, fire safety, means of egress, accessibility, light, ventilation and sanitary", that is not needed for the section and includes provisions that are not addressed in all of the codes (e.g. IPC does not address structural strength, means of egress, or light).

The BCAC is working from the philosophy that ICC is a family of codes, so administrative requirements should be consistent across books. Most administrative and enforcement matters are the same for any code. Those matters unique for a specific code remain unchanged. This is one of a series of proposals being submitted relating to technical, editorial and organizational changes proposed for the Administrative chapters (Chapter 1) in all of the I-Codes.

This proposal is submitted by the ICC Building Code Action Committee (BCAC), ICC Fire Code Action Committee (FCAC) and . ICC Plumbing/Mechanical/Gas Code Action Committee (PMGCAC).

BCAC was established by the ICC Board of Directors in July 2011 to pursue opportunities to improve and enhance assigned International Codes or portions thereof. In 2020 and 2021 the BCAC has held several virtual meetings open to any interested party. In addition, there were numerous virtual Working Group meetings for the current code development cycle, which included members of the committee as well as interested parties. Related documents and reports are posted on the BCAC website at <https://www.iccsafe.org/products-and-services/i-codes/code-development/cs/building-code-action-committee-bcac/>.

The FCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance assigned International Codes with regard to fire and life safety in new and existing buildings and facilities as well as the protection of life and property in wildland urban interface areas. In 2020 and 2021 the Fire-CAC held multiple virtual meetings that were open to any interested party. In addition, there were numerous virtual specific working group meetings that were also open to any interested parties, to develop, discuss and debate the proposed changes. Related documentation and reports are posted on the FCAC website at: <https://www.iccsafe.org/products-and-services/i-codes/code-development/cs/fire-code-action-committee-fcac/>

The PMG CAC was established by the ICC Board of Directors in July 2011 to pursue opportunities to improve and enhance assigned International

Codes or portions thereof. In 2020 and 2021, the PMGCAC has held several virtual meetings open to any interested party. Numerous interested parties attended the committee meetings and offered their input.

Cost Impact: The code change proposal will not increase or decrease the cost of construction. This change is only removing repeating requirements, therefore this revision is strictly editorial and will not have any changes to the construction requirements.

ADM41-22 Part I

Public Hearing Results

Committee Action:

As Submitted

Committee Reason: The committee stated that the reason for the approval was that it coordinates the requirements for temporary structures across the codes using the same language while making it appropriate for each code. (Vote: 13-0)

ADM41-22 Part I

ADM42-22

IPC: 109.3 (New)

Proposed Change as Submitted

Proponents: Mike Nugent, representing Building Code Action Committee (bcac@iccsafe.org); Joseph J. Summers, representing Plumbing, Mechanical and Fuel Gas Code Action Committee (pmgcac@iccsafe.org)

2021 International Plumbing Code

Add new text as follows:

109.3 Permit valuations. The applicant for a permit shall provide an estimated value of the work for which the permit is being issued at time of application. Such estimated valuations shall include the total value of work, including materials and labor, for which the permit is being issued, such as electrical, gas, mechanical, plumbing equipment and permanent systems. Where, in the opinion of the building official, the valuation is underestimated, the permit shall be denied, unless the applicant can show detailed estimates acceptable to the building official. The building official shall have the authority to adjust the final valuation for permit fees.

Reason: ADM27-19 was approved last cycle for the coordination of the Fees section in IMC, IPC, IPMC, IFGC, ISPSC. This section was left out of IPC by accident. There is another proposal from BCAC that has some adjustment to this section across codes. That revised language has been incorporated into this proposal.

This proposal is submitted by the ICC Plumbing/Mechanical/Gas Code Action Committee (PMGCAC) in coordination with the ICC Building Code Action Committee (BCAC).

The PMG CAC was established by the ICC Board of Directors in July 2011 to pursue opportunities to improve and enhance assigned International Codes or portions thereof. In 2020 and 2021, the PMGCAC has held several virtual meetings open to any interested party. Numerous interested parties attended the committee meetings and offered their input.

Cost Impact: The code change proposal will not increase or decrease the cost of construction
This is an administrative section and will not change the cost of construction.

ADM42-22

Public Hearing Results

Committee Action:

As Submitted

Committee Reason: The committee stated that the reason for the approval was to provide consistency with previous actions and consistency across the codes. (Vote: 12-0)

ADM42-22

Individual Consideration Agenda

Public Comment 1:

IPC: 109.3

Proponents: Mike Nugent, representing Building Code Action Committee (bcac@iccsafe.org) requests As Modified by Public Comment

Modify as follows:

2021 International Plumbing Code

[A] 109.3 Permit valuations. The applicant for a permit shall provide an estimated value of the work for which the permit is being issued at time of application. Such estimated valuations shall include the total value of work, including materials and labor, for ~~which the permit is being issued~~ work, such as electrical, gas, mechanical, plumbing equipment and permanent systems. ~~Where, in the opinion of the code official, the valuation is underestimated, the permit shall be denied, unless the applicant can show detailed estimates acceptable to the code official. The code official shall have the authority to adjust the final valuation for permit fees.~~ Where inconsistencies occur within the submitted valuation, the final building permit

valuation shall be determined by the building official. The building official shall notify the applicant in writing, stating the reasons why the valuation was altered.

Commenter's Reason: BCAC received comments after the spring hearings with concern about the possible mis-interpretation of the last two sentences. The public comment removes the last two sentences and replaces them with clarifying text. This proposed language provides the building official the authority to set accurate building valuations as currently regulated within the I codes. At the same time provides the applicant the documentation they are entitled in order to proceed with any potential appeals, the same as any other code section. This eliminates potential subjectivity from either party and ensures consistency in fees implemented by the locality.

Cost Impact: The net effect of the public comment and code change proposal will not increase or decrease the cost of construction. This is an editorial change that provides consistency between I-codes.

Public Comment# 3540

Public Comment 2:

IPC: 109.3

Proponents: Kota Wharton, representing City of Grove City (kwharton@grovecityohio.gov) requests As Modified by Public Comment

Modify as follows:

2021 International Plumbing Code

[A] 109.3 Permit valuations. The applicant for a permit shall provide an estimated value of the work for which the permit is being issued at time of application. Such estimated valuations shall include the total value of work, including materials and labor, for which the permit is being issued, such as electrical, gas, mechanical, plumbing equipment and permanent systems. Where, in the opinion of the building code official, ~~the valuation is underestimated the applicant underestimates the valuation of the work on the permit, and the applicant fails to provide detailed estimates acceptable to the code official, the permit shall be denied~~ the code official shall have the authority to deny the permit, unless the applicant can show detailed estimates acceptable to the code official. The building code official shall have the authority to adjust the final valuation for permit fees.

Commenter's Reason: This proposal addresses an issue brought up in ADM43-22 Part II, which applies here, where the committee had an issue with the restrictiveness of requiring the official to deny a permit that isn't estimated correctly. The solution is to give the official authority, which is done.

Cost Impact: The net effect of the public comment and code change proposal will not increase or decrease the cost of construction. No net change for construction costs.

Public Comment# 3541

ADM43-22 Part I

IBC: [A] 109.3; IEBC: [A] 108.3; IFC: 107.3; IFGC: 109.3; IMC: [A] 109.3; ISPC: [A] 108.3; IWUC: [A] 109.3; IGCC: 108.3

Proposed Change as Submitted

Proponents: Mike Nugent, representing Building Code Action Committee (bcac@iccsafe.org); Joseph J. Summers, representing Plumbing, Mechanical and Fuel Gas Code Action Committee (pmgac@iccsafe.org); Robert Marshall, representing FCAC (fcac@iccsafe.org)

THIS IS A 2 PART CODE CHANGE. PART I WILL BE HEARD BY THE ADMINISTRATIVE CODE COMMITTEE. PART II WILL BE HEARD BY THE IRC-BUILDING CODE COMMITTEE. SEE THE TENTATIVE HEARING ORDER FOR THESE COMMITTEES.

2021 International Building Code

Revise as follows:

[A] 109.3 Permit valuations. The applicant for a *permit* shall provide an estimated permit value of the work for which the permit is being issued at time of application. ~~Permit valuations shall reflect~~ Such estimated valuations shall include the total value of work, including materials and labor, for which the *permit* is being issued, such as electrical, gas, mechanical, plumbing equipment and permanent systems. ~~# Where~~, in the opinion of the *building official*, the valuation is underestimated ~~on the application~~, the *permit* shall be denied, unless the applicant can show detailed estimates ~~to meet the approval of acceptable to~~ acceptable to the *building official*. ~~Final building permit valuation shall be set by the building official.~~ The building official shall have the authority to adjust the final valuation for permit fees.

2021 International Existing Building Code

Revise as follows:

[A] 108.3 Permit valuations. The applicant for a *permit* shall provide an estimated permit value of the work for which the permit is being issued at time of application. ~~Permit valuations shall reflect~~ Such estimated valuations shall include the total value of work, including materials and labor, for which the *permit* is being issued, such as electrical, gas, mechanical, plumbing equipment and permanent systems. ~~# Where~~, in the opinion of the *code official*, the valuation is underestimated ~~on the application~~, the *permit* shall be denied unless the applicant can show detailed estimates ~~to meet the approval of acceptable to~~ acceptable to the *code official*. ~~Final building permit valuation shall be set by the code official.~~ The code official shall have the authority to adjust the final valuation for permit fees.

2021 International Fire Code

Revise as follows:

107.3 Permit valuations. The applicant for a *permit* shall provide an estimated permit value of the work for which the permit is being issued at time of application. ~~Permit valuations shall reflect~~ Such estimated valuations shall include the total value of work, including materials and labor, for which the *permit* is being issued, such as electrical, gas, mechanical, plumbing equipment and permanent systems. ~~# Where~~, in the opinion of the *fire code official*, the valuation is underestimated ~~on the application~~, the *permit* shall be denied unless the applicant can show detailed estimates ~~to meet the approval of acceptable to~~ acceptable to the *fire code official*. ~~Final permit valuation shall be set by the fire code official.~~ The fire code official shall have the authority to adjust the final valuation for permit fees.

2021 International Fuel Gas Code

Revise as follows:

109.3 Permit valuations. The applicant for a *permit* shall provide an estimated permit value of the work for which the permit is being issued at time of application. ~~Permit valuations shall reflect~~ Such estimated valuations shall include the total value of work, including materials and labor, for which the *permit* is being issued, such as electrical, gas, mechanical, plumbing equipment and permanent systems. ~~# Where~~, in the opinion of the *code official*, the valuation is underestimated ~~on the application~~, the *permit* shall be denied, unless the applicant can show detailed estimates ~~to meet the approval of acceptable to~~ acceptable to the *code official*. ~~Final building permit valuation shall be set by the code official.~~ The code official shall have the authority to adjust the final valuation for permit fees.

2021 International Mechanical Code

Revise as follows:

[A] 109.3 Permit valuations . The applicant for a *permit* shall provide an estimated permit value of the work for which the permit is being issued at time of application. ~~Permit valuations shall reflect~~ Such estimated valuations shall include the total value of work, including materials and labor, for which the *permit* is being issued, such as electrical, gas, mechanical, plumbing equipment and permanent systems. ~~# Where~~, in the opinion of the *code official*, the valuation is underestimated ~~on the application~~, the *permit* shall be denied, unless the applicant can show detailed estimates ~~to meet the approval of acceptable to~~ acceptable to the *code official*. ~~Final building permit valuation shall be set by the code official.~~ The code official shall have the authority to adjust the final valuation for permit fees.

2021 International Swimming Pool and Spa Code

Revise as follows:

[A] 108.3 Permit valuations. The applicant for a *permit* shall provide an estimated ~~permit value~~ of the work for which the permit is being issued at time of application. ~~Permit valuations shall reflect~~ Such estimated valuations shall include the total value of work, including materials and labor, for which the *permit* is being issued, such as electrical, gas, mechanical, plumbing equipment and permanent systems. ~~Where~~, in the opinion of the *code official*, the valuation is underestimated ~~on the application~~, the permit shall be denied, unless the applicant can show detailed estimates ~~to meet the approval of acceptable~~ to the code official. ~~Final building permit valuation shall be set by the code official.~~ The code official shall have the authority to adjust the final valuation for permit fees.

2021 International Wildland-Urban Interface Code

Revise as follows:

[A] 109.3 Permit valuations. The applicant for a permit shall provide an estimated ~~permit value~~ of the work for which the permit is being issued at time of application. ~~Permit valuations shall reflect~~ Such estimated valuations shall include the total value of work, including materials and labor, for which the permit is being issued. ~~Where~~, in the opinion of the applicable governing authority, the valuation is underestimated ~~on the application~~, the permit shall be denied, unless the applicant can show detailed estimates ~~to meet the approval of acceptable~~ to the applicable governing authority. ~~Final building permit valuation shall be set by the applicable governing authority.~~ The applicable governing authority shall have the authority to adjust the final valuation for permit fees.

2021 International Green Construction Code

Revise as follows:

108.3 Permit valuations. The applicant for a permit shall provide an estimated ~~permit value~~ of the work for which the permit is being issued at the time of application. ~~Permit valuations shall consist of~~ Such estimated valuations shall include the total value of work, including materials and labor, for which the permit is being issued, such as electrical, gas, mechanical, and plumbing equipment and permanent systems. ~~Where~~, in the opinion of the building official, the valuation is underestimated ~~on the application~~, the permit shall be denied unless the applicant can show detailed estimates ~~to meet the approval of acceptable~~ to the building official. ~~Final building permit valuation shall be set by the building official.~~ The building official shall have the authority to adjust the final valuation for permit fees.

Reason: The intent of this proposal is to coordinate the provisions for fees in the I-codes. Last cycle there were two different proposals to address consistency in the Fees section (ADM 27-19 and ADM 33-19) – the end result was coordination between the 2021 codes. for – IBC, IFC, IEBC, IMC, IPC, IPMC, IFGC, ISPSC, IWUIC and IZC.

The revisions to Section 109.3 is based on some concerns raised during discussion. The change to the first and second sentence is a clarification of application. The cost of the permit is the value of the work being performed, not the value of the permit. The current last sentence could be read to say the code official can arbitrarily set the permit valuation, or it could be read to say the code official had to calculate the valuation. The proposed language allows for the code official to make adjustments if warranted.

There is another code change to add this section to IPC. ADM27-19 was approved last cycle for the coordination of the Fees section in IMC, IPC, IPMC, IFGC, IPSPC. This section was left out of IPC by accident. This revised text has been submitted to be added to the IPC Section 109.3.

The BCAC is working from the philosophy that ICC is a family of codes, so administrative requirements should be consistent across books. Most administrative and enforcement matters are the same for any code. Those matters unique for a specific code remain unchanged. This is one of a series of proposals being submitted relating to technical, editorial and organizational changes proposed for the Administrative chapters (Chapter 1) in all of the I-Codes.

This proposal is submitted by the ICC Building Code Action Committee (BCAC), ICC Fire Code Action Committee (FCAC) and . ICC Plumbing/Mechanical/Gas Code Action Committee (PMGCAC).

BCAC was established by the ICC Board of Directors in July 2011 to pursue opportunities to improve and enhance assigned International Codes or portions thereof. In 2020 and 2021 the BCAC has held several virtual meetings open to any interested party. In addition, there were numerous virtual Working Group meetings for the current code development cycle, which included members of the committee as well as interested parties. Related documents and reports are posted on the BCAC website at <https://www.iccsafe.org/products-and-services/i-codes/code-development/cs/building-code-action-committee-bcac/>.

The FCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance assigned International Codes with regard to fire and life safety in new and existing buildings and facilities as well as the protection of life and property in wildland urban interface areas. In 2020 and 2021 the Fire-CAC held multiple virtual meetings that were open to any interested party. In addition, there were numerous virtual specific working group meetings that were also open to any interested parties, to develop, discuss and debate the proposed changes. Related documentation and reports are posted on the FCAC website at: <https://www.iccsafe.org/products-and-services/i-codes/code-development/cs/fire-code-action-committee-fcac/>.

The PMG CAC was established by the ICC Board of Directors in July 2011 to pursue opportunities to improve and enhance assigned International Codes or portions thereof. In 2020 and 2021, the PMGCAC has held several virtual meetings open to any interested party. Numerous interested parties attended the committee meetings and offered their input.

Cost Impact: The code change proposal will not increase or decrease the cost of construction. This is an editorial change that provides consistency between I-codes.

ADM43-22 Part I

Public Hearing Results

Committee Action:

As Submitted

Committee Reason: The committee stated that the reason for the approval was that the permit valuation needs to be in the hands of the building, code or fire code official and this change clarifies it by making it consistent across the other codes in a plain language correction. (Vote: 12-1)

ADM43-22 Part I

Individual Consideration Agenda

Public Comment 1:

IBC: [A] 109.3; IEBC: [A] 108.3; IFC: 107.3; IFGC: 109.3; IMC: [A] 109.3; ISPSC: [A] 108.3; IWUIC: [A] 109.3; IGCC: 108.3

Proponents: Mike Nugent, representing Building Code Action Committee (bcac@iccsafe.org) requests As Modified by Public Comment

Modify as follows:

2021 International Building Code

[A] 109.3 Permit valuations. The applicant for a *permit* shall provide an estimated value of the work for which the permit is being issued at time of application. Such estimated valuations shall include the total value of work, including materials and labor, for ~~which the permit is being issued, work~~ such as electrical, gas, mechanical, plumbing equipment and permanent systems. ~~Where, in the opinion of the building official, the valuation is underestimated, the permit shall be denied, unless the applicant can show detailed estimates acceptable to the building official. The building official shall have the authority to adjust the final valuation for permit fees.~~

Where inconsistencies occur within the submitted valuation, the final building permit valuation shall be determined by the building official. The building official shall notify the applicant in writing, stating the reasons why the valuation was altered.

2021 International Existing Building Code

[A] 108.3 Permit valuations. The applicant for a *permit* shall provide an estimated value of the work for which the permit is being issued at time of application. Such estimated valuations shall include the total value of work, including materials and labor, for ~~which the permit is being issued work~~, such as electrical, gas, mechanical, plumbing equipment and permanent systems. ~~Where, in the opinion of the code official, the valuation is underestimated, the permit shall be denied unless the applicant can show detailed estimates acceptable to the code official. The code official shall have the authority to adjust the final valuation for permit fees.~~ Where inconsistencies occur within the submitted valuation, the final building permit valuation shall be determined by the building official. The building official shall notify the applicant in writing, stating the reasons why the valuation was altered.

2021 International Fire Code

107.3 Permit valuations. The applicant for a *permit* shall provide an estimated value of the work for which the permit is being issued at time of application. Such estimated valuations shall include the total value of work, including materials and labor, for ~~which the permit is being issued work~~, such as electrical, gas, mechanical, plumbing equipment and permanent systems. ~~Where, in the opinion of the fire code official, the valuation is underestimated, the permit shall be denied unless the applicant can show detailed estimates acceptable to the fire code official. The fire code official shall have the authority to adjust the final valuation for permit fees.~~ Where inconsistencies occur within the submitted valuation, the final building permit valuation shall be determined by the building official. The building official shall notify the applicant in writing, stating the reasons why the

valuation was altered.

2021 International Fuel Gas Code

109.3 Permit valuations. The applicant for a *permit* shall provide an estimated value of the work for which the permit is being issued at time of application. Such estimated valuations shall include the total value of work, including materials and labor, for ~~which the permit is being issued work~~, such as electrical, gas, mechanical, plumbing equipment and permanent systems. ~~Where, in the opinion of the code official, the valuation is underestimated, the permit shall be denied, unless the applicant can show detailed estimates acceptable to the code official. The code official shall have the authority to adjust the final valuation for permit fees.~~ Where inconsistencies occur within the submitted valuation, the final building permit valuation shall be determined by the building official. The building official shall notify the applicant in writing, stating the reasons why the valuation was altered.

2021 International Mechanical Code

[A] 109.3 Permit valuations . The applicant for a *permit* shall provide an estimated value of the work for which the permit is being issued at time of application. Such estimated valuations shall include the total value of work, including materials and labor, for ~~which the permit is being issued work~~, such as electrical, gas, mechanical, plumbing equipment and permanent systems. ~~Where, in the opinion of the code official, the valuation is underestimated, the permit shall be denied, unless the applicant can show detailed estimates acceptable to the code official. The code official shall have the authority to adjust the final valuation for permit fees.~~ Where inconsistencies occur within the submitted valuation, the final building permit valuation shall be determined by the building official. The building official shall notify the applicant in writing, stating the reasons why the valuation was altered.

2021 International Swimming Pool and Spa Code

[A] 108.3 Permit valuations. The applicant for a *permit* shall provide an estimated value of the work for which the permit is being issued at time of application. Such estimated valuations shall include the total value of work, including materials and labor, for ~~which the permit is being issued work~~, such as electrical, gas, mechanical, plumbing equipment and permanent systems. ~~Where, in the opinion of the code official, the valuation is underestimated, the permit shall be denied, unless the applicant can show detailed estimates acceptable to the code official. The code official shall have the authority to adjust the final valuation for permit fees.~~ Where inconsistencies occur within the submitted valuation, the final building permit valuation shall be determined by the building official. The building official shall notify the applicant in writing, stating the reasons why the valuation was altered.

2021 International Wildland-Urban Interface Code

[A] 109.3 Permit valuations. The applicant for a permit shall provide an estimated value of the work for which the permit is being issued at time of application. Such estimated valuations shall include the total value of work, including materials and labor, for ~~which the permit is being issued work~~. ~~Where, in the opinion of the applicable governing authority, the valuation is underestimated, the permit shall be denied, unless the applicant can show detailed estimates acceptable to the applicable governing authority. The applicable governing authority shall have the authority to adjust the final valuation for permit fees.~~ Where inconsistencies occur within the submitted valuation, the final building permit valuation shall be determined by the building official. The building official shall notify the applicant in writing, stating the reasons why the valuation was altered.

2021 International Green Construction Code

108.3 Permit valuations. The applicant for a permit shall provide an estimated value of the work for which the permit is being issued at the time of application. Such estimated valuations shall include the total value of work, including materials and labor, for ~~which the permit is being issued work~~, such as electrical, gas, mechanical, and plumbing equipment and permanent systems. ~~Where, in the opinion of the building official, the valuation is underestimated, the permit shall be denied unless the applicant can show detailed estimates acceptable to the building official. The building official shall have the authority to adjust the final valuation for permit fees.~~ Where inconsistencies occur within the submitted valuation, the final building permit valuation shall be determined by the building official. The building official shall notify the applicant in writing, stating the reasons why the valuation was altered.

Commenter's Reason: BCAC received comments after the spring hearings with concern about the possible mis-interpretation of the last two sentences. The public comment removes the last two sentences and replaces them with clarifying text.

This proposed language provides the building official the authority to set accurate building valuations as currently regulated within the I codes. At the same time provides the applicant the documentation they are entitled in order to proceed with any potential appeals, the same as any other code section. This eliminates potential subjectivity from either party and ensures consistency in fees implemented by the locality.

Cost Impact: The net effect of the public comment and code change proposal will not increase or decrease the cost of construction. This is an editorial change that provides consistency between I-codes.

Public Comment 2:

IBC: [A] 109.3; IEBC: [A] 108.3; IFC: 107.3; IFGC: 109.3; IMC: [A] 109.3; ISPSC: [A] 108.3; IWUIC: [A] 109.3; IGCC: 108.3

Proponents: Kota Wharton, representing City of Grove City (kwharton@grovecityohio.gov) requests As Modified by Public Comment

Modify as follows:

2021 International Building Code

[A] 109.3 **Permit valuations.** The applicant for a *permit* shall provide an estimated value of the work for which the permit is being issued at time of application. Such estimated valuations shall include the total value of work, including materials and labor, for which the *permit* is being issued, such as electrical, gas, mechanical, plumbing equipment and permanent systems. Where, in the opinion of the *building official*, ~~the valuation is underestimated~~ the applicant underestimates the valuation of the work on the application, and the applicant fails to provide detailed estimates acceptable to the building official, the permit shall be denied ~~the building official shall have the authority to deny the permit, unless the applicant can show detailed estimates acceptable to the building official.~~ The building official shall have the authority to adjust the final valuation for permit fees.

2021 International Existing Building Code

[A] 108.3 **Permit valuations.** The applicant for a *permit* shall provide an estimated value of the work for which the permit is being issued at time of application. Such estimated valuations shall include the total value of work, including materials and labor, for which the *permit* is being issued, such as electrical, gas, mechanical, plumbing equipment and permanent systems. Where, in the opinion of the *code official*, ~~the valuation is underestimated~~ the applicant under estimates the valuation of the work on the application, and the applicant fails to provide detailed estimates acceptable to the code official, the permit shall be denied ~~the code official shall have the authority to deny the permit, unless the applicant can show detailed estimates acceptable to the code official.~~ The code official shall have the authority to adjust the final valuation for permit fees.

2021 International Fire Code

107.3 **Permit valuations.** The applicant for a *permit* shall provide an estimated value of the work for which the permit is being issued at time of application. Such estimated valuations shall include the total value of work, including materials and labor, for which the *permit* is being issued, such as electrical, gas, mechanical, plumbing equipment and permanent systems. Where, in the opinion of the *fire code official*, ~~the valuation is underestimated~~ the applicant underestimates the valuation of the work on the application, and the applicant fails to provide detailed estimates acceptable to the fire code official, the permit shall be denied ~~the fire code official shall have the authority to deny the permit, unless the applicant can show detailed estimates acceptable to the fire code official.~~ The fire code official shall have the authority to adjust the final valuation for permit fees.

2021 International Fuel Gas Code

109.3 **Permit valuations.** The applicant for a *permit* shall provide an estimated value of the work for which the permit is being issued at time of application. Such estimated valuations shall include the total value of work, including materials and labor, for which the *permit* is being issued, such as electrical, gas, mechanical, plumbing equipment and permanent systems. Where, in the opinion of the *code official*, ~~the valuation is underestimated~~ the applicant underestimates the valuation of the work on the application, and the applicant fails to provide detailed estimates acceptable to the code official, the permit shall be denied ~~the code official shall have the authority to deny the permit, unless the applicant can show detailed estimates acceptable to the code official.~~ The code official shall have the authority to adjust the final valuation for permit fees.

2021 International Mechanical Code

[A] 109.3 **Permit valuations** . The applicant for a *permit* shall provide an estimated value of the work for which the permit is being issued at time of application. Such estimated valuations shall include the total value of work, including materials and labor, for which the *permit* is being issued, such as electrical, gas, mechanical, plumbing equipment and permanent systems. Where, in the opinion of the *code official*, ~~the valuation is underestimated~~ the applicant underestimates the valuation of the work on the permit, and the applicant fails to provide detailed estimates acceptable to the code official, the permit shall be denied ~~the code official shall have the authority to deny the permit, unless the applicant can show detailed estimates acceptable to the code official.~~ The code official shall have the authority to adjust the final valuation for permit fees.

2021 International Swimming Pool and Spa Code

[A] 108.3 **Permit valuations.** The applicant for a *permit* shall provide an estimated value of the work for which the permit is being issued at time of application. Such estimated valuations shall include the total value of work, including materials and labor, for which the *permit* is being issued, such as electrical, gas, mechanical, plumbing equipment and permanent systems. Where, in the opinion of the *code official*, ~~the valuation is underestimated~~ the applicant underestimates the valuation of the work on the application, and the applicant fails to provide detailed estimates acceptable to the code official, the permit shall be denied ~~the code official shall have the authority to deny the permit, unless the applicant can show detailed estimates acceptable to the code official.~~ The code official shall have the authority to adjust the final valuation for permit fees.

2021 International Wildland-Urban Interface Code

[A] 109.3 Permit valuations. The applicant for a permit shall provide an estimated value of the work for which the permit is being issued at time of application. Such estimated valuations shall include the total value of work, including materials and labor, for which the permit is being issued, such as electrical, gas, mechanical, plumbing equipment and permanent systems. Where, in the opinion of the applicable governing authority, ~~the valuation is underestimated~~ the applicant underestimates the valuation of the work on the application, and the applicant fails to provide detailed estimates acceptable to the applicable governing body, ~~the permit shall be denied~~ the applicable governing body shall have the authority to deny the permit, unless the applicant can show detailed estimates acceptable to the applicable governing authority. The applicable governing authority shall have the authority to adjust the final valuation for permit fees.

2021 International Green Construction Code

108.3 Permit valuations. The applicant for a permit shall provide an estimated value of the work for which the permit is being issued at the time of application. Such estimated valuations shall include the total value of work, including materials and labor, for which the permit is being issued, such as electrical, gas, mechanical, and plumbing equipment and permanent systems. Where, in the opinion of the building official, ~~the valuation is underestimated~~ the applicant underestimates the valuation of the work on the application, and the applicant fails to provide detailed estimates acceptable to the *building official*, ~~the permit shall be denied unless the applicant can show detailed estimates acceptable to the building official~~ the code official shall have the authority to deny the permit. The building official shall have the authority to adjust the final valuation for permit fees.

Commenter's Reason: This proposal addresses an issue brought up in ADM43-22 Part II, which applies here, where the committee had an issue with the restrictiveness of requiring the official to deny a permit that isn't estimated correctly. The solution is to give the official authority, which is done.

Cost Impact: The net effect of the public comment and code change proposal will not increase or decrease the cost of construction
No net change for construction costs.

ADM43-22 Part II

IRC: R108.3, R108.6, R108.4, R108.5

Proposed Change as Submitted

Proponents: Mike Nugent, representing Building Code Action Committee (bcac@iccsafe.org); Joseph J. Summers, representing Plumbing, Mechanical and Fuel Gas Code Action Committee (pmgcac@iccsafe.org); Robert Marshall, representing FCAC (fcac@iccsafe.org)

2021 International Residential Code

Revise as follows:

~~R108.6~~ ~~Building permit~~ ~~Permit valuations.~~ ~~The applicant for a permit shall provide an estimated value of the work for which the permit is being issued at time of application. Such estimated Building permit valuations shall include the total value of work, including materials and labor, for which the permit is being issued, such as electrical, gas, mechanical, plumbing equipment and permanent systems, including materials and labor. Where, in the opinion of the building official, the valuation is underestimated, the permit shall be denied, unless the applicant can show detailed estimates acceptable to the building official. The building official shall have the authority to adjust the final valuation for permit fees.~~

~~R108.6~~ ~~R108.4~~ ~~Work commencing before permit issuance.~~ Any person who commences work requiring a permit on a building, structure, electrical, gas, mechanical or plumbing system before obtaining the necessary permits shall be subject to a fee established by the applicable governing authority that shall be in addition to the required permit fees.

~~R108.4~~ ~~R108.5~~ ~~Related fees.~~ The payment of the fee for the construction, alteration, removal or demolition for work done in connection to or concurrently with the work authorized by a building permit shall not relieve the applicant or holder of the permit from the payment of other fees that are prescribed by law.

~~R108.5~~ ~~R108.6~~ ~~Refunds.~~ The building official is authorized to establish a refund policy.

Reason: The intent of this proposal is to coordinate the provisions for fees in the I-codes. Last cycle there were two different proposals to address consistency in the Fees section (ADM 27-19 and ADM 33-19) – the end result was coordination between the 2021 codes. for – IBC, IFC, IEBC, IMC, IPC, IPMC, IFGC, ISPC, IWUIC and IZC.

The revisions to Section 109.3 is based on some concerns raised during discussion. The change to the first and second sentence is a clarification of application. The cost of the permit is the value of the work being performed, not the value of the permit. The current last sentence could be read to say the code official can arbitrarily set the permit valuation, or it could be read to say the code official had to calculate the valuation. The proposed language allows for the code official to make adjustments if warranted.

There is another code change to add this section to IPC. ADM27-19 was approved last cycle for the coordination of the Fees section in IMC, IPC, IPMC, IFGC, ISPC. This section was left out of IPC by accident. This revised text has been submitted to be added to the IPC Section 109.3.

The BCAC is working from the philosophy that ICC is a family of codes, so administrative requirements should be consistent across books. Most administrative and enforcement matters are the same for any code. Those matters unique for a specific code remain unchanged. This is one of a series of proposals being submitted relating to technical, editorial and organizational changes proposed for the Administrative chapters (Chapter 1) in all of the I-Codes.

This proposal is submitted by the ICC Building Code Action Committee (BCAC), ICC Fire Code Action Committee (FCAC) and . ICC Plumbing/Mechanical/Gas Code Action Committee (PMGCAC).

BCAC was established by the ICC Board of Directors in July 2011 to pursue opportunities to improve and enhance assigned International Codes or portions thereof. In 2020 and 2021 the BCAC has held several virtual meetings open to any interested party. In addition, there were numerous virtual Working Group meetings for the current code development cycle, which included members of the committee as well as interested parties. Related documents and reports are posted on the BCAC website at <https://www.iccsafe.org/products-and-services/i-codes/code-development/cs/building-code-action-committee-bcac/>.

The FCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance assigned International Codes with regard to fire and life safety in new and existing buildings and facilities as well as the protection of life and property in wildland urban interface areas. In 2020 and 2021 the Fire-CAC held multiple virtual meetings that were open to any interested party. In addition, there were numerous virtual specific working group meetings that were also open to any interested parties, to develop, discuss and debate the proposed changes. Related documentation and reports are posted on the FCAC website at: <https://www.iccsafe.org/products-and-services/i-codes/code-development/cs/fire-code-action-committee-fcac/>.

The PMG CAC was established by the ICC Board of Directors in July 2011 to pursue opportunities to improve and enhance assigned International Codes or portions thereof. In 2020 and 2021, the PMGCAC has held several virtual meetings open to any interested party. Numerous interested parties attended the committee meetings and offered their input.

Cost Impact: The code change proposal will not increase or decrease the cost of construction
This is an editorial change that provides consistency between I-codes.

ADM43-22 Part II

Public Hearing Results

Committee Action:

Disapproved

Committee Reason: The proposal was disapprove because of concerns over the revisions to the last sentence in Section R108.3. Some of the committee members felt that "shall be denied" is too restrictive and "in the opinion" was too open for interpretation. The valuation did not include the significant rise in construction materials during the pandemic, but the existing intent is about valuation, not cost. (Vote: 7-3)

ADM43-22 Part II

Individual Consideration Agenda

Public Comment 1:

IRC: R108.3

Proponents: Mike Nugent, representing Building Code Action Committee (bcac@iccsafe.org) requests As Modified by Public Comment

Modify as follows:

2021 International Residential Code

R108.3 Permit valuations. The applicant for a *permit* shall provide an estimated value of the work for which the permit is being issued at time of application. Such estimated valuations shall include the total value of work, including materials and labor, ~~for which the permit is being issued work,~~ such as electrical, gas, mechanical, plumbing equipment and permanent systems. ~~Where, in the opinion of the building official, the valuation is underestimated, the permit shall be denied, unless the applicant can show detailed estimates acceptable to the building official. The building official shall have the authority to adjust the final valuation for permit fees. Where inconsistencies occur within the submitted valuation, the final building permit valuation shall be determined by the building official. The building official shall notify the applicant in writing, stating the reasons why the valuation was altered.~~

Commenter's Reason: The IRC code development committee was concerned about the last two sentences of Section R108.3 of the original proposal. These sentences have been removed. This proposed language provides the BO the authority to set accurate building valuations as currently regulated within the I codes. At the same time provides the applicant the documentation they are entitled in order to proceed with any potential appeals, the same as any other code section. This eliminates potential subjectivity from either party and ensures consistency in fees implemented by the locality.

Cost Impact: The net effect of the public comment and code change proposal will not increase or decrease the cost of construction
This is an editorial change that provides consistency between I-codes.

Public Comment# 3022

Public Comment 2:

IRC: R108.3, R108.4, R108.5, R108.6

Proponents: Kota Wharton, representing City of Grove City (kwharton@grovecityohio.gov) requests As Modified by Public Comment

Modify as follows:

2021 International Residential Code

R108.3 Permit valuations. The applicant for a *permit* shall provide an estimated value of the work for which the permit is being issued at time of application. Such estimated valuations shall include the total value of work, including materials and labor, for which the *permit* is being issued, such

as electrical, gas, mechanical, plumbing equipment and permanent systems. Where, in the opinion of the *building official*, ~~the valuation is underestimated, the applicant underestimates the valuation of the work on the application, and the applicant fails to provide detailed estimates acceptable to the *building official*, the permit shall be denied, the *building official* shall have the authority to deny the permit, unless the applicant can show detailed estimates acceptable to the *building official*.~~ The building official shall have the authority to adjust the final valuation for permit fees.

R108.4 Work commencing before permit issuance. Any *person* who commences work requiring a *permit* on a building, structure, electrical, gas, mechanical or plumbing system before obtaining the necessary *permits* shall be subject to a fee established by the applicable governing authority that shall be in addition to the required *permit* fees.

R108.5 Related fees. The payment of the fee for the construction, *alteration*, removal or demolition for work done in connection to or concurrently with the work authorized by a building *permit* shall not relieve the applicant or holder of the *permit* from the payment of other fees that are prescribed by law.

R108.6 Refunds. The *building official* is authorized to establish a refund policy.

Commenter's Reason: This modification coordinates changes proposed in ADM43-22-WHARTON-4 and addresses the issue where the committee had an issue with the restrictiveness of requiring the official to deny a permit that isn't estimated correctly. The solution is to give the official authority, which is done.

Cost Impact: The net effect of the public comment and code change proposal will not increase or decrease the cost of construction. No net change for construction costs. Coordination and clarity only.

ADM44-22

IFGC: SECTION 110, 110.3, SECTION 115, [A] 115.6.2; IMC: SECTION 112, [A] 112.3, SECTION 115, [A] 115.6.2; IPC: SECTION 112, [A] 112.3, SECTION 115, [A] 115.6.2; IPSDC: SECTION 110, [A] 110.3, SECTION 114, [A] 114.6.2; ISPSC: SECTION 109, [A] 109.3, SECTION 113, [A] 113.6.2

Proposed Change as Submitted

Proponents: Mike Nugent, representing Building Code Action Committee (bcac@iccsafe.org)

2021 International Fuel Gas Code

SECTION 110 SERVICE UTILITIES

Revise as follows:

[A] 110.3 Authority to disconnect service utilities. The *code official* shall have the authority to authorize disconnection of utility service to the building, structure or system regulated by this code and the referenced codes and standards in case of emergency where necessary to eliminate an immediate hazard to life or property or where such utility connection has been made without the approval required by Section 112.1 or 112.2. The *code official* shall notify the serving utility, and wherever possible the owner or the owner's authorized agent and occupant of the building, structure or service system, of the decision to disconnect prior to taking such action. If not notified prior to disconnecting, the owner, the owner's authorized agent or occupant of the building, structure or service system shall be notified in writing, as soon as practical thereafter.

SECTION 115 VIOLATIONS

Revise as follows:

[A] 115.6.2 Authority to disconnect service utilities. The *code official* shall have the authority to require disconnection of utility service in accordance with Section 110.3 to the building, structure or system regulated by the technical codes in case of emergency where necessary to eliminate an immediate hazard to life or property. The *code official* shall notify the serving utility and, where possible, the owner or the owner's authorized agent and occupant of the building, structure or service system of the decision to disconnect prior to taking such action. If not notified prior to disconnection, the owner or occupant of the building, structure or service system shall be notified in writing, as soon as practicable thereafter.

2021 International Mechanical Code

SECTION 112 SERVICE UTILITIES

[A] 112.3 Authority to disconnect service utilities. The code official shall have the authority to authorize disconnection of utility service to the building, structure or system regulated by this code and the referenced codes and standards in case of emergency where necessary to eliminate an immediate hazard to life or property or where such utility connection has been made without the approval required by Section 112.1 or 112.2. The code official shall notify the serving utility, and wherever possible the owner or the owner's authorized agent and occupant of the building, structure or service system, of the decision to disconnect prior to taking such action. If not notified prior to disconnecting, the owner, the owner's authorized agent or occupant of the building, structure or service system shall be notified in writing as soon as practical thereafter.

SECTION 115 VIOLATIONS

Revise as follows:

[A] 115.6.2 Authority to order ~~disconnection of energy sources~~ disconnect service utilities. The code official shall have the authority to ~~order authorize disconnection of utility services in accordance with Section 112.3 energy sources supplied to a building, structure or mechanical system regulated by this code, where it is determined that the mechanical system or any portion thereof has become hazardous or unsafe. Written notice of such order to disconnect service and the causes therefor shall be given within 24 hours to the owner, the owner's authorized agent and occupant of such building, structure or premises, provided, however, that in cases of immediate danger to life or property, such disconnection shall be made immediately without such notice. Where energy sources are provided by a public utility, the code official shall immediately notify the serving utility in writing of the issuance of such order to disconnect.~~

2021 International Plumbing Code

SECTION 112 SERVICE UTILITIES

[A] 112.3 Authority to disconnect service utilities. The code official shall have the authority to authorize disconnection of utility service to the building, structure or system regulated by this code and the referenced codes and standards in case of emergency where necessary to eliminate an immediate hazard to life or property or where such utility connection has been made without the approval required by Section 112.1 or 112.2. The code official shall notify the serving utility, and wherever possible the owner or the owner's authorized agent and occupant of the building, structure or service system, of the decision to disconnect prior to taking such action. If not notified prior to disconnecting, the owner, the owner's authorized agent or occupant of the building, structure or service system shall be notified in writing as soon as practical thereafter.

SECTION 115 VIOLATIONS

Revise as follows:

[A] 115.6.2 Authority to disconnect service utilities. The code official shall have the authority to authorize disconnection of utility service in accordance with Section 112.3 to the building, structure or system regulated by the technical codes in case of an emergency, where necessary, to eliminate an immediate danger to life or property. Where possible, the owner or the owner's authorized agent and occupant of the building, structure or service system shall be notified of the decision to disconnect utility service prior to taking such action. If not notified prior to disconnecting, the owner, the owner's authorized agent or occupant of the building, structure or service systems shall be notified in writing, as soon as practical thereafter.

2021 International Private Sewage Disposal Code

SECTION 110 SERVICE UTILITIES

[A] 110.3 Authority to disconnect service utilities. The *code official* shall have the authority to authorize disconnection of utility service to the building, structure or system regulated by this code and the referenced codes and standards in case of emergency where necessary to eliminate an immediate hazard to life or property or where such utility connection has been made without the approval required by Section 110.1 or 110.2. The *code official* shall notify the serving utility, and wherever possible the owner or the owner's authorized agent and occupant of the building, structure or service system of the decision to disconnect prior to taking such action. If not notified prior to disconnecting, the owner, the owner's authorized agent or occupant of the building, structure or service system shall be notified in writing, as soon as practical thereafter.

SECTION 114 VIOLATIONS

Revise as follows:

[A] 114.6.2 Authority to disconnect service utilities. The *code official* shall have the authority to authorize disconnection of utility service in accordance with Section 110.3 to the building, structure or system regulated by the technical codes in case of emergency, where necessary, to eliminate an immediate danger to life or property. Where possible, the owner, the owners's authorized agent and occupant of the building, structure or service system shall be notified of the decision to disconnect utility service prior to taking such action. If not notified prior to disconnecting, the owner or occupant of the building, structure or service systems shall be notified in writing as soon as is practical thereafter.

2021 International Swimming Pool and Spa Code

SECTION 109 SERVICE UTILITIES

[A] 109.3 Authority to disconnect service utilities. The *code official* shall have the authority to authorize disconnection of utility service to the building, structure or system regulated by this code and the referenced codes and standards in case of emergency where necessary to eliminate an immediate hazard to life or property or where such utility connection has been made without the approval required by Section 108.2 or 108.3. The *code official* shall notify the serving utility, and wherever possible the owner or the owner's authorized agent and occupant of the building, structure or service system of the decision to disconnect prior to taking such action. If not notified prior to disconnecting, the owner, the owner's authorized agent or occupant of the building, structure or service system shall be notified in writing, as soon as practical thereafter.

SECTION 113 VIOLATIONS

Revise as follows:

[A] 113.6.2 Authority to disconnect service utilities. The *code official* shall have the authority to authorize disconnection of utility service in accordance with Section 109.3 to the pool or spa regulated by the technical codes in case of an emergency, where necessary, to eliminate an immediate danger to life or property. Where possible, the owner or the owner's authorized agent and occupant of the building where the pool or spa is located shall be notified of the decision to disconnect utility service prior to taking such action. If not notified prior to disconnecting, the owner, the owner's authorized agent or the occupant of the building shall be notified in writing, as soon as practical thereafter.

Reason: ADM 39-19 was a coordinating proposal for Service Utilities. There was an inadvertent duplication of language in the section on Violations. This proposal is intended to editorially remove the repeated sections. A reference to the same section in Service Utilities is provided instead.

This proposal is submitted by the Plumbing/Mechanical/Gas Code Action Committee (PMGCAC) working with the Building Code Action Committee (BCAC).

The PMG CAC was established by the ICC Board of Directors in July 2011 to pursue opportunities to improve and enhance assigned International Codes or portions thereof. In 2020 and 2021, the PMGCAC has held several virtual meetings open to any interested party. Numerous interested parties attended the committee meetings and offered their input.

Cost Impact: The code change proposal will not increase or decrease the cost of construction. These are administration requirements, so there will be no change in construction requirements.

ADM44-22

Public Hearing Results

Committee Action:

As Submitted

Committee Reason: The committee stated that the reason for approval was that it provides good clarification to the code. (Vote: 13-0)

ADM44-22

Individual Consideration Agenda

Public Comment 1:

IFGC: SECTION 115, [A] 115.6.2; IMC: SECTION 115, [A] 115.6.2; IPC: SECTION 115, [A] 115.6.2; IPSC: SECTION 114, [A] 114.6.2; ISPC: SECTION 113, [A] 113.6.2

Proponents: Robert Frances, representing Self (bfrances@howardcountymd.gov) requests As Modified by Public Comment

Modify as follows:

2021 International Fuel Gas Code

SECTION 115 VIOLATIONS

[A] 115.6.2 Authority to disconnect service utilities. The *code official* shall have the authority to require disconnection of utility service in accordance with Section 110.3.

2021 International Mechanical Code

SECTION 115 VIOLATIONS

[A] 115.6.2 Authority to order disconnect service utilities. The *code official* shall have the authority to authorize disconnection of utility services in accordance with Section 112.3.

2021 International Plumbing Code

SECTION 115 VIOLATIONS

~~[A] 115.6.2 Authority to disconnect service utilities. The code official shall have the authority to authorize disconnection of utility service in accordance with Section 112.3.~~

2021 International Private Sewage Disposal Code

SECTION 114 VIOLATIONS

~~[A] 114.6.2 Authority to disconnect service utilities. The code official shall have the authority to authorize disconnection of utility service in accordance with Section 110.3.~~

2021 International Swimming Pool and Spa Code

SECTION 113 VIOLATIONS

~~[A] 113.6.2 Authority to disconnect service utilities. The code official shall have the authority to authorize disconnection of utility service in accordance with Section 109.3.~~

Commenter's Reason: Each of these sections is stating that the code official has the authority to disconnect service utilities as authorized by an earlier "service utilities" section. However, the earlier "service utilities" section already states that the code official has the authority to disconnect service utilities. Therefore, each of these sections that were significantly changed to remove duplicated language could have been completely deleted; this is what my proposal is intending to do.

Bibliography: N/A

Cost Impact: The net effect of the public comment and code change proposal will not increase or decrease the cost of construction. This will not have any impact on the cost of construction.

ADM48-22 Part I

IBC: SECTION 113, [A] 113.1, [A] 113.2, [A] 113.3, [A] 113.4; IEBC: SECTION 112, [A] 112.1, [A] 112.2, [A] 112.3, [A] 112.4; IFC: SECTION 111, [A] 111.1, [A] 111.2, [A] 111.3, [A] 111.4; IFGC: SECTION 113, 113.1, [A] 113.2, 113.3, 113.4; IMC: SECTION 114, [A] 114.1, [A] 114.2, [A] 114.3, [A] 114.4; IPC: SECTION 114, [A] 114.1, [A] 114.2, [A] 114.3, [A] 114.4; IPMC: SECTION 107, 107.1, [A] 107.2, 107.3, 107.4; IPSDC: SECTION 112, [A] 112.1, 112.2, [A] 112.3, [A] 112.4; ISPSC: SECTION 111, [A] 111.1, [A] 111.2, [A] 111.3, [A] 111.4; IWUIC: SECTION 113, [A] 113.1, [A] 113.2, [A] 113.3, [A] 113.4; IGCC: SECTION 111, 111.1, 111.2, 111.3, 111.4

Proposed Change as Submitted

Proponents: Mike Nugent, representing Building Code Action Committee (bcac@iccsafe.org); Joseph J. Summers, representing Plumbing, Mechanical and Fuel Gas Code Action Committee (pmgac@iccsafe.org); Robert Marshall, representing FCAC (fcac@iccsafe.org)

THIS IS A 2 PART CODE CHANGE. PART I WILL BE HEARD BY THE ADMINISTRATIVE CODE COMMITTEE. PART II WILL BE HEARD BY THE IRC-BUILDING CODE COMMITTEE. SEE THE TENTATIVE HEARING ORDER FOR THESE COMMITTEES.

2021 International Building Code

SECTION 113 MEANS OF APPEALS

[A] 113.1 **General.** In order to hear and decide appeals of orders, decisions or determinations made by the *building official* relative to the application and interpretation of this code, there shall be and is hereby created a board of appeals. The board of appeals shall be appointed by the applicable governing authority and shall hold office at its pleasure. The board shall adopt rules of procedure for conducting its business and shall render all decisions and findings in writing to the appellant with a duplicate copy to the *building official*.

Revise as follows:

[A] 113.2 **Limitations on authority.** An application for appeal shall be based on a claim that the true intent of this code or the rules legally adopted thereunder have been incorrectly interpreted, the provisions of this code do not fully apply or an equivalent or better form of construction is proposed. The board shall not have authority to waive requirements of this code or interpret the administration of this code.

[A] 113.3 **Qualifications.** The board of appeals shall consist of members who are qualified by experience and training to ~~pass on~~ matters pertaining to ~~building construction~~ provisions of this code and are not employees of the jurisdiction.

[A] 113.4 **Administration .** The *building official* shall take ~~immediate~~ action in accordance with the decision of the board.

2021 International Existing Building Code

SECTION 112 MEANS OF APPEALS

[A] 112.1 **General.** In order to hear and decide appeals of orders, decisions or determinations made by the *code official* relative to the application and interpretation of this code, there shall be and is hereby created a board of appeals. The board of appeals shall be appointed by the applicable governing authority and shall hold office at its pleasure. The board shall adopt rules of procedure for conducting its business and shall render all decisions and findings in writing to the appellant with a duplicate copy to the *code official*.

Revise as follows:

[A] 112.2 **Limitations on authority.** An application for appeal shall be based on a claim that the true intent of this code or the rules legally adopted thereunder have been incorrectly interpreted, the provisions of this code do not fully apply or an equivalent or better form of construction is proposed. The board shall not have authority to waive requirements of this code or interpret the administration of this code.

[A] 112.3 **Qualifications.** The board of appeals shall consist of members who are qualified by experience and training to pass on matters pertaining to ~~building construction~~ the provisions of this code and are not employees of the jurisdiction.

[A] 112.4 **Administration.** The *code official* shall take ~~immediate~~ action in accordance with the decision of the board.

2021 International Fire Code

SECTION 111 MEANS OF APPEALS

Revise as follows:

[A] 111.1 ~~Board of appeals established~~ **General.** In order to hear and decide appeals of orders, decisions or determinations made by the *fire*

code official relative to the application and interpretation of this code, there shall be and is hereby created a board of appeals. The board of appeals shall be appointed by the applicable governing authority and shall hold office at its pleasure. The board shall adopt rules of procedure for conducting its business and shall render all decisions and findings in writing to the appellant with a duplicate copy to the *fire code official*.

[A] 111.2 Limitations on authority. An application for appeal shall be based on a claim that the true intent of this code or the rules legally adopted thereunder have been incorrectly interpreted, the provisions of this code do not fully apply or an equivalent or better form of construction is proposed. The board shall not have authority to waive requirements of this code ~~or interpret the administration of this code~~.

[A] 111.3 Qualifications. The board of appeals shall consist of members who are qualified by experience and training ~~to pass on matters pertaining to hazards of fire, explosions, hazardous conditions or fire protection systems,~~ the provisions of this code and are not employees of the jurisdiction.

[A] 111.4 Administration. The *fire code official* shall take ~~immediate~~ action in accordance with the decision of the board.

2021 International Fuel Gas Code

Revise as follows:

SECTION 113 MEANS OF APPEALS

113.1 General. In order to hear and decide appeals of orders, decisions or determinations made by the *code official* relative to the application and interpretation of this code, there shall be and is hereby created a board of appeals. The board of appeals shall be appointed by the applicable governing authority and shall hold office at its pleasure. The board shall adopt rules of procedure for conducting its business and shall render all decisions and findings in writing to the appellant with a duplicate copy to the *code official*.

Revise as follows:

[A] 113.2 Limitations on authority. An application for appeal shall be based on a claim that the true intent of this code or the rules legally adopted thereunder have been incorrectly interpreted, the provisions of this code do not fully apply or an equivalent or better form of construction is proposed. The board shall not have authority to waive requirements of this code ~~or interpret the administration of this code~~.

113.3 Qualifications. The board of appeals shall consist of members who are qualified by experience and training on matters pertaining to the provisions of this code and are not employees of the jurisdiction.

113.4 Administration. The *code official* shall take ~~immediate~~ action in accordance with the decision of the board.

2021 International Mechanical Code

SECTION 114 MEANS OF APPEALS

[A] 114.1 General. In order to hear and decide appeals of orders, decisions or determinations made by the code official relative to the application and interpretation of this code, there shall be and is hereby created a board of appeals. The board of appeals shall be appointed by the applicable governing authority and shall hold office at its pleasure. The board shall adopt rules of procedure for conducting its business and shall render all decisions and findings in writing to the appellant with a duplicate copy to the code official.

Revise as follows:

[A] 114.2 Limitations on authority. An application for appeal shall be based on a claim that the true intent of this code or the rules legally adopted thereunder have been incorrectly interpreted, the provisions of this code do not fully apply or an equivalent or better form of construction is proposed. The board shall not have the authority to waive requirements of this code ~~or interpret the administration of this code~~.

[A] 114.3 Qualifications. The board of appeals shall consist of members who are qualified by experience and training on matters pertaining to the provisions of this code and are not employees of the jurisdiction.

[A] 114.4 Administration. The code official shall take ~~immediate~~ action in accordance with the decision of the board.

2021 International Plumbing Code

SECTION 114 MEANS OF APPEALS

[A] 114.1 General. In order to hear and decide appeals of orders, decisions or determinations made by the code official relative to the application and interpretation of this code, there shall be and is hereby created a board of appeals. The board of appeals shall be appointed by the applicable governing authority and shall hold office at its pleasure. The board shall adopt rules of procedure for conducting its business and shall render all decisions and findings in writing to the appellant with a duplicate copy to the code official.

Revise as follows:

[A] **114.2 Limitations on authority.** An application for appeal shall be based on a claim that the true intent of this code or the rules legally adopted thereunder have been incorrectly interpreted, the provisions of this code do not fully apply, or an equivalent or better form of construction is proposed. The board shall not have authority to waive requirements of this code ~~or interpret the administration of this code.~~

[A] **114.3 Qualifications.** The board of appeals shall consist of members who are qualified by experience and training on matters pertaining to the provisions of this code and are not employees of the jurisdiction.

[A] **114.4 Administration.** The code official shall take ~~immediate~~ action in accordance with the decision of the board.

2021 International Property Maintenance Code

Revise as follows:

SECTION 107 MEANS OF APPEALS

107.1 General. In order to hear and decide appeals of orders, decisions or determinations made by the *code official* relative to the application and interpretation of this code, there shall be and is hereby created a board of appeals. The board of appeals shall be appointed by the applicable governing authority and shall hold office at its pleasure. The board shall adopt rules of procedure for conducting its business and shall render all decisions and findings in writing to the appellant with a duplicate copy to the *code official*.

Revise as follows:

[A] **107.2 Limitations of authority.** An application for appeal shall be based on a claim that the true intent of this code or the rules legally adopted thereunder have been incorrectly interpreted, the provisions of this code do not fully apply or an equivalent or better form of construction is proposed. The board shall not have authority to waive requirements of this code ~~or interpret the administration of this code.~~

107.3 Qualifications. The board of appeals shall consist of members who are qualified by experience and training on matters pertaining to the provisions of this code and are not employees of the jurisdiction.

107.4 Administration. The *code official* shall take ~~immediate~~ action in accordance with the decision of the board.

2021 International Private Sewage Disposal Code

Revise as follows:

SECTION 112 MEANS OF APPEALS

[A] **112.1 General.** In order to hear and decide appeals of orders, decisions or determinations made by the *code official* relative to the application and interpretation of this code, there shall be and is hereby created a board of appeals. The board of appeals shall be appointed by the applicable governing authority and shall hold office at its pleasure. The board shall adopt rules of procedure for conducting its business and shall render all decisions and findings in writing to the appellant with a duplicate copy to the *code official*.

Revise as follows:

112.2 Limitations on authority. An application for appeal shall be based on a claim that the true intent of this code or the rules legally adopted thereunder have been incorrectly interpreted, the provisions of this code do not fully apply or an equivalent or better form of construction is proposed. The board shall not have authority to waive requirements of this code ~~or interpret the administration of this code.~~

[A] **112.3 Qualifications.** The board of appeals shall consist of members who are qualified by experience and training on matters pertaining to the provisions of this code and are not employees of the jurisdiction.

[A] **112.4 Administration.** The *code official* shall take ~~immediate~~ action in accordance with the decision of the board.

2021 International Swimming Pool and Spa Code

Revise as follows:

SECTION 111 MEANS OF APPEALS

[A] **111.1 General.** In order to hear and decide appeals of orders, decisions or determinations made by the *code official* relative to the application and interpretation of this code, there shall be and is hereby created a board of appeals. The board of appeals shall be appointed by the applicable governing authority and shall hold office at its pleasure. The board shall adopt rules of procedure for conducting its business and shall render all

decisions and findings in writing to the appellant with a duplicate copy to the *code official*.

Revise as follows:

[A] 111.2 Limitations on authority. An application for appeal shall be based on a claim that the true intent of this code or the rules legally adopted thereunder have been incorrectly interpreted, the provisions of this code do not fully apply, or an equivalent or better form of construction is proposed. The board shall not have authority to waive requirements of this code ~~or interpret the administration of this code.~~

[A] 111.3 Qualifications. The board of appeals shall consist of members who are qualified by experience and training on matters pertaining to the provisions of this code and are not employees of the jurisdiction.

[A] 111.4 Administration. The *code official* shall take ~~immediate~~ action in accordance with the decision of the board.

2021 International Wildland-Urban Interface Code

SECTION 113 MEANS OF APPEALS

[A] 113.1 General. In order to hear and decide appeals of orders, decisions or determinations made by the code official relative to the application and interpretation of this code, there shall be and is hereby created a board of appeals. The board of appeals shall be appointed by the applicable governing authority and shall hold office at its pleasure. The board shall adopt rules of procedure for conducting its business and shall render all decisions and findings in writing to the appellant, with a duplicate copy to the code official.

Revise as follows:

[A] 113.2 Limitations on authority. An application for appeal shall be based on a claim that the true intent of this code or the rules legally adopted thereunder have been incorrectly interpreted, the provisions of this code do not fully apply or an equivalent or better form of construction is proposed. The board shall not have authority to waive requirements of this code ~~or interpret the administration of this code.~~

[A] 113.3 Qualifications. The board of appeals shall consist of members who are qualified by experience and training on matters pertaining to the provisions of this code and are not employees of the jurisdiction.

[A] 113.4 Administration. The *code official* shall take ~~immediate~~ action in accordance with the decision of the board.

2021 International Green Construction Code

SECTION 111 MEANS OF APPEALS

111.1 General. In order to hear and decide appeals of orders, decisions or determinations made by the authority having jurisdiction relative to the application and interpretation of this code, there shall be, and is hereby created, a board of appeals. The board of appeals shall be appointed by the applicable governing authority and shall hold office at its pleasure. The board shall adopt rules of procedure for conducting its business and shall render all decisions and findings in writing to the appellant with a duplicate copy to the authority having jurisdiction.

Revise as follows:

111.2 Limitations on authority. An application for appeal shall be based on a claim that the true intent of this code or the rules legally adopted thereunder have been incorrectly interpreted, the provisions of this code do not fully apply, or an equivalent or better form of construction is proposed. The board shall not have authority to waive requirements of this code ~~or interpret the administration of this code.~~

111.3 Qualifications. The board of appeals shall consist of members who are qualified by experience and training ~~to pass~~ on matters pertaining to the provisions of this code building construction and are not employees of the jurisdiction.

111.4 Administration. The authority having jurisdiction shall take ~~immediate~~ action in accordance with the decision of the board.

Reason: ADM40-19 was approved for IBC, IEBC, IFC, IWUIC, IPC, IMC, IFGC, ISPSC, IPMC, IPSDC, IECC-R and IGCC for revisions to the section on Means of Appeals. This item was disapproved for IECC Commercial and IRC. The result is an inconsistency with IECC Commercial and IRC.

The intent of this proposal is coordination for the means of appeals within the family of codes. Most of this was accomplished through ADM40-19 during the last cycle. Comments during the testimony, from the code development committees and subsequent discussions have suggested some improvements.

General: In the IRC and IECC Residential, the sentence about the code official not being a voting member of the board of appeals is proposed to be deleted. The fact about city employees not being a voting member of the board is already included in the section on qualifications. The code official is an important advisor for the Board of Appeals. The deletion of this sentence will not change that.

Limitation on authority. The deletion of 'or interpret the administration of this code' is proposed to be deleted so that the board could consider appeals on any part of the codes.

Qualifications: The phrase for experience and training is slightly different in each code. Adding this idea to all codes would provide consistency.

Administration: The IRC code change committee felt that 'immediate' was unreasonable. With the word removed, the board, or jurisdiction can set a reasonable timeframe.

This proposal is submitted by the ICC Building Code Action Committee (BCAC), ICC Fire Code Action Committee (FCAC) and . ICC Plumbing/Mechanical/Gas Code Action Committee (PMGCAC).

BCAC was established by the ICC Board of Directors in July 2011 to pursue opportunities to improve and enhance assigned International Codes or portions thereof. In 2020 and 2021 the BCAC has held several virtual meetings open to any interested party. In addition, there were numerous virtual Working Group meetings for the current code development cycle, which included members of the committee as well as interested parties. Related documents and reports are posted on the BCAC website at <https://www.iccsafe.org/products-and-services/i-codes/code-development/cs/building-code-action-committee-bcac/>.

The FCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance assigned International Codes with regard to fire and life safety in new and existing buildings and facilities as well as the protection of life and property in wildland urban interface areas. In 2020 and 2021 the Fire-CAC held multiple virtual meetings that were open to any interested party. In addition, there were numerous virtual specific working group meetings that were also open to any interested parties, to develop, discuss and debate the proposed changes. Related documentation and reports are posted on the FCAC website at: <https://www.iccsafe.org/products-and-services/i-codes/code-development/cs/fire-code-action-committee-fcac/>

The PMG CAC was established by the ICC Board of Directors in July 2011 to pursue opportunities to improve and enhance assigned International Codes or portions thereof. In 2020 and 2021, the PMGCAC has held several virtual meetings open to any interested party. Numerous interested parties attended the committee meetings and offered their input.

Cost Impact: The code change proposal will not increase or decrease the cost of construction. These are administration requirements, so there will be no change in construction requirements.

ADM48-22 Part I

Public Hearing Results

Committee Action:

As Submitted

Committee Reason: The committee stated that the reason for approval was the proponent's reason statement which includes coordination of the codes. It was specifically noted that most jurisdictions have a single board of appeals that covers all the codes in that jurisdiction, so it is important to only have one set of requirements that is consistent within each code. (Vote: 13-0)

ADM48-22 Part I

Individual Consideration Agenda

Public Comment 1:

IBC: [A] 113.3; IEBC: [A] 112.3

Proponents: Robert Frances, representing Self (bfrances@howardcountymd.gov) requests As Modified by Public Comment

Modify as follows:

2021 International Building Code

[A] 113.3 Qualifications. The board of appeals shall consist of members who are qualified by experience and training on matters pertaining to the provisions of this code and are not employees of the jurisdiction.

2021 International Existing Building Code

[A] 112.3 **Qualifications.** The board of appeals shall consist of members who are qualified by experience and training to ~~pass~~ on matters pertaining to the provisions of this code and are not employees of the jurisdiction.

Commenter's Reason: These are two minor editorial corrections to add the word "the" to Section 113.3 of the IBC, and striking out the words "to pass" from Section 112.3 of the IEBC.

Cost Impact: The net effect of the public comment and code change proposal will not increase or decrease the cost of construction. This will have no cost impact on what has already been passed; it is editorial in nature only.

Public Comment# 3249

Public Comment 2:

IBC: [A] 113.4; IEBC: [A] 112.4; IFC: [A] 111.4; IFGC: 113.4; IMC: [A] 114.4; IPC: [A] 114.4; IPMC: 107.4; IPSDC: [A] 112.4; ISPC: [A] 111.4; IWUIC: [A] 113.4; IGCC: 111.4

Proponents: Mike Nugent, representing Building Code Action Committee (bcac@iccsafe.org) requests As Modified by Public Comment

Modify as follows:

2021 International Building Code

[A] 113.4 **Administration .** The *building official* shall take action without delay in accordance with the decision of the board.

2021 International Existing Building Code

[A] 112.4 **Administration.** The *code official* shall take action without delay in accordance with the decision of the board.

2021 International Fire Code

[A] 111.4 **Administration.** The *fire code official* shall take action without delay in accordance with the decision of the board.

2021 International Fuel Gas Code

113.4 **Administration.** The *code official* shall take action without delay in accordance with the decision of the board.

2021 International Mechanical Code

[A] 114.4 **Administration.** The code official shall take action without delay in accordance with the decision of the board.

2021 International Plumbing Code

[A] 114.4 **Administration.** The code official shall take action without delay in accordance with the decision of the board.

2021 International Property Maintenance Code

107.4 **Administration.** The *code official* shall take action without delay in accordance with the decision of the board.

2021 International Private Sewage Disposal Code

[A] 112.4 **Administration.** The *code official* shall take action without delay in accordance with the decision of the board.

2021 International Swimming Pool and Spa Code

[A] 111.4 **Administration.** The *code official* shall take action without delay in accordance with the decision of the board.

2021 International Wildland-Urban Interface Code

[A] 113.4 **Administration.** The *code official* shall take action without delay in accordance with the decision of the board.

2021 International Green Construction Code

111.4 **Administration.** The authority having jurisdiction shall take action without delay in accordance with the decision of the board.

Commenter's Reason: Last cycle the Administrative Committee asked the BCAC to remove the word 'immediate' as it could be read to require the code official to respond immediately after the board made it's decision - as in that night immediately following the conclusion of the meeting. This proposal did that. However, after the spring hearings, BCAC received comments that no timeline could be read the opposite - in that a code official could delay indefinitely. It is hope that 'without delay' is a reasonable compromise.

Cost Impact: The net effect of the public comment and code change proposal will not increase or decrease the cost of construction. This is an editorial correction with no changes to construction requirements.

ADM48-22 Part II

IRC: SECTION R112, R112.1, R112.2, R112.3, R112.4

Proposed Change as Submitted

Proponents: Mike Nugent, representing Building Code Action Committee (bcac@iccsafe.org); Joseph J. Summers, representing Plumbing, Mechanical and Fuel Gas Code Action Committee (pmgac@iccsafe.org); Robert Marshall, representing FCAC (fcac@iccsafe.org)

2021 International Residential Code

Revise as follows:

SECTION R112 ~~BOARD MEANS OF APPEALS~~

R112.1 General. In order to hear and decide appeals of orders, decisions or determinations made by the *building official* relative to the application and interpretation of this code, there shall be and is hereby created a board of appeals. ~~The *building official* shall be an ex officio member of said board but shall not have a vote on any matter before the board.~~ The board of appeals shall be appointed by the applicable governing body authority and shall hold office at its pleasure. The board shall adopt rules of procedure for conducting its business, and shall render all decisions and findings in writing to the appellant with a duplicate copy to the *building official*.

R112.2 Limitations on authority. An application for appeal shall be based on a claim that the true intent of this code or the rules legally adopted thereunder have been incorrectly interpreted, the provisions of this code do not fully apply or an ~~equally good equivalent~~ or better form of construction is proposed. The board shall not have authority to waive requirements of this code.

R112.3 Qualifications. The board of appeals shall consist of members who are qualified by experience and training ~~to pass judgment~~ on matters pertaining to ~~building construction~~ the provisions of this code and are not employees of the *jurisdiction*.

R112.4 Administration. The *building official* shall take ~~immediate~~ action in accordance with the decision of the board.

Reason: ADM40-19 was approved for IBC, IEBC, IFC, IWUIC, IPC, IMC, IFGC, ISPSC, IPMC, IPSDC, IECC-R and IGCC for revisions to the section on Means of Appeals. This item was disapproved for IECC Commercial and IRC. The result is an inconsistency with IECC Commercial and IRC.

The intent of this proposal is coordination for the means of appeals within the family of codes. Most of this was accomplished through ADM40-19 during the last cycle. Comments during the testimony, from the code development committees and subsequent discussions have suggested some improvements.

General: In the IRC and IECC Residential, the sentence about the code official not being a voting member of the board of appeals is proposed to be deleted. The fact about city employees not being a voting member of the board is already included in the section on qualifications. The code official is an important advisor for the Board of Appeals. The deletion of this sentence will not change that.

Limitation on authority. The deletion of 'or interpret the administration of this code' is proposed to be deleted so that the board could consider appeals on any part of the codes.

Qualifications: The phrase for experience and training is slightly different in each code. Adding this idea to all codes would provide consistency.

Administration: The IRC code change committee felt that 'immediate' was unreasonable. With the word removed, the board, or jurisdiction can set a reasonable timeframe.

This proposal is submitted by the ICC Building Code Action Committee (BCAC), ICC Fire Code Action Committee (FCAC) and . ICC Plumbing/Mechanical/Gas Code Action Committee (PMGCAC).

BCAC was established by the ICC Board of Directors in July 2011 to pursue opportunities to improve and enhance assigned International Codes or portions thereof. In 2020 and 2021 the BCAC has held several virtual meetings open to any interested party. In addition, there were numerous virtual Working Group meetings for the current code development cycle, which included members of the committee as well as interested parties. Related documents and reports are posted on the BCAC website at <https://www.iccsafe.org/products-and-services/i-codes/code-development/cs/building-code-action-committee-bcac/>.

The FCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance assigned International Codes with regard to fire and life safety in new and existing buildings and facilities as well as the protection of life and property in wildland urban interface areas. In 2020 and 2021 the Fire-CAC held multiple virtual meetings that were open to any interested party. In addition, there were numerous virtual specific working group meetings that were also open to any interested parties, to develop, discuss and debate the proposed changes. Related documentation and reports are posted on the FCAC website at: <https://www.iccsafe.org/products-and-services/i-codes/code-development/cs/fire->

The PMG CAC was established by the ICC Board of Directors in July 2011 to pursue opportunities to improve and enhance assigned International Codes or portions thereof. In 2020 and 2021, the PMGCAC has held several virtual meetings open to any interested party. Numerous interested parties attended the committee meetings and offered their input.

Cost Impact: The code change proposal will not increase or decrease the cost of construction. These are administration requirements, so there will be no change in construction requirements.

ADM48-22 Part II

Public Hearing Results

Committee Action:

Disapproved

Committee Reason: The proposal was disapproved. In R112.4 the word 'immediate' should not be struck. It leaves the timing ambiguous. Striking the sentence in Section R112.1 would remove the restriction that the code official could not vote, leaving the question, why would the building official be voting? Some also felt the building official should be an ex officio, non-voting member. This language is more confusing than the original. (Vote: 7-3)

One argument against disapproval was that removing the building official from the board is not giving them a vote.

ADM48-22 Part II

Individual Consideration Agenda

Public Comment 1:

IRC: R112.4

Proponents: Mike Nugent, representing Building Code Action Committee (bcac@iccsafe.org) requests As Modified by Public Comment

Replace as follows:

2021 International Residential Code

R112.4 Administration. The *building official* shall take action ~~immediate~~ without delay in accordance with the decision of the board.

Commenter's Reason: The public comments are dividing the question into two parts - R112 through R112.3 is Part 1 and R112.4 is Part 2. PART 2

This modification is to revise Section R112.4 so that the term 'immediate' is replaced with 'without delay' as a reasonable compromise for a building official to react promptly to a board of appeals decision, without having to respond immediately following the meeting.

Cost Impact: The net effect of the public comment and code change proposal will not increase or decrease the cost of construction. This is an editorial change with no change in construction requirements.

Public Comment# 3024

Public Comment 2:

IRC: SECTION R112, R112.1, R112.2, R112.3

Proponents: Mike Nugent, representing Building Code Action Committee (bcac@iccsafe.org) requests As Modified by Public Comment

Replace as follows:

2021 International Residential Code

SECTION R112

~~BOARD MEANS OF APPEALS~~

R112.1 General. In order to hear and decide appeals of orders, decisions or determinations made by the *building official* relative to the application and interpretation of this code, there shall be and is hereby created a board of appeals. ~~The building official shall be an ex officio member of said board but shall not have a vote on any matter before the board.~~ The board of appeals shall be appointed by the applicable governing body authority and shall hold office at its pleasure. The board shall adopt rules of procedure for conducting its business, and shall render all decisions and findings in writing to the appellant with a duplicate copy to the *building official*.

R112.2 Limitations on authority. An application for appeal shall be based on a claim that the true intent of this code or the rules legally adopted thereunder have been incorrectly interpreted, the provisions of this code do not fully apply or an ~~equally good~~ equivalent or better form of construction is proposed. The board shall not have authority to waive requirements of this code.

R112.3 Qualifications. The board of appeals shall consist of members who are qualified by experience and training ~~to pass judgment~~ on matters pertaining to ~~building construction~~ the provisions of this code and are not employees of the *jurisdiction*.

Commenter's Reason: The public comments are dividing the question into two parts - R112 through R112.3 is Part 1 and R112.4 is Part 2.

PART 1

The BCAC respectively disagrees with the IRC committee's comment on the deleted sentence in Section R112.1. During the last cycle, ADM40-19 edited the sections for the Board of Appeals in each code book to limit the section to just the right and process for someone to have a means of appeal and ADM43-19 Part II, created Appendix AV for the Board of Appeals which is intended to provide a template for jurisdictions that do not already have such language. (The appendix for Board of Appeals now exists in all code books except IZC and ICCPC.) The make-up of the board is addressed in the Appendix. The role of the code official in the Board of Appeals is addressed in Sections AV101.1 and AV101.3. Since language regarding the makeup of the Board of Appeals is in the appendix and Section R112 is limited to the means of appeal, this change removes any requirements for the Board of Appeals from Section R112, which allows the jurisdiction to determine the makeup of the Board of Appeals in their specific ordinances or through the adoption of the appendix.

Appendix AV - Board of Appeals AV101.1 Scope. A board of appeals shall be established within the jurisdiction for the purpose of hearing applications for modification of the requirements of this code pursuant to the provisions of Section R112. The board shall be established and operated in accordance with this section, and shall be authorized to hear evidence from appellants and the building official pertaining to the application and intent of this code for the purpose of issuing orders pursuant to these provisions.

AV101.3 Membership of board. The board shall consist of five voting members appointed by the chief appointing authority of the jurisdiction. Each member shall serve for [INSERT NUMBER OF YEARS] years or until a successor has been appointed. The board member's terms shall be staggered at intervals, so as to provide continuity. The building official shall be an ex officio member of said board but shall not vote on any matter before the board.

Cost Impact: The net effect of the public comment and code change proposal will not increase or decrease the cost of construction. These are administration requirements, so there will be no change in construction requirements.

EB34-22

IEBC: SECTION 202 (New), SECTION 310 (New), 310.1 (New), ASTM Chapter 16 (New), UL Chapter 16 (New)

Proposed Change as Submitted

Proponents: Jeffrey Shapiro, representing Self (jeff.shapiro@intlcodeconsultants.com)

2021 International Existing Building Code

Add new definition as follows:

ACCESSORY DWELLING UNIT. An additional, subordinate dwelling unit on the same lot, that is entirely within a dwelling unit, attached to a dwelling unit, or in a detached structure.

Add new text as follows:

SECTION 310 ACCESSORY DWELLING UNITS

310.1 General. Where an *accessory dwelling unit* or second dwelling unit is added to an existing dwelling, the dwelling units shall be separated from each other by wall and floor assemblies having not less than a 1-hour fire-resistance rating where tested in accordance with ASTM E119, UL 263 or Section 703.2.2 of the International Building Code. Such separation shall be provided regardless of whether a lot line exists between dwelling units. Fire-resistance-rated floor/ceiling and wall assemblies shall extend to and be tight against the exterior wall, and wall assemblies shall extend from the foundation to the underside of the roof sheathing.

Exceptions:

1. A fire-resistance rating of 1/2 hour shall be permitted in buildings equipped throughout with an automatic sprinkler system installed in accordance with Section P2904 of the International Residential Code.
2. Wall assemblies need not extend through attic spaces where the ceiling is protected by not less than 1/2-inch (12.7 mm) Type X gypsum board, an attic draft stop constructed as specified in International Residential Code Section R302.12.1 is provided above and along the wall assembly separating the dwellings and the structural framing supporting the ceiling is protected by not less than 1/2-inch (12.7 mm) gypsum board or equivalent.
3. A fire-resistance rated separation is not required where one of the dwelling units is an accessory dwelling unit and the other is an owner-occupied dwelling unit.

Add new standard(s) as follows:

ASTM

ASTM International
100 Barr Harbor Drive, P.O. Box C700
West Conshohocken, PA 19428-2959

E119-2018B

Standard Test Methods for Fire Tests of Building Construction and Materials

UL

UL LLC
333 Pfingsten Road
Northbrook, IL 60062

723-2018

Test for Surface Burning Characteristics of Building Materials

Reason: In Group A, Code Change Z1-21 added a new definition of Accessory Dwelling Unit, or ADU, with the apparent intent of formally recognizing what has become an increasingly common practice of adding additional dwelling unit(s) to a property or building that was originally intended and limited to function as a single family dwelling unit. The proliferation of ADUs in many jurisdictions as a means of increasing available housing has had an undiscussed consequence of often creating buildings that essentially constitute illegal two-family dwellings / duplexes, in that such buildings do not meet adopted IRC provisions for a two-family dwelling.

The trend essentially allows construction of a single-family dwelling, issuance of a certificate of occupancy, then subdividing the floorplan to provide an additional dwelling unit, completely circumventing the fire safety considerations in the IRC, particularly the requirement for a fire-rated separation. There is no logic behind requiring a building permitted as a two-family dwelling to provide a suitable fire barrier between units, but not requiring that separation for a building permitted as a one-family dwelling that immediately or thereafter adds an ADU. This proposal will return parity between the fire separation requirements for two-family dwellings and dwellings with an ADU.

An exception is provided for ADUs in owner occupied housing because, like lodging houses, these situations at least provide some level of on-site oversight of the ADU. To those who might argue that "owner occupied" is not something that's enforceable under the IRC, IEBC or otherwise, note that the concept of using this as a limitation is already baked into other portions of the IRC for lodging houses (see R101.2, Exception 2 and R320.1).

The intent here is to simply duplicate that precedent for ADUs. A similar change has been submitted to the IRC, and the intent of this proposal to the IEBC is to prevent the IEBC from becoming a loophole to escape the IRC requirement.

Cost Impact: The code change proposal will decrease the cost of construction

The IRC currently requires all two-family dwellings to have a fire separation between dwelling units, and there is currently no differentiation that applies to dwelling units with an added ADU. This proposal provides a limited reduction in the code requirements by allowing an ADU to be unseparated when the primary dwelling unit is owner-occupied, thereby reducing the cost of construction for such cases.

Staff Analysis: ASTM E119 and UL723 are already referenced in the IBC. This is simply a new occurrence of the references in the I-Codes

EB34-22

Public Hearing Results

This proposal includes unpublished errata

ASCE/SEI

7—16 with Supplement 1_22: Minimum Design Loads and Associated Criteria for Buildings and Other Structures

Committee Action:

Disapproved

Committee Reason: Though the reason for the proposal was understood there were various concerns. First, this was viewed as more of a zoning issue. Questions were raised as to how these separations would affect aspects such as ceiling heights. Although these proposed fire safety related requirements and allowances are important there are others aspects including structural safety that need to be addressed. Generally, there were reservations about specifically promoting a practice that is not permitted by the current codes and such situations should be treated as a duplex. Others voiced a concern that although this issue needs to be addressed that this will not target those creating current violations to the code and instead will simply encourage this concept. There was also concerns with the applicability of the definition as it calls out detached structures in addition to the dwelling unit. (Vote: 10-4)

EB34-22

Individual Consideration Agenda

Public Comment 1:

IEBC: APPENDIX E (New), E101 (New), E101.1 (New), E101.1.1 (New), E101.2 (New), E201 (New), E201.1 (New), E301 (New), E301.1 (New), E401 (New), E401.1 (New), E401.2 (New), E401.3 (New), E401.4 (New), E501 (New), E501.1 (New), E501.2 (New), E501.3 (New), E501.4 (New)

Proponents: Mike Nugent, representing Building Code Action Committee (bcac@iccsafe.org) requests As Modified by Public Comment

Replace as follows:

2021 International Existing Building Code

APPENDIX E **ACCESSORY DWELLING UNITS (ADU)**

E101 **GENERAL**

E101.1 Scope. ADUs proposed within existing one- and two-family dwellings or townhouses shall be in accordance with this appendix and other applicable requirements in this code except as specified in this Appendix. The existing building together with the ADU shall be a one- or two-family dwelling or townhouse not more than three stories above grade plane in height.

E101.1.1 Prohibited Conditions. An ADU shall not be permitted within:

1. Live/work units located in townhouses.

2. Owner-occupied lodging houses with five fewer guestrooms.
3. A care-facility with five or fewer persons receiving medical care within a dwelling unit.
4. A care-facility with five or fewer persons receiving care within a single-family dwelling.

E101.2 Conditions. ADUs shall be permitted without requiring a *change of occupancy* where in compliance with all of the following:

1. An ADU shall be permitted within an existing single-family detached dwelling or within an existing townhouse unit not more than three stories above grade plane in height with a separate means of egress for each dwelling unit.
2. Only one ADU shall be permitted for each dwelling unit.
3. The owner of a property containing an ADU shall reside in either the primary dwelling unit or the ADU, as of the date of permit approval.
4. An ADU shall have a separate house number from the primary dwelling unit.
5. ADUs shall be secondary in size and function to the primary dwelling unit and shall comply with all of the following limits.
 - 5.1. Not less than 190 square feet (17.65 m) in area.
 - 5.2. Not more than 50 percent of the area of the primary dwelling unit.
 - 5.3. Not more than 1,200 square feet (111 m) in area.
6. An ADU shall be provided with a separate entrance than that serving the primary dwelling unit either from the exterior of the building or from a common hallway located within the building.
7. An ADU shall have a maximum number of two bedrooms.
8. The location of a detached ADU shall comply with the requirements of the *International Existing Building Code*.
9. An ADU shall be provided with adequate provisions for electricity, water supply and sewage disposal.

E201 **DEFINITIONS**

E201.1 Definitions. The following words and terms shall, for the purposes of this appendix, have the meanings shown herein.

ACCESSORY DWELLING UNIT (ADU). An addition or alteration that is an additional, subordinate dwelling unit on the same lot, that is entirely within a dwelling unit, attached to a dwelling unit, or in a detached structure.

E301 **PERMITS**

E301.1 Required. Any owner or owner's agent who intends to construct an ADU within an existing or proposed building or structure shall first make application to the building official and obtain the required permit.

E401 **ADU PLANNING**

E401.1 Design. Except as modified by this section, building planning and the building structure shall be in accordance with the *International Existing Building Code*.

E401.2 Means of egress. The path of egress travel from an ADU to a public way or to a yard or court that opens to a public way shall be independent of, and not pass through the primary dwelling unit.

E401.3 Fire separation. For ADUs adjoining the primary dwelling unit, the 1-hour fire-resistance rated wall and floor assembly provisions of the *International Existing Building Code* shall not be required provided that both of the following conditions have been met:

1. The interconnection of smoke alarms activates the smoke alarms in both the primary dwelling unit and the ADU.
2. The interconnection of carbon monoxide alarms activates the carbon monoxide alarms in both the primary dwelling unit and the ADU.

E401.4 Smoke and carbon monoxide alarms. For ADUs adjoining the primary dwelling unit, the interconnectivity of smoke alarms and carbon monoxide alarms may be independent for the primary dwelling unit and the ADU provided that a 1-hour fire-resistance rating is provided for walls and floor assemblies in accordance with the *International Existing Building Code*.

E501

UTILITIES

E501.1 Heating, ventilation and air-conditioning systems. A primary dwelling unit and an ADU shall be provided with:

1. A separate heating system.
2. Separate ducting for heating and cooling systems. Return air openings for heating, ventilation and air-conditioning shall not be taken from another dwelling unit.
3. Separate climate controls.

E501.2 Electrical systems. A primary dwelling unit and an ADU shall be provided with:

1. Ready access to the service disconnecting means serving the dwelling unit.
2. Ready access for each occupant to all overcurrent devices protecting the conductors supplying the dwelling unit in which they reside.

E501.3 Gas piping. A primary dwelling unit and an ADU shall be provided with:

1. Ready access to shutoff valves serving the dwelling unit in which they reside.
2. Ready access to appliance shutoff valves serving appliances in the dwelling unit in which they reside.

E501.4 Water service. A primary dwelling unit and an ADU may share a common potable water system provided that there are separate, accessible main shutoff valves allowing the water to be turned off on one-side without affecting the other.

Commenter's Reason: This public comment creates an Appendix in the International Existing Building code that applies to ADU's in one-, two-story, and townhouse residential dwellings. This correlates the IEBC with the same proposed appendix that was approved for the IRC. Because one- and two-story dwellings and townhouses may comply with either the IRC or the IEBC, it is appropriate to have the same appendix in both documents.

Cost Impact: The net effect of the public comment and code change proposal will not increase or decrease the cost of construction. This proposal does not increase nor decrease the cost of construction. The proposal creates a voluntary appendix allowing someone to build an accessory dwelling unit within the scope of the specified residential building types. no one is under any obligation to build an ADU, nor are they required to plan for the construction of a future ADU.

For someone choosing not to construct and ADU, these code provisions will not be applicable; there are no cost implications.

For someone choosing to construct and ADU, these code provisions are applicable; the cost of construction will increase proportionally to the size of the project. According to an article titled *Calculating the Costs of Building an ADU*, published on the BuildinganADU.com blog, the average cost for an ADU from 2016-2019 based on their research is as follows:

- Detached New Construction: \$305/SF
- Basement ADU: \$265/SF
- Attached ADU: \$300/SF
- Garage Conversion: \$297/SF
- Detached New Construction Above a Garage: \$212/SF

EB47-22

IEBC: 502.1.1 (New), 1101.3 (New)

Proposed Change as Submitted

Proponents: David Bonowitz, representing FEMA-ATC Seismic Code Support Committee (dbonowitz@att.net); Kelly Cobeen, representing Federal Emergency Management Agency/Applied Technology Council - Seismic Code Support Committee (kcobeen@wje.com); Michael Mahoney, representing FEMA (mike.mahoney@fema.dhs.gov)

THIS CODE CHANGE WILL BE HEARD BY THE IBC-STRUCTURAL CODE COMMITTEE. SEE THE TENTATIVE HEARING ORDER FOR THAT COMMITTEE.

2021 International Existing Building Code

Add new text as follows:

502.1.1 Risk category assignment. Where the addition and the existing building have different occupancies, the risk category of each existing and added occupancy shall be determined in accordance with Section 1604.5.1 of the *International Building Code*. Where application of that section results in a higher risk category for the existing building, such a change shall be considered a change of occupancy and shall comply with Section 506 of this code. Where application of that section results in a higher risk category for the addition, the addition and any systems in the existing building required to serve the addition shall comply with the requirements of the *International Building Code* for new construction for the higher risk category.

1101.3 Risk category assignment. Where the addition and the existing building have different occupancies, the risk category of each existing and added occupancy shall be determined in accordance with Section 1604.5.1 of the *International Building Code*. Where application of that section results in a higher risk category for the existing building, such a change shall be considered a change of occupancy and shall comply with Section 506 of this code. Where application of that section results in a higher risk category for the addition, the addition and any systems in the existing building required to serve the addition shall comply with the requirements of the *International Building Code* for new construction for the higher risk category.

Reason: This proposal clarifies how risk category should be assigned where the addition and the existing building have different uses. It creates identical provisions in the Prescriptive and Work Area methods.

IBC Section 1604.5.1 already covers conditions like this for new buildings. Generally, IEBC users would use IBC Section 1604.5 to find the risk category where any IEBC provision calls for it, but there is no general IEBC provision that explicitly points there. The case of additions, where the IEBC already requires the addition to be designed and built as new construction, is of particular interest, so this proposal provides a common sense interpretation.

As background and precedent, it is worth noting the other cases where the current codes address mismatched uses:

- IEBC Section 302.5 points to IBC Chapter 3 to assign occupancies, and Chapter 3 points in turn to Section 508 for buildings with mixed occupancies.
- IEBC Section 304.3 points to IBC Section 1604.5 to assign risk categories, and Section 1604.5.1 addresses mixed use buildings, requiring each portion of a new building to be assigned to the highest risk category of any portion on which it is structurally or functionally dependent. This proposal creates new IEBC sections to make that reference more direct and explicit for the case of additions.
- IEBC Section 1101.2 prohibits deficiencies in existing buildings from being extended into additions. (We are separately proposing a similar provision for the Prescriptive method.)
- IEBC Sections 506.5.4 and 1006.4 address operational access to RC IV facilities that might be affected by a change of occupancy project, but there is no similar provision for additions. This proposal would address that situation in a different way, by acknowledging that a dependent addition to a RC IV building must itself be assigned to RC IV, and that a RC IV addition changes the occupancy of a dependent non-RC IV existing building.

Cost Impact: The code change proposal will not increase or decrease the cost of construction
The proposal merely provides a more explicit interpretation of the current code for the special case of additions.

EB47-22

Public Hearing Results

Committee Action:

As Modified

Committee Modification:

2021 International Existing Building Code

1101.3 Risk category assignment. Where the addition and the existing building have different occupancies, the risk category of each existing and added occupancy shall be determined in accordance with Section 1604.5.1 of the *International Building Code*. Where application of that section results in a higher risk category for the existing building, such a change shall be considered a change of occupancy and shall comply with ~~Section 506~~ Chapter 10 of this code. Where application of that section results in a higher risk category for the addition, the addition and any systems in the existing building required to serve the addition shall comply with the requirements of the *International Building Code* for new construction for the higher risk category.

Committee Reason: Approved as modified as this provides consistency between the IEBC and the IBC for Risk Category assignments. The modification correctly adds a pointer to Chapter 10. (Vote: 14-0)

EB47-22

Individual Consideration Agenda

Public Comment 1:

IEBC: 502.1.1, 1101.3

Proponents: Jonathan Siu, representing Self requests As Modified by Public Comment

Further modify as follows:

2021 International Existing Building Code

502.1.1 Risk category assignment. Where the addition and the existing building have different occupancies, the risk category of each existing and added occupancy shall be determined in accordance with Section 1604.5.1 of the *International Building Code*. Where application of that section results in a higher risk category for the existing building compared with the risk category for the existing building before the addition, such a change shall be considered a change of occupancy and shall comply with Section 506 of this code. Where application of that section results in a higher risk category for the addition compared with the risk category for the addition by itself, the addition and any systems in the existing building required to serve the addition shall comply with the requirements of the *International Building Code* for new construction for the higher risk category.

1101.3 Risk category assignment. Where the addition and the existing building have different occupancies, the risk category of each existing and added occupancy shall be determined in accordance with Section 1604.5.1 of the *International Building Code*. Where application of that section results in a higher risk category for the existing building compared with the risk category for the existing building before the addition, such a change shall be considered a change of occupancy and shall comply with Chapter 10 of this code. Where application of that section results in a higher risk category for the addition compared with the risk category for the addition by itself, the addition and any systems in the existing building required to serve the addition shall comply with the requirements of the *International Building Code* for new construction for the higher risk category.

Commenter's Reason: This public comment is being submitted to clarify the application of the proposed change, in response to comments from a Structural Committee member at the Committee Action Hearings. As submitted, the text of the code will address changes to "a higher risk category," but does not establish any baseline for comparison. This begs the question, "higher than what?"

The intent of the second sentence in both sections in the code change is that if Section 1604.5.1 triggers a change to the existing portion of the building, either with or without the addition taken into consideration, the provisions for change of occupancy get applied to the existing portion of the building.

Similarly, the third sentence in both sections is intended to trigger compliance with the IBC for new construction in the addition should Section 1604.5.1 trigger a change to the risk category for the addition. This sentence also triggers changes within the existing portion of the building, should the existing portion and the addition share building systems (sprinklers, fire alarms, mechanical systems, etc.)

This public comment establishes the baselines for comparison as follows:

- For the existing portion of the building, the "end-result" risk category gets compared to the risk category of the building before the addition was proposed. If Section 1604.5.1 requires the risk category to be higher than it was previous to the addition, the existing portion of the building is subject to the change of occupancy provisions.
- For the addition, the "end-result" risk category gets compared to the risk category of the addition if it were a standalone or separated portion of the building. Again, if Section 1604.5.1 triggers the risk category of the addition to be higher than would ordinarily be required, the addition must comply with new construction requirements for the higher risk category. If any building systems are shared between the addition and the existing portion of the building, the existing building will be required to be upgraded to meet the requirements for new construction for the higher risk category as well.

Cost Impact: The net effect of the public comment and code change proposal will not increase or decrease the cost of construction. The cost impact statement for the original proposal says there will be no change to the cost of construction, since it is merely a clarification of what is required by the existing code language. Given that this public comment is a further clarification of the original code change, it will have no effect on the original cost impact statement.

EB48-22

IEBC: 502.1.1 (New), 1101.2

Proposed Change as Submitted

Proponents: David Bonowitz, representing FEMA-ATC Seismic Code Support Committee (dbonowitz@att.net); Kelly Cobeen, representing Federal Emergency Management Agency/Applied Technology Council - Seismic Code Support Committee (kcobeen@wje.com); Michael Mahoney, representing FEMA (mike.mahoney@fema.dhs.gov)

2021 International Existing Building Code

Add new text as follows:

502.1.1 Creation or extension of nonconformity. An addition shall not create or extend any nonconformity in the existing building to which the addition is being made with regard to accessibility, structural strength, supports and attachments for nonstructural components, fire safety, means of egress or the capacity of mechanical, plumbing or electrical systems.

Exception: Nonconforming supports and attachments for nonstructural components that serve the addition from within the existing building need not be altered to comply with International Building Code Section 1613 unless the components are part of the addition's life safety system or are required to serve an addition assigned to Risk Category IV.

Revise as follows:

1101.2 Creation or extension of nonconformity. An addition shall not create or extend any nonconformity in the existing building to which the addition is being made with regard to accessibility, structural strength, supports and attachments for nonstructural components, fire safety, means of egress or the capacity of mechanical, plumbing or electrical systems.

Exception: Nonconforming supports and attachments for nonstructural components that serve the addition from within the existing building need not be altered to comply with International Building Code Section 1613 unless the components are part of the addition's life safety system or are required to serve an addition assigned to Risk Category IV.

Reason: This proposal clarifies the current intent of the IEBC for cases where an addition relies on the existing building for certain systems or services – or vice versa.

The code already requires that any addition should itself be designed and built as new construction. This proposal ensures that the new addition is provided with suitable support from the existing building, consistent with the code's current intent. Examples:

- An addition might get its hot water from mechanical systems in the existing building, or might rely on a stair tower in the existing building for egress. In these cases, the addition is new and ought to have mechanical systems and egress capacity that are like new as well.
- A horizontal addition will include an elevator and new HVAC equipment meant to serve both the addition and the existing building. If the existing building is assigned to Risk Category IV, then the new systems should meet requirements for RC IV buildings even if the addition itself contains only RC II uses.

We believe this is the current intent of the code, and the Work Area method Sec 1101.2 already captures this intent for critical systems -- accessibility, structural strength, fire safety, egress, and MEP systems. Section 1101.2 sensibly requires that if the addition must be built as new construction, we wouldn't allow it to be built with deficient systems as a standalone structure, so why would we allow it to be served with deficient systems just because they're in an adjacent existing building?

But the current provision is not quite clear about bracing (especially seismic) of nonstructural components. Some might read "structural strength" to include "supports and attachments for nonstructural components" since the latter are covered in IBC Chapter 16. Some might consider the current reference to MEP systems to include their bracing and support. Nevertheless, the code is not as clear as it could be regarding this issue, so this proposal clarifies it.

Why the new exception? Despite what we believe is a laudable intent, we also recognize that the reason these items get overlooked is that it can be expensive to expose, evaluate, and retrofit nonstructural systems (even those already included in the list under fire safety, egress, and MEP). So the proposal adds an exception that effectively requires retrofit only for those systems serving RC IV additions where post-earthquake functionality is inherent in the design assumptions. Similarly, *life safety systems* must be functional in the addition, so they are not eligible for the exception either. The exception refers to IBC Section 1613 because that would be the default criteria if the exception were not provided, as indicated by Section 1101.1 (not shown) or by Section 502.1 (not shown) for the Prescriptive method.

Thus, depending on how one interprets the current code, this proposal is either an extension of the requirement in current Section 1101.2, or a relaxation of it through an exception. Either way, we submit that this proposal finds the right balance and should be in both the Work Area and Prescriptive methods. Therefore, in addition to revising Sec 1101.2, this proposal copies it into the Prescriptive method, where it will clarify the similar but implicit requirement in the first sentence of Section 502.1.

Finally, it's worth observing that if you don't want to retrofit existing systems, there's an easy way out. Just design your addition to be structurally

and functionally separate from the existing building, as IBC Section 1605.4.1 and IEBC Section 1101.2 both allow. Thus, neither the current code nor this proposal actually mandates any upgrade to the existing building for an independent addition. But *without* this proposal, the incentive is to save money on the addition by relying on deficient systems in the existing building, or by having it serve the RC IV existing building while being designed itself as RC II. This proposal removes those perverse incentives.

Cost Impact: The code change proposal will not increase or decrease the cost of construction

The proposal should not increase the cost of construction because it merely clarifies the intent of the current code, especially Section 1101.2, which prohibits the creation or extension of a deficient building system within an existing building when an addition is made. In some cases, depending on how the current code is interpreted, the proposed new Exception might actually reduce the cost of an addition.

EB48-22

Public Hearing Results

Committee Action:

As Submitted

Committee Reason: This proposal provides the necessary guidance as to what aspects of the existing building would need to be upgraded when an addition is made to the building. (Vote: 13-0)

EB48-22

Individual Consideration Agenda

Public Comment 1:

Proponents: John Swanson, representing NFSA (swanson@nfsa.org); Jeffrey Hugo, representing NFSA (hugo@nfsa.org) requests Disapprove

Commenter's Reason: This public comment recommends the ICC membership to disapprove this code change for the following reasons:

1. The cost statement of this code change states it will not increase or decrease the cost of construction is inaccurate. When an addition occurs on an existing building, and the existing building needs to upgrade the seismic bracing for the automatic sprinkler system it will increase the cost of construction.
2. The code change proposal references "life safety system" as defined in the ICC codes. This term is extremely broad and will likely lead to confusion over which parts of a life safety system are subject to the structural requirement in IBC section 1613.
3. Since this code change will require "life safety systems" in existing building be brought up to current IBC (and NFPA 13) requirements, this code change does not clarify how far into an existing building the life safety system must be upgraded or what specific components. For example, if a system serves a new addition to an existing building, is seismic bracing required from the new addition back to the riser assembly? This change adds expensive upgrades to existing buildings with little clarity for how to apply it.

Cost Impact: The net effect of the public comment and code change proposal will increase the cost of construction

The original proposal, as submitted, will increase the cost of construction. The public comment for disapproval, decreases the cost of construction.

Public Comment# 3263

EB67-22

IEBC: [BS] 503.12, [BS] 706.3.2, [BS] C201.1

Proposed Change as Submitted

Proponents: Michael Fillion, representing National Council of Structural Engineers Associations (mrf.structure@verizon.net); Don Scott, representing ASCE 7 Wind Load Subcommittee (dscott@pcs-structural.com)

THIS CODE CHANGE WILL BE HEARD BY THE IBC-STRUCTURAL CODE COMMITTEE. SEE THE TENTATIVE HEARING ORDER FOR THAT COMMITTEE.

2021 International Existing Building Code

Revise as follows:

[BS] 503.12 Roof diaphragms resisting wind loads in high-wind regions. Where the intended *alteration* requires a permit for reroofing and involves removal of roofing materials from more than 50 percent of the roof diaphragm of a building or section of a building located where the ~~ultimate design~~ basic wind speed, V , is greater than 130 mph (58 m/s) in accordance with Figure 1609.3(1) of the International Building Code for Risk Category II, roof diaphragms, connections of the roof diaphragm to roof framing members, and roof-to-wall connections shall be evaluated for the wind loads specified in Section 1609 of the International Building Code, including wind uplift. If the diaphragms and connections in their current condition are not capable of resisting 75 percent of those wind loads, they shall be replaced or strengthened in accordance with the loads specified in Section 1609 of the International Building Code.

Exception: Buildings that have been demonstrated to comply with the wind load provisions in ASCE 7—88 or later editions.

[BS] 706.3.2 Roof diaphragms resisting wind loads in high-wind regions. Where roofing materials are removed from more than 50 percent of the roof diaphragm or section of a building located where the ~~ultimate design basic~~ wind speed, ~~V_{eff}~~ V , is greater than 130 mph (58 m/s) ~~determined~~ in accordance with Figure 1609.3(1) of the International Building Code for Risk Category II, ~~is greater than 130 mph (58 m/s)~~, roof diaphragms, connections of the roof diaphragm to roof framing members, and roof-to-wall connections shall be evaluated for the wind loads specified in the *International Building Code*, including wind uplift. If the diaphragms and connections in their current condition are not capable of resisting 75 percent of those wind loads, they shall be replaced or strengthened in accordance with the loads specified in the *International Building Code*.

Exception: Buildings that have been demonstrated to comply with the wind load provisions in ASCE 7—88 or later editions.

[BS] C201.1 Purpose. This chapter provides prescriptive methods for partial structural retrofit of an *existing building* to increase its resistance to wind loads. It is intended for voluntary use where the ~~ultimate design basic~~ wind speed, ~~V_{eff}~~ V , is greater than 130 mph (58 m/s) ~~determined~~ in accordance with Figure 1609.3(1) of the International Building Code for Risk Category II, ~~exceeds 130 mph (58 m/s)~~ and for reference by mitigation programs. The provisions of this chapter do not necessarily satisfy requirements for new construction. Unless specifically cited, the provisions of this chapter do not necessarily satisfy requirements for structural improvements triggered by *addition, alteration, repair, change of occupancy, building relocation* or other circumstances.

Reason: Editorial changes to align the wind speed description consistent with ASCE 7 and the *International Building Code*.

Cost Impact: The code change proposal will not increase or decrease the cost of construction. The code change proposal is editorial.

EB67-22

Public Hearing Results

Committee Action:

As Modified

Committee Modification:

2021 International Existing Building Code

[BS] 503.12 Roof diaphragms resisting wind loads in high-wind regions. Where the intended *alteration* requires a permit for reroofing and involves removal of roofing materials from more than 50 percent of the roof diaphragm of a building or section of a building located where the basic wind speed, V , is greater than 130 mph (58 m/s) in accordance with Figure 1609.3(2) of the International Building Code ~~for Risk Category II~~, roof diaphragms, connections of the roof diaphragm to roof framing members, and roof-to-wall connections shall be evaluated for the wind loads specified in Section 1609 of the International Building Code, including wind uplift. If the diaphragms and connections in their current condition are not capable of resisting 75 percent of those wind loads, they shall be replaced or strengthened in accordance with the loads specified in Section 1609 of the International Building Code.

Exception: Buildings that have been demonstrated to comply with the wind load provisions in ASCE 7—88 or later editions.

[BS]706.3.2 Roof diaphragms resisting wind loads in high-wind regions. Where roofing materials are removed from more than 50 percent of the roof diaphragm or section of a building located where the basic wind speed, V , is greater than 130 mph (58 m/s) in accordance with Figure 1609.3(2+) of the International Building Code for Risk Category II, roof diaphragms, connections of the roof diaphragm to roof framing members, and roof-to-wall connections shall be evaluated for the wind loads specified in the *International Building Code*, including wind uplift. If the diaphragms and connections in their current condition are not capable of resisting 75 percent of those wind loads, they shall be replaced or strengthened in accordance with the loads specified in the *International Building Code*.

Exception: Buildings that have been demonstrated to comply with the wind load provisions in ASCE 7—88 or later editions.

[BS]C201.1 Purpose. This chapter provides prescriptive methods for partial structural retrofit of an *existing building* to increase its resistance to wind loads. It is intended for voluntary use where the basic wind speed, V , is greater than 130 mph (58 m/s) in accordance with Figure 1609.3(2+) of the International Building Code for Risk Category II, and for reference by mitigation programs. The provisions of this chapter do not necessarily satisfy requirements for new construction. Unless specifically cited, the provisions of this chapter do not necessarily satisfy requirements for structural improvements triggered by *addition, alteration, repair, change of occupancy*, building relocation or other circumstances.

Committee Reason: Approved as modified as a needed change to align with appropriate terminology. This provides updates to the appropriate figure while keeping the same Risk Category as existing code wording. The modification updates the reference to the correct figure and appropriately deletes the reference to a specific Risk Category. (Vote:10-4)

EB67-22

Individual Consideration Agenda

Public Comment 1:

IEBC: [BS] 503.12, [BS] 706.3.2, [BS] C201.1

Proponents: Julie Furr, representing National Council of Structural Engineers Association (jfurr@rimkus.com) requests As Modified by Public Comment

Further modify as follows:

2021 International Existing Building Code

[BS] 503.12 Roof diaphragms resisting wind loads in high-wind regions. Where the intended *alteration* requires a permit for reroofing and involves removal of roofing materials from more than 50 percent of the roof diaphragm of a building or section of a building located where the basic design wind speed, V , is greater than 130 mph (58 m/s) in accordance with ~~Figure 1609.3(2)~~ of the International Building Code, roof diaphragms, connections of the roof diaphragm to roof framing members, and roof-to-wall connections shall be evaluated for the wind loads specified in Section 1609 of the International Building Code, including wind uplift. If the diaphragms and connections in their current condition are not capable of resisting 75 percent of those wind loads, they shall be replaced or strengthened in accordance with the loads specified in Section 1609 of the International Building Code.

Exception: Buildings that have been demonstrated to comply with the wind load provisions in ASCE 7—88 or later editions.

[BS] 706.3.2 Roof diaphragms resisting wind loads in high-wind regions. Where roofing materials are removed from more than 50 percent of the roof diaphragm or section of a building located where the basic design wind speed, V , is greater than 130 mph (58 m/s) in accordance with ~~Figure 1609.3(2)~~ of the International Building Code, roof diaphragms, connections of the roof diaphragm to roof framing members, and roof-to-wall connections shall be evaluated for the wind loads specified in the *International Building Code*, including wind uplift. If the diaphragms and connections in their current condition are not capable of resisting 75 percent of those wind loads, they shall be replaced or strengthened in accordance with the loads specified in the *International Building Code*.

Exception: Buildings that have been demonstrated to comply with the wind load provisions in ASCE 7—88 or later editions.

[BS] C201.1 Purpose. This chapter provides prescriptive methods for partial structural retrofit of an *existing building* to increase its resistance to wind loads. It is intended for voluntary use where the basic design wind speed, V , is greater than 130 mph (58 m/s) in accordance with ~~Figure 1609.3(2)~~ of the International Building Code, and for reference by mitigation programs. The provisions of this chapter do not necessarily satisfy requirements for new construction. Unless specifically cited, the provisions of this chapter do not necessarily satisfy requirements for structural improvements triggered by *addition, alteration, repair, change of occupancy*, building relocation or other circumstances.

Commenter's Reason: Roof diaphragms and their connections are vulnerable to high wind pressures, which can cause considerable damage, both structural and nonstructural, when these components fail. In the field, as opposed to in a laboratory or academia, actual wind pressures that

develop on any given building or structure are a function of the wind speed, but they are not a function of that building or structure's designated Risk Category. With this understanding, a basic design wind speed of 130 mph has been identified as the appropriate threshold above which roof diaphragms and their connections should be closely evaluated.

Because the geographic areas encompassed by wind speeds greater than 130 mph are larger for Risk Category III and IV buildings and structures than they are for Risk Category II buildings and structures, this public comment would result in an increase in the number of Risk Category III and IV buildings and structures that would be required to comply with this provision. There is a societal expectation that Risk Category III and IV buildings and structures will be more robust than other buildings and structures, and these buildings and structures are required to be designed to wind pressures generated by these higher wind speeds. This increased robustness is the entire basis for the risk category system in the first place. These are storm shelters, hospitals, power-plants, large assembly areas, and the other buildings, the failure of which could pose a substantial risk to human life and/or a substantial hazard to the affected community.

On the other hand, buildings and structures in Risk Category I represent a low risk to human life in the event of failure, and because the geographic areas encompassed by wind speeds greater than 130 mph are smaller for Risk Category I buildings and structures than they are for Risk Category II buildings and structures, this public comment would result in a decrease in the number of Risk Category I buildings and structures that would be required to comply with this provision. This will reduce the net cost increase accordingly.

Cost Impact: The net effect of the public comment and code change proposal will increase the cost of construction

There will be somewhat greater costs for buildings and structures in Risk Categories III and IV as a result of the increased geographical area encompassed the the 130 mph contours; however, the costs for buildings and structures in Risk Category I would be reduced and would reduce the net cost increase accordingly.

EB83-22

IEBC: 804.4, 804.4.1, 804.4.1.1, TABLE 804.4.1.1(1), TABLE 804.4.1.1(2)

Proposed Change as Submitted

Proponents: Mike Nugent, representing Building Code Action Committee (bcac@iccsafe.org)

2021 International Existing Building Code

804.4 Number of exits. The number of exits shall be in accordance with Sections 804.4.1 through 804.4.3.

Revise as follows:

804.4.1 Minimum number. Every story or occupied roof utilized for human occupancy on which there is a *work area* that includes exits or corridors shared by more than one tenant within the *work area* shall be provided with the minimum number of exits based on the occupancy and the occupant load in accordance with the *International Building Code*. In addition, the exits shall comply with Sections 804.4.1.1 and 804.4.1.2.

804.4.1.1 Single-exit buildings. A single exit or access to a single exit shall be permitted from spaces, any story or any ~~occupied~~occupiable roof where one of the following conditions exists:

1. The occupant load, number of dwelling units and exit access travel distance do not exceed the values in Table 804.4.1.1(1) or Table 804.4.1.1(2).
2. In Group R-1 or R-2, buildings without an *approved* automatic sprinkler system, individual single-story or multiple-story dwelling or sleeping units shall be permitted to have a single exit or access to a single exit from the dwelling or sleeping unit provided one of the following criteria are met:
 - 2.1. The occupant load is not greater than 10 and the exit access travel distance within the unit does not exceed 75 feet (22 860 mm).
 - 2.2. The building is not more than three stories in height; all third-story space is part of dwelling with an exit access doorway on the second story; and the portion of the exit access travel distance from the door to any habitable room within any such unit to the unit entrance doors does not exceed 50 feet (15 240 mm).
3. In buildings of Group R-2 occupancy of any number of stories with not more than four dwelling units per floor served by an interior exit stairway; with a smokeproof enclosure in accordance with Sections 909.20 and 1023.12 of the *International Building Code* or an exterior stairway as an exit; and where the portion of the exit access travel distance from the dwelling unit entrance door to the exit is not greater than 20 feet (6096 mm).

TABLE 804.4.1.1(1) STORIES AND OCCUPIABLE ROOFS WITH ONE EXIT OR ACCESS TO ONE EXIT FOR R-2 OCCUPANCIES

STORY OR OCCUPIABLE ROOF	OCCUPANCY	MAXIMUM NUMBER OF DWELLING UNITS	MAXIMUM EXIT ACCESS TRAVEL DISTANCE (feet)
Basement, first, or second or third story above grade plane <u>and occupiable roofs over the first or second floor above grade plane</u>	R-2 ^{a,b,c}	4 dwelling units	50-125 feet
Third-Fourth story above grade plane and higher	NP	NA	NA

For SI: 1 foot = 304.8 mm.

NP = Not Permitted.

NA = Not Applicable.

- a. Buildings classified as Group R-2, equipped without an approved automatic sprinkler system in accordance with Section 903.3.1.1 or 903.3.1.2 of the International Fire Code and provided with emergency escape and rescue openings in accordance with Section 1031 of the International Building Code.
- b. This table is used for Group R-2 occupancies consisting of dwelling units. For Group R-2 occupancies consisting of sleeping units, use Table 1006.3.4(2) of the International Building Code.
- c. This table is for occupiable roofs accessed through and serving individual dwelling units in Group R-2 occupancies. For Group R-2 occupancies with occupiable roofs that are not access through and serving individual units, use Table 804.4.1.1(2).

TABLE 804.4.1.1(2) STORIES AND OCCUPIABLE ROOFS WITH ONE EXIT OR ACCESS TO ONE EXIT FOR OTHER OCCUPANCIES

STORY OR OCCUPIABLE ROOF	OCCUPANCY	MAXIMUM OCCUPANT LOAD PER STORY	MAXIMUM EXIT ACCESS TRAVEL DISTANCE (feet)
First story above or below grade plane <u>or occupable roofs over the first story above grade plane</u>	B ^b , F-2 ^b , S-2 ^a	35-49	75
	S-2 ^{a,b}	35	75
Second story above grade plane	B, F-2, S-2 ^a	35	75
Third story above grade plane and higher	NP	NA	NA

For SI: 1 foot = 304.8 mm.

NP = Not Permitted.

NA = Not Applicable.

a. The length of exit access travel distance in a Group S-2 open parking garage shall be not more than 100 feet.

b. Group B, F and S occupancies in buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 or on the roof of such buildings shall have a maximum exit access travel distance of 100 feet.

Reason: This proposal has two reasons.

1. Coordination with IBC Section 1006.3.4 and E21-21 that added occupiable roofs to the single exit tables.
2. The current requirements in Table 804.4.1.1(1) is less that what is permitted for new construction for travel distance and could be read to not allow for a single exit from a 3rd floor. The current requirements for B and F-2 are less than permitted for new construction.

This has been approved for the 2024 IBC through the Approval of E21-21. Proposal E21-21 was approved as submitted and can be found at the following link. <https://www.iccsafe.org/wp-content/uploads/IBC-Egress-2021-Group-A.pdf> The committee reason statement is below:

Committee Reason:

This proposal was approved as an occupied roof is not a story, so the number of exits from the occupied roof needs to be clarified. The location of the occupied roof allowance in Table 1006.3.4(2) is appropriate as the occupied roof over the 1st floor is the same vertical travel as from the basement level. This is a good correlation with the occupied roof requirements in the code. (Vote: 10-4)

This proposal is submitted by the ICC Building Code Action Committee (BCAC).

BCAC was established by the ICC Board of Directors in July 2011 to pursue opportunities to improve and enhance assigned International Codes or portions thereof. In 2020 and 2021 the BCAC has held several virtual meetings open to any interested party. In addition, there were numerous virtual Working Group meetings for the current code development cycle, which included members of the committee as well as interested parties. Related documents and reports are posted on the BCAC website at <https://www.iccsafe.org/products-and-services/i-codes/code-development/cs/building-code-action-committee-bcac/>.

Cost Impact: The code change proposal will not increase or decrease the cost of construction. This is a correlation revisions made to the IBC in Group A (2021). Without this correlation the IEBC requirements would be more restrictive than new thus increasing the cost of construction in existing buildings.

Public Hearing Results

Committee Action:

As Modified

Committee Modification:

804.4.1 Minimum number. Every story or ~~occupiable occupied~~ roof utilized for human occupancy on which there is a *work area* that includes exits or corridors shared by more than one tenant within the *work area* shall be provided with the minimum number of exits based on the occupancy and the occupant load in accordance with the *International Building Code*. In addition, the exits shall comply with Sections 804.4.1.1 and 804.4.1.2.

Committee Reason: This proposal was approved for consistency with the approval of code change proposal E21-21. The modification simply updates to the approved terminology "occupiable" versus "occupied." (Vote: 11-3)

EB83-22

Individual Consideration Agenda

Public Comment 1:

IEBC: TABLE 804.4.1.1(1), TABLE 804.4.1.1(2)

Proponents: Kota Wharton, representing City of Grove City (kwharton@grovecityohio.gov) requests As Modified by Public Comment

Modify as follows:

2021 International Existing Building Code

TABLE 804.4.1.1(1) STORIES AND OCCUPIABLE ROOFS WITH ONE EXIT OR ACCESS TO ONE EXIT FOR R-2 OCCUPANCIES

STORY OR OCCUPIABLE ROOF	OCCUPANCY	MAXIMUM NUMBER OF DWELLING UNITS	MAXIMUM EXIT ACCESS TRAVEL DISTANCE
Basement, first, second or third story above grade plane and occupiable roofs over the first or second floor above grade plane	R-2 ^{a, b, c}	4 dwelling units	125 feet
Fourth story above grade plane and higher	NP	NA	NA

For SI: 1 foot = 304.8 mm.

NP = Not Permitted.

NA = Not Applicable.

- a. Buildings classified as Group R-2, ~~equipped~~ without an approved automatic sprinkler system ~~throughout in accordance~~ complying with Section 903.3.1.1 or 903.3.1.2 of the International Fire Code and provided with emergency escape and rescue openings in accordance with Section 1031 of the International Building Code.
- b. This table is used for Group R-2 occupancies consisting of dwelling units. For Group R-2 occupancies consisting of sleeping units, use Table 1006.3.4(2) of the International Building Code.
- c. This table is for occupiable roofs accessed through and serving individual dwelling units in Group R-2 occupancies. For Group R-2 occupancies with occupiable roofs that are not access through and serving individual units, use Table 804.4.1.1(2).

TABLE 804.4.1.1(2) STORIES AND OCCUPIABLE ROOFS WITH ONE EXIT OR ACCESS TO ONE EXIT FOR OTHER OCCUPANCIES

STORY OR OCCUPIABLE ROOF	OCCUPANCY	MAXIMUM OCCUPANT LOAD PER STORY AND OCCUPIABLE ROOF	MAXIMUM EXIT ACCESS TRAVEL DISTANCE (feet)
First story above or below grade plane or occupable roofs over the first story above grade plane	B ^b , F-2 ^b	49	75
	S-2 ^{a,b}	35	75
Second story above grade plane	B, F-2, S-2 ^a	35	75
Third story above grade plane and higher	NP	NA	NA

For SI: 1 foot = 304.8 mm.

NP = Not Permitted.

NA = Not Applicable.

- a. The length of exit access travel distance in a Group S-2 open parking garage shall be not more than 100 feet.
- b. Group B, F and S occupancies in buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 or on the roof of such buildings shall have a maximum exit access travel distance of 100 feet.

Commenter's Reason: Multiple modifications to proposal.

- **International Existing Building Code Table 804.4.1.1 (1) footnote (a).** Removed *equipped* for clarity. *Equipped* adds no meaning and is open to confusion when follows by *without*. Added scoping by adding *throughout*. The concern is whether the building is equipped *throughout* rather than equipped in areas. See International Building Code Table 1006.3.4 (1). Removed and replaced *accordance* with *complying* for clarity.
- **International Existing Building Code 804.4.1.1 (2).** Added *OR OCCUPIABLE ROOF* to the column heading for clarity and coordination. See International Building Code Table 1006.3.4

Cost Impact: The net effect of the public comment and code change proposal will not increase or decrease the cost of construction. See the original proposal for the cost impact. The modification is editorial only.

EB85-22

IEBC: 804.4, 804.4.1

Proposed Change as Submitted

Proponents: Daniel Nichols, representing MTA Construction and Development (dnichols@mnr.org)

2021 International Existing Building Code

Revise as follows:

804.4 Number of exits. The number of exits or access to exits shall be in accordance with Sections 804.4.1 through 804.4.3.

804.4.1 Minimum number. Every story utilized for human occupancy on which there is a *work area* that includes exits or access to exits, or corridors shared by more than one tenant within the *work area* shall be provided with the minimum number of exits or access to exits based on the occupancy and the occupant load in accordance with the *International Building Code*. In addition, the exits shall comply with Sections 804.4.1.1 and 804.4.1.2.

Reason: When utilizing the Alterations – Level 2 work area method, IEBC Section 804.4.1 requires that any work to a work area that effects any exits or corridors shared by more than one tenant shall be provided with the minimum number of exits. With the recent changes to the IBC expanding the use of exit access stairways, it creates a double-edged sword for existing buildings:

1. For “newer” existing buildings constructed under the more recent editions of the IBC, any Alt. 2 rehab work on a multi-tenant story that effects a corridor will no longer be permitted to utilize the “exit access stairway” allowance that was allowed when first built since the language specifically states “minimum number of exits” without exception
2. In a more general sense, a code user that goes to the IBC looking for the minimum number of exits per story will start at IBC Section 1006.3.3 and Table 1006.3.3. Both the section and the table state “Exits, or access to exits per story.” This gives the IEBC code user little direction if they are limited to just exits, IBC compliant exits, or can use any access to exits? The latter can be very concerning since there is not any limitation to sizing, separation, or travel distances referenced anywhere for this type of application.

The purpose of IEBC 804.4.1.3 is to provide qualifiers to allow for a subset of IBC compliant exit access stairways to be permitted. The 2 sections referenced ensure that the exit access travel distance and the number of stories traveled are both considered in the determination of exit access stairways counting toward the number of “exits” within IEBC Section 804.4

Cost Impact: The code change proposal will not increase or decrease the cost of construction
This proposal is to align the methodology of “number of exits” with current requirements within the IBC.

EB85-22

Public Hearing Results

Committee Action:

As Submitted

Committee Reason: This proposal was approved to be consistent with the allowance of exit access stairways in the International Building Code. It was suggested that as corridors are currently mentioned in Section 804.4.1 and are considered exit access that the current language may need further refinement. (Vote: 14-0)

EB85-22

Individual Consideration Agenda

Public Comment 1:

IEBC: 804.4, 804.4.1

Proponents: Daniel Nichols, representing MTA Construction and Development (dnichols@mnr.org) requests As Modified by Public Comment

Modify as follows:

2021 International Existing Building Code

804.4 Number of exits. The number of exits or access to exits shall be in accordance with Sections 804.4.1 through 804.4.3.

804.4.1 Minimum number. Every story utilized for human occupancy on which there is a *work area* that includes exits, ~~access to exits~~, or corridors shared by more than one tenant within the *work area* shall be provided with the minimum number of exits or access to exits based on the occupancy and the occupant load in accordance with the *International Building Code*. In addition, the exits shall comply with Sections 804.4.1.1 and 804.4.1.2.

Commenter's Reason: At the Rochester hearings, the committee agreed with the change but did ask for the application to the exit access be further explored. In doing so, we are submitting this public comment to remove the "access to exits" trigger for use of the section since it could be interpreted to applying to any work area undergoing Alteration work. This would meet the intent of the original code change proposal to not change the trigger for the level of work, which can be interpreted as such in the proposal's original language.

The public comment still meets the intent of the reason statement to permit the consideration of "access to exits" and eliminate confusion when utilizing IBC Table 1006.3.2.

Cost Impact: The net effect of the public comment and code change proposal will decrease the cost of construction

The public comment is further clarification to allow an exit access stairways in existing buildings, lowering the need for exits to be constructed with enclosures.

EB94-22

IEBC: 1002.1

Proposed Change as Submitted

Proponents: Mike Nugent, representing Building Code Action Committee (bcac@iccsafe.org)

2021 International Existing Building Code

Revise as follows:

1002.1 Compliance with the building code. Where an *existing building* or part of an *existing building* undergoes a *change of occupancy* to one of the special use or occupancy categories as described in Chapter 4 in the *International Building Code*, the building shall comply with all of the requirements of Chapter 4 of the *International Building Code* applicable to the special use or occupancy.

Exception: Where construction of a new occupiable roof on an existing building results in a high rise building classification, compliance with Section 403 of the *International Building Code* shall not be required. The construction of the occupiable roof shall comply with Section 1011.

Reason: The intent of this proposal is to add an exception for converting portion of roof to an occupiable roof for buildings where the highest floor is below 75' but the roof is about 75'. This will have no impact on existing high-rise buildings.

The exception exempts buildings that were not considered high-rises without the occupied roof from the high-rise package as long as the building is sprinklered, has occupant notification and (if provided) an EVAC system. This is not an exemption from the limitations for occupiable roof so this added occupied roof is not an additional story. The items that would be very difficult or impossible for an existing building to comply with include :

- Moving the stairways to meet separation requirements
- Changing the structural integrity of the stairways
- Adding a secondary water supply.
- Adding a fire command center

In urban environments the opportunity for people to get outside by using the roof is very important for occupant health and well-being.

This proposal is submitted by the ICC Building Code Action Committee (BCAC).

BCAC was established by the ICC Board of Directors in July 2011 to pursue opportunities to improve and enhance assigned International Codes or portions thereof. In 2020 and 2021 the BCAC has held several virtual meetings open to any interested party. In addition, there were numerous virtual Working Group meetings for the current code development cycle, which included members of the committee as well as interested parties. Related documents and reports are posted on the BCAC website at <https://www.iccsafe.org/products-and-services/i-codes/code-development/cs/building-code-action-committee-bcac/>.

Cost Impact: The code change proposal will decrease the cost of construction

To require compliance with the high-rise provisions in Section 403 of the IBC simply due to the later addition of an occupiable roof would be very expensive. This proposal prevents the need for costly and complex upgrades that would be required.

EB94-22

Public Hearing Results

Committee Action:

As Modified

Committee Modification:

1002.1 Compliance with the building code. Where an *existing building* or part of an *existing building* undergoes a *change of occupancy* to one of the special use or occupancy categories as described in Chapter 4 in the *International Building Code*, the building shall comply with all of the requirements of Chapter 4 of the *International Building Code* applicable to the special use or occupancy.

Exception: Where construction of a new occupiable roof on an existing building results in a high rise building classification and the occupiable

roof has an occupant load less than 50, compliance with Section 403 of the *International Building Code* shall not be required. The construction of the occupiable roof shall comply with Section 1011.

Committee Reason: This proposal with the modification was seen as a reasonable compromise to not require compliance with IBC Section 403 retroactively. The modification places a occupant limit of 50 for occupiable roofs. It was felt that larger occupant loads pose a higher risk and should trigger more restrictive requirements. (Vote: 8-6)

EB94-22

Individual Consideration Agenda

Public Comment 1:

Proponents: Mike Nugent, representing Building Code Action Committee (bcac@iccsafe.org) requests As Submitted

Commenter's Reason: We are asking the ICC membership to accept this proposed code change As Submitted. As the addition of an occupied roof will constitute a change of occupancy (or partial change of occupancy), without the proposed exception the building – regardless of the age, its type of construction or the code under which it was built - would be required TO TOTALLY COMPLY with the requirements of the IBC. At first blush this doesn't seem so out of the ordinary as logic says if you add a new "occupancy" or "use" to a building, the applicable alterations should be made. BUT, and we cannot emphasize this enough, given the acceptance of code change G15-21 in Group A to revise the definition of "high-rise building" in the IBC to make an occupied roof be one of the thresholds which may push a building into that category, the alterations needed for the existing building may be monumental and extremely costly. Per code change G15-21, the definition for a high-rise building in the 2024 code will now read:

[BG] HIGH-RISE BUILDING.

A building with an occupied floor or occupied roof located more than 75 feet (22 860 mm) above the lowest level of fire department vehicle access.

The change to the definition of "high-rise building" resulted in there now two (2) thresholds.

- When an occupied floor is located more than 75 feet (22 860 mm) above the lowest level of fire department vehicle access; OR
- When an occupied roof is located more than 75 feet (22 860 mm) above the lowest level of fire department vehicle access.

The new threshold works for new buildings but WILL NOT work for most existing buildings without significant alterations at a significant cost. This is an extremely important issue that was outlined in the Reason statement to this proposed code and we feel is worth reiterating.

Should an occupied roof be constructed on an existing building that has a building height of 75 feet, per the 2024 IBC definition the building is now a "high-rise." BUT the existing building was not designed or constructed as a high-rise as the highest occupied floor is less than 75 ft above the lowest level of fire department vehicle access. Without the proposed exception, the ENTIRE building would be subject to the high-rise package that is found in Section 403 of the IBC. That package would include among other items the following :

- Exit stairways that must meet separation requirements – min 30 ft.
- Changing the structural integrity of the stairways – requirement for hardening of shafts
- Adding a secondary water supply – building may not even be sprinklered.
- Adding a fire command center –
- Adding a smoke removal system to each story

Over the past 3 cycles the IBC has been revised significantly to include a package of requirements for occupied roofs. Forcing an existing building into compliance with the high-rise package will kill most project due to the cost. The items that would be very difficult or impossible for an existing.

We encourage that you accept the proposed code change As Submitted.

Cost Impact: The net effect of the public comment and code change proposal will decrease the cost of construction To require compliance with the high-rise provisions in Section 403 of the IBC simply due to the later addition of an occupiable roof would be very

expensive. This proposal prevents the need for costly and complex upgrades that would be required.

Public Comment# 3045

Public Comment 2:

Proponents: Stephen Thomas, representing Colorado Chapter ICC (stthomas@coloradocode.net) requests Disapprove

Commenter's Reason: This proposal will create a conflict within the IEBC. Proposal EB46-22 was approved as submitted by the committee. That proposal considers new occupiable roofs as an addition. This proposal places the requirements under a Change of occupancy. Therefore, there will be a conflict in the code and create confusion. The definition of Change of Occupancy states the following:

Any of the following shall be considered as a change of occupancy where the current International Building Code requires a greater degree of safety, accessibility, structural strength, fire protection, means of egress, ventilation or sanitation than is existing in the current building or structure:

1. Any change in the occupancy classification of at building or structure.
2. Any change in the purpose of, or a change in the level of activity within, a building or structure.
3. A Change of use.

The creation of a new occupiable roof does not fall within any of those conditions. The definition of additions states, "An extension or increase in floor area, number of stories, or height of a building or structure". When an owner creates an occupiable roof, decking is typically added over the top of the existing roof and therefore increasing the height of the building/structure. Therefore, it meets the definition of an addition. It is not a change of occupancy.

We have taken the revised exception approved by the committee and relocated it within a public our comment for Proposal EB46-22 to maintain the intent of the committee. The revised exception will be maintain, just in a different location. This will maintain the original proponent's and committee's intent. It is important that a new occupied roof be considered an addition and not a change of occupancy. If it is considered a change of occupancy, the provisions of Section 306.7.1 would apply and the 20% limitation on improving the accessibility would be applicable. Therefore, there would be little likelihood that an elevator would be provided to an occupiable roof. An additions does not fall under this limitation and full accessibility would be required at the roof.

In addition, the charging statement in Section 1002.1 states that where there is a change of occupancy to one of the special use or occupancies in Chapter 4 of the IBC, the building has to comply with the building code. Occupied roofs are not a special use or occupancy referenced in Chapter 4 of the IBC. They are referenced in Chapter 5. The proposed exception would also only apply to a change of occupancy under the work area option of the IEBC. It would not apply to the prescriptive option or the performance option. Therefore, this is not the correct location for the exception. We feel it is better located in the Addition sections as addressed in EB46-22.

Cost Impact: The net effect of the public comment and code change proposal will not increase or decrease the cost of construction
No change to code.

Public Comment# 3078

EB97-22

IEBC: 1011.2.1, 1011.2.1.1 (New), 1011.2.1.1.1 (New)

Proposed Change as Submitted

Proponents: Mike Nugent, representing Building Code Action Committee (bcac@iccsafe.org); Robert Marshall, representing FCAC (fcac@iccsafe.org)

2021 International Existing Building Code

1011.2.1 Fire sprinkler system. Where a change in occupancy classification occurs or where there is a *change of occupancy* within a space where there is a different fire protection system threshold requirement in Chapter 9 of the International Building Code that requires an automatic fire sprinkler system to be provided based on the new occupancy in accordance with Chapter 9 of the International Building Code. The installation of the automatic sprinkler system shall be required within the area of the *change of occupancy* and areas of the building not separated horizontally and vertically from the change of occupancy by one of the following:

1. Nonrated permanent partition and horizontal assemblies.
2. Fire partition.
3. Smoke partition.
4. Smoke barrier.
5. Fire barrier.
6. Fire wall.

Exceptions:

1. An automatic sprinkler system shall not be required in a one- or two-family dwelling constructed in accordance with the International Residential Code.
2. Automatic sprinkler system shall not be required in a townhouse constructed in accordance with the International Residential Code.
3. The townhouse shall be separated from adjoining units in accordance with Section R302.2 of the *International Residential Code*.

Add new text as follows:

1011.2.1.1 Nonrequired automatic sprinkler systems. The code official is authorized to permit the removal of existing automatic sprinkler system where all of the following conditions exist:

1. The system is not required for new construction.
2. Portions of the system that are obvious to the public are removed.
3. The system was not installed as part of any special construction features, including fire-resistance-rated assemblies and smoke-resistive assemblies, conditions of occupancy, means of egress conditions, fire code deficiencies, approved modifications or approved alternative materials, design and methods of construction, and equipment applying to the building.

1011.2.1.1.1 Approval. Plans, investigation and evaluation reports, and other data shall be submitted documenting compliance Section 1011.2.1.1 for review and approval in support of a determination authorizing the removal of the automatic sprinkler system by the code official.

Reason: E103-19 was approved as modified. It was disapproved in the final action due because Section 1011.2.1.1.1 did not reference all three items in Section 1011.2.1.1. The concerns raised have been addressed in the revisions.

A change of occupancy could be to an occupancy that did not require a sprinkler system. If the system was old, outdated or needed extensive reconfiguration, costs could be high. The new Section 1011.2.1.1 allows for non required systems to be removed. To be removed the designer/building owner would have to demonstrate to the code official that the building did not need the sprinklers for occupancy, fire areas or type of construction limitations, and that none of the trade off's for items such as travel distance or corridor rating were in effect in the building. The system would have to be removed totally – including the system in the ceiling, standpipes and the connections for the fire department outside of the building.

This proposal is submitted by the ICC Building Code Action Committee (BCAC) and ICC Fire Code Action Committee (FCAC).

BCAC was established by the ICC Board of Directors in July 2011 to pursue opportunities to improve and enhance assigned International Codes or portions thereof. In 2020 and 2021 the BCAC has held several virtual meetings open to any interested party. In addition, there were numerous virtual Working Group meetings for the current code development cycle, which included members of the committee as well as interested parties. Related documents and reports are posted on the BCAC website at <https://www.iccsafe.org/products-and-services/i-codes/code-development/cs/building->

[code-action-committee-bcac/](#).

The FCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance assigned International Codes with regard to fire and life safety in new and existing buildings and facilities as well as the protection of life and property in wildland urban interface areas. In 2020 and 2021 the Fire-CAC held multiple virtual meetings that were open to any interested party. In addition, there were numerous virtual specific working group meetings that were also open to any interested parties, to develop, discuss and debate the proposed changes. Related documentation and reports are posted on the FCAC website at: <https://www.iccsafe.org/products-and-services/i-codes/code-development/cs/fire-code-action-committee-fcac/>

Cost Impact: The code change proposal will not increase or decrease the cost of construction
This section is essentially providing the allowance to remove a system that is not required and may be providing a false sense of security. Any costs will simply be associated with the removal process. Once removed it will reduce maintenance and repair costs.

EB97-22

Public Hearing Results

Committee Action:

As Submitted

Committee Reason: This proposal was approved as it is necessary for situations where existing systems needs to be removed and recognizes that existing buildings should not be held to a higher standard than new buildings. This also includes language to ensure that such systems are not removed where they are part of the approval of the building as originally constructed. The proposal also appropriately includes language to make sure all visible aspects of the system are removed to avoid a false sense of protection by the public. There was some concern of the use of the term "obvious" with regard to the visibility to the public and also on the location of the provisions within a section triggering automatic sprinklers. It was suggested that other types of non required fire safety systems should also be addressed. (Vote: 14-0)

EB97-22

Individual Consideration Agenda

Public Comment 1:

IEBC: 1011.2.1.1

Proponents: Kota Wharton, representing City of Grove City (kwharton@grovecityohio.gov) requests As Modified by Public Comment

Modify as follows:

2021 International Existing Building Code

1011.2.1.1 Nonrequired automatic sprinkler systems.. The code official is authorized to permit the removal of existing automatic sprinkler system where all of the following conditions exist:

1. The system is not required for new construction.
2. Portions of the system that are ~~obvious~~ exposed to the public are removed.
3. The system was not installed as part of any special construction features, including fire-resistance-rated assemblies and smoke-resistive assemblies, conditions of occupancy, means of egress conditions, fire code deficiencies, approved modifications or approved alternative materials, design and methods of construction, and equipment applying to the building.

Commenter's Reason: Clarifies the intent of the word "obvious".
Expose. v. To show publicly; to display [...] (Staff et al., *Black's Law Dictionary* 1990)

Bibliography: Publisher's Editorial Staff, Haley, J. R., & Nolan-Haley, J. M. (1990). *Black's Law Dictionary* (6th ed.). West Publishing Co.

Cost Impact: The net effect of the public comment and code change proposal will not increase or decrease the cost of construction
See proposal cost impact statement.

Public Comment 2:

Proponents: Jeffrey Hugo, representing NFSA (hugo@nfsa.org) requests Disapprove

Commenter's Reason: IEBC, Section 1011.2 is the charging section for requiring fire protection systems for a change of occupancy. The new language by this proposal is a subsection of 1011.2.1 that removes existing systems. Nowhere is there an allowance or path to get to this new subsection to remove nonrequired systems. The IFC, Section 901.4.2, already has rules for nonrequired system removal. The IEBC and IFC, should be correlated for continuity of application for designers and code officials.

Cost Impact: The net effect of the public comment and code change proposal will decrease the cost of construction
No change to code.

EB98-22

IEBC: 1011.5.1, 1011.5.2, 804.12, 804.12.1, 804.12.2

Proposed Change as Submitted

Proponents: John Williams, representing Committee on Healthcare (ahc@iccsafe.org)

2021 International Existing Building Code

Revise as follows:

1011.5.1 Means of egress for change to a higher-hazard category. Where a change of occupancy classification is made to a higher-hazard category (lower number) as shown in Table 1011.5, the means of egress shall comply with the requirements of Chapter 10 of the International Building Code.

Exceptions:

1. Stairways shall be enclosed in compliance with the applicable provisions of Section 903.1.
2. Existing stairways including handrails and guards complying with the requirements of Chapter 9 shall be permitted for continued use subject to approval of the *code official*.
3. Any stairway replacing an existing stairway within a space where the pitch or slope cannot be reduced because of existing construction shall not be required to comply with the maximum riser height and minimum tread depth requirements.
4. Existing corridor walls constructed on both sides of wood lath and plaster in good condition or 1/2-inch-thick (12.7 mm) gypsum wallboard shall be permitted. Such walls shall either terminate at the underside of a ceiling of equivalent construction or extend to the underside of the floor or roof next above.
5. Existing corridor doorways, transoms and other corridor openings shall comply with the requirements in Sections 804.6.1, 804.6.2 and 804.6.3.
6. Existing dead-end corridors shall comply with the requirements in Section 804.7.
7. An operable window complying with Section 1011.5.6 shall be accepted as an *emergency escape and rescue opening*.
8. In Group I-1 and I-2 facilities, required guards enclosing the occupiable roof areas shall be permitted to be greater than 48 inches (1219 mm) above the surface of the occupiable roof where the occupants, because of clinical needs, require restraint or containment as part of a function of a psychiatric or cognitive treatment area.

1011.5.2 Means of egress for change of use to an equal or lower-hazard category. Where a change of occupancy classification is made to an equal or lesser-hazard category (higher number) as shown in Table 1011.5, existing elements of the means of egress shall comply with the requirements of Section 905 for the new occupancy classification. Newly constructed or configured means of egress shall comply with the requirements of Chapter 10 of the International Building Code.

~~Exception~~ Exceptions:

1. Any stairway replacing an existing stairway within a space where the pitch or slope cannot be reduced because of existing construction shall not be required to comply with the maximum riser height and minimum tread depth requirements.
2. In Group I-1 and I-2 facilities, required guards enclosing the occupiable roof areas shall be permitted to be greater than 48 inches (1219 mm) above the surface of the occupiable roof where the occupants, because of clinical needs, require restraint or containment as part of a function of a psychiatric or cognitive treatment area.

804.12 Guards. The requirements of Sections 804.12.1 and 804.12.2 shall apply to guards from the *work area* floor to, and including, the level of exit discharge but shall be confined to the egress path of any *work area*.

804.12.1 Minimum requirement. Every open portion of a stairway, landing, or balcony that is more than 30 inches (762 mm) above the floor or grade below and is not provided with guards, or those portions in which existing guards are judged to be in danger of collapsing, shall be provided with guards.

Revise as follows:

804.12.2 Design. Guards required in accordance with Section 804.12.1 shall be designed and installed in accordance with the *International Building Code*.

Exception: In Group I-1 and I-2 facilities, required guards enclosing the occupiable roof areas shall be permitted to be greater than 48 inches (1219 mm) above the surface of the occupiable roof where the occupants, because of clinical needs, require restraint or containment as part of

a function of a psychiatric or cognitive treatment area.

Reason: The intent of this proposal is to allow higher guards for patient safety around outdoor patient garden/exercise areas on the roof. The Healthcare committee understands the guard height limitation for low rise buildings was to allow for fire department access to the roof. However, we feel that the limitations proposed are reasonable.

Access to fresh air and getting outside is incredibly important for older adults who live in Group I-1&I-2 care facilities. These care recipients spend up to 90% of their time indoors and if the only choice of outdoor space requires staff or volunteers to take them downstairs, via an elevator, to get outside, some care recipients never get the opportunity to be outside. If a garden space or other outdoor area can be created on a roof adjacent to sleeping areas, this can make getting outside much easier.

Unfortunately, while we want care recipients to get outside, we also need to keep them safe. We know that exit seeking behavior is prevalent and a 48" barrier is not enough to protect from elopement or self harm.

Outdoor areas are important for patient mental health and wellness. Hospitals and nursing homes in a urban environment often don't have property that would allow for outdoor patient areas. The 'clinical needs' language is an attempt to balance care recipient wellness with safety. These types of facilities have extensive fire and safety evacuation plans and staff that is trained in assisting care recipients and guest for evacuation/defend-in-place during an emergency. Fire departments perform regular inspections of these buildings, to they would be very familiar with the layouts. In addition, these facilities have exceptionally good records for a small number of fire events.

There was a similar change in Group A, G105-21 that had an original intention of allowing for guards to exceed the height limitation required by IBC Section 503.1.4.1. The modification to broaden this allowance for "walls, parapets, rooftop structures (some of which are exempted in Exception 1), and wind screens" on roofs above the reach of fire departments (>75') was appropriate. However, there is still the issue with existing buildings that want to expand or add an occupied roof with the result being –

- If any structure or guard is above 48" high, this is now being considered an additional story so they could violate height limitations for the type of construction.
- If the building is less than 75' in height, you cannot have guards high enough to discourage people from jumping off the roof.

There is a suggestion for Sections 804.12.2, 1011.5.1 and 1011.5.2 for Group I-1 and I-2 where high guards are needed for patient safety. The language for the limitation of 'clinical needs' is the same as IBC Section 101.2.14 for Controlled Egress Doors.

Below are two pictures of a roof garden on a memory care facility. There are glass between the columns.



This proposal is submitted by the Committee on Healthcare (CHC). The CHC was established by the ICC Board to evaluate and assess contemporary code issues relating to healthcare facilities. This is a joint effort between ICC and the American Society for Healthcare Engineering (ASHE), a subsidiary of the American Hospital Association, to eliminate duplication and conflicts in healthcare regulation. In 2020 and 2021 of the committees as well as any interested parties, to discuss and debate the proposed changes. Information on the CHC, including: meeting agendas; minutes; reports; resource documents; presentations; and all other materials developed in conjunction with the CHC effort can be downloaded from the CHC website at <https://www.iccsafe.org/products-and-services/i-codes/code-development/cs/icc-committee-on-healthcare/>.

Cost Impact: The code change proposal will not increase or decrease the cost of construction. This is an optional allowance for certain facilities so will provide design flexibility. It will cost more if such barriers are constructed but that is an option for the building owner.

Public Hearing Results

Committee Action:

As Submitted

Committee Reason: This proposal was approved as it is consistent with the allowance in the IBC for such guards through the occupiable roof requirements and is critical to allow the ability for such occupancies to provide a safe outdoor space for occupants. There was some concern as to how this allowance relates to the occupiable roof requirements in the IBC as approved in Group A where they are addressed within Chapter 5 versus Chapter 10 of the IBC. (Vote: 10-4)

EB98-22

Individual Consideration Agenda

Public Comment 1:

Proponents: David Renn, PE, SE, City and County of Denver, representing Code Change Committee of Colorado Chapter of ICC (david.renn@denvergov.org) requests Disapprove

Commenter's Reason: This public comment requests disapproval of this proposal for the following reasons:

1. The proposed new exceptions permit required guards enclosing occupiable roofs to be greater than 48". These are exceptions to complying with requirements of Chapter 10 of the IBC; however, Chapter 10 of the IBC (Section 1015.3) only has a minimum height for guards, so guards greater than 48" are allowed by Chapter 10. As a result, the new exceptions are for requirements that do not exist in Chapter 10 and have no impact on the code.
2. Section 503.1.4.1 for enclosures at occupied roofs has a requirement for elements or structures enclosing occupied roofs to not extend more than 48" above the roof surface and it appears this proposal is trying to address this. However, this proposal provides no relief for Chapter 5 requirements, so they still apply. Furthermore, 503.1.4.1 makes no mentions of guards, just elements or structures, so the language in the exceptions regarding "required guards" is incorrect as guards are not required to enclose occupiable roofs. If an occupiable roof extends to the edge of a roof, a guard would be required only at the edge of the roof, but not at interior edges of the occupied roof.
3. The 2021 IBC makes no similar allowance for enclosures at occupied roofs on new buildings, so it is not reasonable to give this allowance to existing buildings that undergo a change of occupancy or have alterations. A better spot to make this change is in the IBC - then, no change is needed in the IEBC when compliance with the IBC is required. Note that during testimony at the committee action hearings it was stated that a proposal was made in Group A for this, but we could not locate a proposal for this topic - and if there was, this IEBC proposal isn't needed since you could use the IBC allowances when directed to comply with the IBC.
4. This proposal only makes changes to the work area compliance method. If using the prescriptive compliance method (IEBC Chapter 5) the proposed changes would not apply.

While we agree with the intent of this proposal, the language in the proposal does not give the desired outcome since it adds exceptions to IBC Chapter 10 requirements that do not exist and does not give relief to the relevant requirements in IBC Chapter 5. Please support disapproval with the hope that this change is made in the next Group A hearings for the IBC, instead of the IEBC.

Cost Impact: The net effect of the public comment and code change proposal will not increase or decrease the cost of construction
No change to code.

Public Comment# 3185

EB116-22

IEBC: APPENDIX E (New)

Proposed Change as Submitted

Proponents: Mike Nugent, representing Building Code Action Committee (bcac@iccsafe.org); John Williams, representing Committee on Healthcare (ahc@iccsafe.org); Robert Marshall, representing FCAC (fcac@iccsafe.org)

2021 International Existing Building Code

Add new text as follows:

User notes. About this appendix: The primary purpose for Appendix E is to provide guidance for designers, engineers, architects, fire and building code officials to allow temporary emergency uses of existing buildings or temporary structures with respect to the minimum code requirements. This appendix is intended to serve as that template or checklist for use during an emergency that references the relevant code requirement of concerns.

APPENDIX E TEMPORARY EMERGENCY STRUCTURES AND EMERGENCY USES

SECTION E101 GENERAL

E101.1 Scope. The provisions of this appendix shall apply to the use, construction, installation, alteration, relocation and location of existing buildings or temporary structures and any service utilities or systems that serve such existing buildings or temporary structures during or based on the response to the emergency."

E101.1.1 Objectives. The objective of this Appendix is to provide flexibility for the code official to permit the temporary uses of existing buildings or temporary structures during an emergency to address unusual circumstances that temporarily overwhelms response capabilities of an entity while maintaining the level of safety intended by the code.

E101.1.2 Temporary use. Where temporary uses during emergencies exceed 180 days, judgement shall be used by the code official to allow for temporary uses and conditions to continue for the duration of the emergency based on the needs of the emergency. The code official is authorized to grant extensions for demonstrated cause.

SECTION E102 DEFINITIONS

Add new definition as follows:

EMERGENCY. Any event declared by local, state, or federal entities that temporarily overwhelms response capabilities, and that require the temporary suspension or modification of regulations, codes, or standards to facilitate response to such an event.

TEMPORARY STRUCTURES. That which is built, constructed or erected for a period of less than 180 days.

TEMPORARY USE. An activity or practice that is established at a designated location for a period of less than 180 days. Uses include, but are not limited to, those functional designations listed within the occupancy group descriptions in Section 302.1 of the International Building Code.

Add new text as follows:

SECTION E103 SUBMITTAL DOCUMENTS

E103.1 General. Submittal documents shall be of sufficient clarity to indicate the location, nature and extent of the work or use proposed and show in detail that it will conform to the provisions of this code and relevant laws, ordinances, rules and regulations, as determined by the code official.

SECTION E104 CONFORMANCE

E104.1 Conformance. Temporary use of existing buildings and temporary structures shall conform to the structural strength, fire safety, means of egress, accessibility, light, ventilation, and sanitary requirements of this code as necessary to provide a reasonable level of safety, health, and general welfare as determined by the code official. Tents and other membrane structures shall comply with Sections 3102 and 3103 of the *International Building Code*.

E104.2 Changes over time. As an emergency evolves, submittal documents shall be submitted to demonstrate that the temporary uses of the existing buildings or temporary structures are in compliance with the requirements of the *International Building Code*.

SECTION E105 **PERMITS**

E105.1 Emergency permits. In an emergency situation, where temporary structures are erected or an existing building undergoes a temporary change of use or occupancy, the *permit* application shall be submitted as soon as practicable to the *code official*. Permits shall be required in accordance with Sections 105.1.1 through 105.1.3.

105.1.1 Temporary structures, other than tents and membrane structures. Temporary structures, other than tents and other membrane structures, that occupy an area greater than 120 square feet (11.16 m²), shall not be constructed, erected, or relocated for any purpose without obtaining a permit from the code official.

E105.1.2 Tents and membrane structures. Tents and membrane structures shall be permitted in accordance with the *International Fire Code*.

E105.1.3 Existing buildings. An existing buildings shall not repurposed for a purpose it was not designed for without obtaining a permit from the code official for the change of use or occupancy.

SECTION E106 **GENERAL STANDARDS FOR EMERGENCY STRUCTURES**

E106.1 Scope. The provisions of Sections E106.2 through E106.7 shall apply to all existing structure being repurposed or temporary structures constructed, erected or relocated to support the response to an emergency.

E106.2 Intent. The intent of this section is to provide a base level of safety in a structure built or repurposed for emergency use.

E106.3 Change of use or occupancy. Existing buildings used in a way that was not originally intended by occupancy class or use shall be allowed without formally changing the occupancy class. The previous occupancy class shall be restored upon the conclusion of the emergency. Where the temporary live load of the floor is more than that required by Section 1607 of the International Building Code for the original use, the area designated for the temporary live load shall be posted with placards for the approved live load.

E106.4 Fire Safety Provisions. Determination of the fire safety requirements by the code official shall be in accordance with Section E106.4.1 through E106.4.5 in order to make determinations of safe conditions rather than strict adherence to the provisions of the International Fire Code.

E106.4.1 Fire safety and evacuation plans. Fire safety and evacuation plans shall be provided in accordance with Section 403 and 404 of the *International Fire Code*. Submittal documents shall be updated where there are any physical changes to the layout of the structure.

E106.4.2 Training and practice drills. Training of staff and practice drills shall comply with Section 405 and 406 of the *International Fire Code*. Structures in place for longer than 30 days shall conduct evacuation drill in accordance with Section 405.3 of the International Fire Code based on the temporary use.

E106.4.3 Fire Protection. An evaluation shall be performed to decide on fire protection needed utilizing NFPA 550.

E106.4.4 Emergency Access. Emergency vehicle access roads shall be approved by the fire code official.

E106.4.5 Fire Watch. A fire watch in accordance with Section 403.11.1 of the *International Fire Code* shall be permitted to be provided in lieu of other fire protection systems.

E106.5 Means of Egress. Means of egress shall comply with Section 1011.5 in addition to Sections E106.5.1 through E106.5.3.

Exception: In Group I-2 occupancies, in areas where corridors are used for movement of care recipients in beds, the clear width of ramps and corridors shall be not less than 48 inches (1219 mm).

E106.5.1 Exit Discharge. Exit discharge shall provide access to a public way, or to a safe dispersal area in accordance with Section 1028.5 of the *International Building Code*.

E106.5.2 Means of Egress Lighting. The means of egress shall be illuminated when the space is occupied.

Exception: Sleeping areas.

E106.5.3 Exit Signs. Exit signs shall be provided where the means of egress is not readily identifiable. Exit signs shall be permitted to be illuminated by the lighting provided in the structure.

E106.6 Accessibility. A facility that is constructed to be accessible shall be maintained accessible during occupancy.

E106.7 Temporary connection. The code official shall have the authority to authorize the temporary connection of the building or system to the utility, the source of energy, fuel, or power, or the water system or sewer system in accordance with Section 111. Water closets and lavatories shall

be either permanent plumbing fixtures installed within the structure, or temporary water closets or lavatories, such as chemical toilets or other means approved by the code official.

E106.7.1 Portable heating and cooling equipment. Portable heating and cooling equipment shall be used in accordance with their listing, and manufacturer's instructions.

SECTION E107

USE OF SPECIFIC STANDARDS

E107.1 Increased occupant load. Allowing for additional occupants in existing building shall comply with Section E107.1.1 through E107.1.3.

E107.1.1 Authorization. The code official is authorized to allow for an increase in the number of occupants or a change of use in a building or portion of a building during an emergency.

E107.1.2 Maintenance of the means of egress. The existing a means of egress shall be maintained.

E107.1.3 Sleeping areas. Where a space is used for sleeping purposes, the space shall be equipped with smoke alarms in accordance with Sections 907.2.6.2 and 907.2.11 if the International Fire Code or be provided with a fire watch in accordance with Section 403.11.1 of the *International Fire Code*. Carbon monoxide detectors shall be installed in accordance with Section 915 of the *International Fire Code* where the structure uses any fossil fuel or wood burning appliances.

E107.2 Temporary healthcare facilities. Temporary health care facilities shall comply with Section E107.2.1 and E107.2.2.

E107.2.1 General. Temporary health care facilities shall be erected, maintained and operated to minimize the possibility of a fire emergency requiring the evacuation of occupants.

E107.2.2 Membrane structures under projections. Membrane structures of less than 100 square feet (9.3 m²) shall be permitted to be placed under projections of a permanent building provided the permanent building is protected with an automatic sprinkler system installed in accordance with Section 903.3.1.1.

E107.3 Use of tiny houses or manufactured homes. Tiny houses or manufactured homes used for temporary housing shall comply with Section E107.3.1 through E107.3.5.

E107.3.1 Fire separation distances. Tiny houses or manufactured homes shall be separated by not less than 5 feet (1524 mm) between structures.

E107.3.2 Fire breaks. Tiny houses and manufactured homes shall not be located in groups of more than 20 units. Fire breaks of at least 20 feet (6096 mm) shall be provided between each group.

E107.3.3 Smoke alarms. Tiny houses and manufactured homes used for sleeping purposes shall be equipped with a smoke alarm complying with Section 907.2.11. of the *International Fire Code*. Smoke detectors are not required to be hard wired.

E107.3.4 Carbon monoxide detectors. Carbon monoxide detectors shall be installed in accordance with Section 915, where the tiny house or manufactured homes uses any fossil fuel or wood burning appliances.

E107.3.5 Structures located in a wildland urban interface zone. Tiny houses and manufactured homes that a relocated in a wildland urban interface area shall be provided with defensible space in accordance with the Section 603 of the International Wildland Urban Interface Code.

E107.4 Tents and membrane structures used as sleeping accommodations. Tents or membrane structures used as sleeping accommodations shall comply with the same requirements as tiny houses in Section E107.3.1 through E107.3.5 and Chapter 31 of the International Fire Code.

SECTION E108

REFERENCED STANDARDS

E108.1 General. See Table E108.1 for standards that are referenced in various sections of this appendix. Standards are listed by the standard identification with the effective date, standard title, and the section or sections of this appendix referenced in the standard.

TABLE E108.1 REFERENCED STANDARDS

<u>STANDARD ACRONYM</u>	<u>STANDARD NAME</u>	<u>SECTION REFERENCED HEREIN</u>
<u>NFPA 550-2017</u>	<u>Guide to the Fire Safety Concepts Tree</u>	<u>E106.5.3</u>

Reason: This appendix was originally submitted to IBC as G201-21. Since this proposal extensively dealt with temporary use of existing buildings during an emergency, it was felt it was better suited to IEBC. We believe we have addressed concerns that we learned about during the testimony on the previous proposal and have addressed them in this proposal.

The intent of this appendix is to provide guidance when there are emergencies that exceed the emergencies that the community has planned for. Response must be immediate, so there is not time for the typical plan review and inspection. Existing buildings will be used for occupancies other than they were intended, and temporary structures may need to be erected or brought in to address immediate needs. Recent examples were the housing needs due to mass evacuations during the west coast fires and how hard Covid hit many community health care systems. The user note for this Appendix emphasizes that this is a guidance document for emergencies that exceed pre-planned emergency responses.

The code officials are the people with the experience and knowledge base to identify what can be done and still maintain public health and safety.

This idea is emphasized in Section E101.1.2 and the definition of emergency for this appendix, as well as the modification to the title.

The following revisions were incorporated based on the input received during the hearing:

- The user note states this is a guidance appendix. The idea is used in IFC appendix E and G.
- The title was modified for clarity.
- E101.1.2 – better code language
- Definition for emergency – better code language
- E104.1 was modified to mirror Section 3103.1. This is already permitted by the code. E104.1 has an added sentence clarify that tents and other membrane structures are required to comply with Section 3102 and 3103. These sections also incorporate Chapter 16.
- E104.2 – re-evaluation is not always dependent on additional resources – it could be people being able to return or moving to family.
- E106.1 – This change clarifies that this appendix is applicable to what is happening due to the emergency – not other construction that happens to be occurring at the same time that is not related.
- E106.3 – this modification allows for temporary uses with heavier loading – such as storage of emergency supplies in an office building – where the safe limits are addressed. The change to E104.1 and E106.3 are to address concerns raised by structural engineers about loads.

E106.5 – An exception was created to clarify that in I-2 Occupancies, corridors can be 48" wide in existing buildings. This is consistent with IEBC Section 804.3 for Level 2 Alterations.

- E107.1 – the modification removed 'temporary waives for'. The criteria was not related to waivers.
- E107.2.2 – better code language
- E107.3 – use defined term for manufactured homes.
- E107.4 – change 'tiny homes' to 'tiny houses' for consistent terminology
- E107.5 and NFPA 1660 have been removed as they apply to previously anticipated emergencies. This appendix will only address where these plans are exceeded.

This proposal is submitted by the ICC Building Code Action Committee (BCAC), ICC Fire Code Action Committee (FCAC) and the Committee on Healthcare (CHC).

BCAC was established by the ICC Board of Directors in July 2011 to pursue opportunities to improve and enhance assigned International Codes or portions thereof. In 2020 and 2021 the BCAC has held several virtual meetings open to any interested party. In addition, there were numerous virtual Working Group meetings for the current code development cycle, which included members of the committee as well as interested parties. Related documents and reports are posted on the BCAC website at <https://www.iccsafe.org/products-and-services/i-codes/code-development/cs/building-code-action-committee-bcac/>. The FCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance assigned

International Codes with regard to fire and life safety in new and existing buildings and facilities as well as the protection of life and property in wildland urban interface areas. In 2020 and 2021 the Fire-CAC held multiple virtual meetings that were open to any interested party. In addition, there were numerous virtual specific working group meetings that were also open to any interested parties, to develop, discuss and debate the proposed changes. Related documentation and reports are posted on the FCAC website at: <https://www.iccsafe.org/products-and-services/i-codes/code-development/cs/fire-code-action-committee-fcac/>

The CHC was established by the ICC Board to evaluate and assess contemporary code issues relating to healthcare facilities. This is a joint effort between ICC and the American Society for Healthcare Engineering (ASHE), a subsidiary of the American Hospital Association, to eliminate duplication and conflicts in healthcare regulation. In 2020 and 2021 of the committees as well as any interested parties, to discuss and debate the proposed changes. Information on the CHC, including: meeting agendas; minutes; reports; resource documents; presentations; and all other materials developed in conjunction with the CHC effort can be downloaded from the CHC website at <https://www.iccsafe.org/products-and-services/i-codes/code-development/cs/icc-committee-on-healthcare/>.

Cost Impact: The code change proposal will not increase or decrease the cost of construction. This appendix is intended to provide a tool to jurisdictions and is not applicable unless adopted. Currently, no formal code requirements provide guidance on how to address. This will provide a framework to make enforcement more consistent and aligned with the requirements of the ICC codes. It was not intended to make compliance more expensive but instead to provide a resource for these emergency situations. These options mirror established ICC codes sections and standards.

Staff Analysis: The standard proposed for inclusion in the code, NFPA 550-17, Guide to the Fire Safety Concepts Tree, was reviewed during Group A with regard to some of the key ICC criteria for referenced standards (Section 3.6 of CP#28). The result of the review can be found here <https://www.iccsafe.org/wp-content/uploads/2021-PROPOSED-NEW-STANDARDS-ANALYSES.pdf>

EB116-22

Public Hearing Results

Committee Action:

As Modified

Committee Modification:

User notes.

About this appendix: The primary purpose for Appendix E is to provide guidance for designers, engineers, architects, fire and building code officials to allow temporary emergency uses of existing buildings ~~or temporary structures~~ with respect to the minimum code requirements. This appendix is intended to serve as that template or checklist for use during an emergency that references the relevant code requirement of concerns.

APPENDIX E TEMPORARY EMERGENCY STRUCTURES AND EMERGENCY USES

E101.1 Scope. The provisions of this appendix shall apply to the use, ~~construction~~, installation, alteration, relocation and location of existing buildings ~~or temporary structures~~ and any service utilities or systems that serve such existing buildings ~~or temporary structures~~ during or based on the response to the emergency.”

E101.1.1 Objectives. The objective of this Appendix is to provide flexibility for the code official to permit the temporary uses of existing buildings ~~or temporary structures~~ during an emergency to address unusual circumstances that temporarily overwhelms response capabilities of an entity while maintaining the level of safety intended by the code.

~~TEMPORARY STRUCTURES. That which is built, constructed or erected for a period of less than 180 days.~~

E104.1 Conformance. Temporary use of existing buildings ~~and temporary structures~~ shall conform to the structural strength, fire safety, means of egress, accessibility, light, ventilation, and sanitary requirements of this code as necessary to provide a reasonable level of safety, health, and general welfare as determined by the code official. ~~Tents and other membrane structures shall comply with Sections 3102 and 3103 of the International Building Code.~~

E104.2 Changes over time. As an emergency evolves, submittal documents shall be submitted to demonstrate that the temporary uses of the existing buildings ~~or temporary structures~~ are in compliance with the requirements of the *International Existing Building Code*.

E105.1 Emergency permits. In an emergency situation, where ~~temporary structures are erected~~ or an existing building undergoes a temporary change of use or occupancy, the *permit* application shall be submitted as soon as practicable to the *code official*. Permits shall be required in accordance with Sections 105.1.1 through 105.1.3.

~~**E105.1.1 Temporary structures, other than tents and membrane structures.** Temporary structures, other than tents and other membrane structures, that occupy an area greater than 120 square feet (11.16 m²), shall not be constructed, erected, or relocated for any purpose without obtaining a permit from the code official.~~

~~**E105.1.2 Tents and membrane structures.** Tents and membrane structures shall be permitted in accordance with the *International Fire Code*.~~

~~**E105.1.3 Existing buildings Change of use or occupancy.** An existing buildings shall not repurposed for a purpose it was not designed for without obtaining a permit from the code official for the change of use or occupancy.~~

SECTION E106

GENERAL STANDARDS FOR EMERGENCY STRUCTURES USES

E106.1 Scope. The provisions of Sections E106.2 through E106.7 shall apply to all existing structure_s being repurposed ~~or temporary~~ and to all structures constructed, erected or relocated to support the response to an emergency.

E106.2 Intent. The intent of this section is to provide a base level of safety in a structure ~~built or~~ repurposed for emergency use.

E106.7.1 Portable heating, ~~and cooling, and cooking~~ equipment.

Portable heating, ~~and cooling, and cooking~~ equipment shall be used in accordance with Chapter 41 of the International Fire Code, their listing, and manufacturer's instructions.

E107.1.3 Sleeping areas.

Where a space is used for sleeping purposes, the space shall be equipped with smoke alarms in accordance with Sections 907.2.6.2 and 907.2.11 if the International Fire Code or be provided with a fire watch in accordance with Section 403.11.1 of the *International Fire Code*. Carbon monoxide ~~alarms detectors~~ shall be installed in accordance with Section 915 of the *International Fire Code* where the structure uses any fossil fuel or wood burning appliances.

E107.3.3 Smoke alarms.

Tiny houses and manufactured homes used for sleeping purposes shall be equipped with a smoke alarm complying with Section 907.2.11. of the *International Fire Code*. Smoke ~~alarms detectors~~ are not required to be hard wired.

E107.3.4 Carbon monoxide alarms detectors.

Carbon monoxide ~~alarm detectors~~ shall be installed in accordance with Section 915, where the tiny house or manufactured homes uses any fossil fuel or wood burning appliances.

~~**E107.4 Tents and membrane structures used as sleeping accommodations.** Tents or membrane structures used as sleeping accommodations shall comply with the same requirements as tiny houses in Section E107.3.1 through E107.3.5 and Chapter 31 of the International Fire Code.~~

Committee Reason: The proposal provides a solid framework for code officials to deal with emergency uses of existing buildings for uses they were not specifically approved such as what was seen during COVID. There was some concern that the term "emergency" may get used to push the limited of code compliance. There was a suggestion that the applicability of the new term CO source as approved for the IFC and IBC with regard to Section E107.1.3 be addressed as it may affect the application of this appendix. Additionally, it was suggested that Sections E101.1.1, E104.1 and E106.2 be reviewed to make more consistent addressing intent. Some clarity was requested as how the restoration to the original occupancy is intended to be addressed. Finally, it was suggested that the emergency permitting procedures in the base code and the relationship to this appendix be reviewed. The modifications address the following issues.

Temporary structures versus temporary uses. The language in the original proposal was revised to remove anything that should comply as a temporary structure in the IBC and IFC. The focus of this proposal is only on temporary emergency uses.

Alarm Terminology. The correct terminology of "alarm" versus "detector" was revised in several sections to address that "detectors" are associated with a system. Alarms are not monitored but instead, where multiple alarms are required, are simply interconnected. These revisions are found in E107.1, E107.3.3 and E107.3.4.

Cooking and heating. Proper reference to the newly created chapter dealing with temporary heating and cooking in Chapter 41 of the 2024 IFC is referenced in Section 106.2 to create proper correlation between the documents.

(Vote: 14-0)

Individual Consideration Agenda

Public Comment 1:

IEBC: , APPENDIX E, SECTION E101, E101.1, E101.1.1, E101.1.2, SECTION E102, SECTION 202, SECTION E103, E103.1, SECTION E104, E104.1, E104.2, SECTION E105, E105.1, E105.1.1, SECTION E106, E106.1, E106.2, E106.3, E106.4, E106.4.1, E106.4.2, E106.4.3, E106.4.4, E106.4.5, E106.5, E106.5.1, E106.5.2, E106.5.3, E106.6, E106.7, E106.7.1, SECTION E107, E107.1, E107.1.1, E107.1.2, E107.1.3, E107.2, E107.2.1, E107.2.2, E107.3, E107.3.1, E107.3.2, E107.3.3, E107.3.4, E107.3.5, SECTION E108, E108.1, TABLE E108.1

Proponents: Mike Nugent, representing Building Code Action Committee (bcac@iccsafe.org); John Williams, representing Committee on Healthcare (ahc@iccsafe.org) requests As Modified by Public Comment

Modify as follows:

2021 International Existing Building Code

User notes. About this appendix: The primary purpose for Appendix E is to provide guidance for designers, engineers, architects, fire and building code officials to allow temporary emergency uses of existing buildings with respect to the minimum code requirements. This appendix is intended to serve as that template or checklist for use during an emergency that references the relevant code requirement of concerns.

APPENDIX E TEMPORARY EMERGENCY USES

SECTION E101 GENERAL

E101.1 Scope. The provisions of this appendix shall apply to the use, installation, alteration, relocation and location of existing buildings and any service utilities or systems that serve such existing buildings during or based on the response to the emergency.”

E101.1.1 Objectives. The objective of this Appendix is to provide flexibility for the code official to permit the temporary uses of existing buildings during an emergency to address unusual circumstances that temporarily overwhelms response capabilities of an entity while maintaining the level of safety intended by the code.

E101.1.2 Temporary use. Where temporary uses during emergencies exceed 180 days, judgement shall be used by the code official to allow for temporary uses and conditions to continue for the duration of the emergency based on the needs of the emergency. The code official is authorized to grant extensions for demonstrated cause.

SECTION E102 DEFINITIONS

EMERGENCY. Any event declared by local, state, or federal entities that temporarily overwhelms response capabilities, and that require the temporary suspension or modification of regulations, codes, or standards to facilitate response to such an event.

TEMPORARY USE. An activity or practice that is established at a designated location for a period of less than 180 days. Uses include, but are not limited to, those functional designations listed within the occupancy group descriptions in Section 302.1 of the International Building Code.

SECTION E103 SUBMITTAL DOCUMENTS

E103.1 General. Submittal documents shall be of sufficient clarity to indicate the location, nature and extent of the work or use proposed and show in detail that it will conform to the provisions of this code and relevant laws, ordinances, rules and regulations, as determined by the code official.

SECTION E104 CONFORMANCE

E104.1 Conformance. Temporary use of existing buildings shall conform to the structural strength, fire safety, means of egress, accessibility, light, ventilation, and sanitary requirements of this code as necessary to provide a reasonable level of safety, health, and general welfare as determined by the code official.

E104.2 Changes over time. As an emergency evolves, submittal documents shall be submitted to demonstrate that the temporary uses of the existing buildings are in compliance with the requirements of the *International Existing Building Code*.

SECTION E105 PERMITS

E105.1 Emergency permits. In an emergency situation, where an existing building undergoes a temporary change of use or occupancy, the *permit* application shall be submitted as soon as practicable to the *code official*. ~~Permits shall be required in accordance with Sections 105-1.1 through~~

~~E105.1.1 Change of use or occupancy. An existing building shall not be repurposed for a purpose it was not designed for without obtaining a permit from the code official for the change of use or occupancy.~~

SECTION E106 GENERAL STANDARDS FOR EMERGENCY USES

E106.1 Scope. The provisions of Sections E106.2 through E106.7 shall apply to all existing structures being repurposed and to all structures relocated to support the response to an emergency.

E106.2 Intent. The intent of this section is to provide a ~~base~~ reasonable level of safety in a structure repurposed for emergency use.

E106.3 Change of use or occupancy. Existing buildings used in a way that was not originally intended by the occupancy class or use shall be allowed without formally changing the occupancy ~~class~~. The previous occupancy and use class shall be ~~restored~~ resume upon the conclusion of the emergency. Where the temporary live load of the floor is more than that required by Section 1607 of the International Building Code for the original use, the area designated for the temporary live load shall be posted with placards for the approved live load.

E106.4 Fire Safety Provisions. Determination of the fire safety requirements by the code official shall be in accordance with Section E106.4.1 through E106.4.5 in order to make determinations of safe conditions rather than strict adherence to the provisions of the International Fire Code.

E106.4.1 Fire safety and evacuation plans. Fire safety and evacuation plans shall be provided in accordance with Section 403 and 404 of the *International Fire Code*. Submittal documents shall be updated where there are any physical changes to the layout of the structure.

E106.4.2 Training and practice drills. Training of staff and practice drills shall comply with Section 405 and 406 of the *International Fire Code*. Structures in place for longer than 30 days shall conduct evacuation drill in accordance with Section 405.3 of the International Fire Code based on the temporary use.

E106.4.3 Fire Protection. An evaluation shall be performed to decide on fire protection needed utilizing NFPA 550.

E106.4.4 Emergency Access. Emergency vehicle access roads shall be approved by the fire code official.

E106.4.5 Fire Watch. A fire watch in accordance with Section 403.11.1 of the *International Fire Code* shall be permitted to be provided in lieu of other fire protection systems.

E106.5 Means of Egress. Means of egress shall comply with Section 1011.5 in addition to Sections E106.5.1 through E106.5.3.

Exception: In Group I-2 occupancies, in areas where corridors are used for movement of care recipients in beds, the clear width of ramps and corridors shall be not less than 48 inches (1219 mm).

E106.5.1 Exit Discharge. Exit discharge shall provide access to a public way, or to a safe dispersal area in accordance with Section 1028.5 of the *International Building Code*

E106.5.2 Means of Egress Lighting. The means of egress shall be illuminated when the space is occupied.

Exception: Sleeping areas.

E106.5.3 Exit Signs. Exit signs shall be provided where the means of egress is not readily identifiable. Exit signs shall be permitted to be illuminated by the lighting provided in the structure.

E106.6 Accessibility. A facility that is constructed to be accessible shall be maintained accessible during occupancy.

E106.7 Temporary connection. The code official shall have the authority to authorize the temporary connection of the building or system to the utility, the source of energy, fuel, or power, or the water system or sewer system in accordance with Section 111. Water closets and lavatories shall be either permanent plumbing fixtures installed within the structure, or temporary water closets or lavatories, such as chemical toilets or other means approved by the code official.

E106.7.1 Portable heating, cooling and cooking equipment. Portable heating, cooling, and cooking equipment shall be used in accordance with ~~Chapter 41~~ of the International Fire Code, their listing, and manufacturer's instructions.

SECTION E107 USE OF SPECIFIC STANDARDS

E107.1 Increased occupant load. Allowing for additional occupants in existing building shall comply with Section E107.1.1 through E107.1.3.

E107.1.1 Authorization. The code official is authorized to allow for an increase in the number of occupants or a change of use in a building or portion of a building during an emergency.

E107.1.2 Maintenance of the means of egress. The existing a means of egress shall be maintained.

E107.1.3 Sleeping areas. Where a space is used for sleeping purposes, the space shall be equipped with smoke alarms in accordance with Sections 907.2.6.2 and 907.2.11 if the International Fire Code or be provided with a fire watch in accordance with Section 403.11.1 of the *International Fire Code*. Carbon monoxide alarms shall be installed in accordance with Section 915 of the *International Fire Code* where the structure uses any fossil fuel or wood burning appliances.

E107.2 Temporary healthcare facilities. Temporary health care facilities shall comply with Section E107.2.1 and E107.2.2.

E107.2.1 General. Temporary health care facilities shall be erected, maintained and operated to minimize the possibility of a fire emergency requiring the evacuation of occupants.

E107.2.2 Membrane structures under projections. Membrane structures of less than 100 square feet (9.3 m²) shall be permitted to be placed under projections of a permanent building provided the permanent building is protected with an automatic sprinkler system installed in accordance with Section 903.3.1.1.

E107.3 Use of tiny houses or manufactured homes. Tiny houses or manufactured homes used for temporary housing shall comply with Section E107.3.1 through E107.3.5.

E107.3.1 Fire separation distances. Tiny houses or manufactured homes shall be separated by not less than 5 feet (1524 mm) between structures.

E107.3.2 Fire breaks. Tiny houses and manufactured homes shall not be located in groups of more than 20 units. Fire breaks of at least 20 feet (6096 mm) shall be provided between each group.

E107.3.3 Smoke alarms. Tiny houses and manufactured homes used for sleeping purposes shall be equipped with a smoke alarm complying with Section 907.2.11. of the *International Fire Code*. Smoke alarms are not required to be hard wired.

E107.3.4 Carbon monoxide alarms. Carbon monoxide alarms shall be installed in accordance with Section 915, where the tiny house or manufactured homes uses any fossil fuel or wood burning appliances.

E107.3.5 Structures located in a wildland urban interface zone. Tiny houses and manufactured homes that are relocated in a wildland urban interface area shall be provided with defensible space in accordance with the Section 603 of the International Wildland Urban Interface Code.

SECTION E108 REFERENCED STANDARDS

E108.1 General. See Table E108.1 for standards that are referenced in various sections of this appendix. Standards are listed by the standard identification with the effective date, standard title, and the section or sections of this appendix referenced in the standard.

TABLE E108.1 REFERENCED STANDARDS

STANDARD ACRONYM	STANDARD NAME	SECTION REFERENCED HEREIN
NFPA 550-2017	Guide to the Fire Safety Concepts Tree	E106.5.3

Commenter's Reason: This proposal was supported overall, however there were suggestions from the committee and proponents that BCAC wishes to address.

The complete proposal is shown in the public comment so that everyone can see the modified proposal in total.

E105.1 and E105.1.1 - There was a floor modification to delete the references to tents and membrane structures. This floor modification deleted two of the three items in Section 105.1. Therefore, the reference to the three subsections needs to be deleted. The text in E105.1.1 is not needed, because a planned change of occupancy is currently addressed in the IEBC.

There was a suggestion to revise this section to be consistent with IEBC Section 105.2.1, however, since how fast someone could be prepared to submit a permit, or the building department ready to operate as usual depends a great deal on the extent of the emergency. Therefore, 'as soon as practicable' is a reasonable allowance.

E106.2 - A committee member suggested that Sections E104.1 and E106.2 use the same terminology for safety, thus the modification proposed to E106.2.E106.3 - The requirements allow for a temporary change of occupancy or use - 'class' is not a term used in the code, so it has been deleted.

E106.7.1 - The new IFC Chapter 41 (F188-21 AS) deals with temporary heating and cooking, but not cooling. Therefore a general reference to the IFC is more appropriate than a specific reference to Chapter 41.

There was a suggestion that the definition of 'emergency' was too broad. However, this is an appendix intended for guidance. Therefore, BCAC felt that this definition should be open to address any emergency that the community faces. No one thought we would ever have to deal with such large wildfires or Covid over the last couple of years. We do not know what we will face.

Cost Impact: The net effect of the public comment and code change proposal will not increase or decrease the cost of construction. This appendix is intended to provide a tool to jurisdictions and is not applicable unless adopted. Currently, no formal code requirements provide guidance on how to address. This will provide a framework to make enforcement more consistent and aligned with the requirements of the ICC codes. It was not intended to make compliance more expensive but instead to provide a resource for these emergency situations. These options mirror established ICC codes sections and standards.

RB4-22

IRC: R101.2

Proposed Change as Submitted

Proponents: Mike Nugent, representing Building Code Action Committee (bcac@iccsafe.org)

2021 International Residential Code

Revise as follows:

R101.2 Scope. The provisions of this code shall apply to the construction, *alteration*, movement, enlargement, replacement, *repair*, equipment, use and occupancy, location, removal and demolition of detached one- and two-family dwellings and *townhouses* not more than three stories above *grade plane* in height with a separate means of egress and their *accessory structures* not more than three stories above *grade plane* in height.

Exception: The following uses shall be permitted ~~to be constructed in accordance with this code~~ where located within a dwelling unit that is provided with an automatic sprinkler system complying with Section P2904:

1. Live/work units ~~located in townhouses and~~ complying with the requirements of Section 508.5 of the International Building Code.
2. Owner-occupied *lodging houses* with five or fewer guestrooms.
3. A care facility with five or fewer persons receiving custodial care ~~within a dwelling unit.~~
4. A care facility with five or fewer persons receiving medical care ~~within a dwelling unit.~~
5. A day care facility for five or fewer persons receiving care ~~that are within a single family dwelling.~~

Reason: The intent of this proposal is to clarify the permitted uses of the scope within dwelling units and constructed in accordance with the IRC, by removing repeated and redundant language in each of the exceptions ("within a dwelling unit") and placing that in the main body of the exception. The revisions are editorial and for clarification with no technical changes included.

This proposal is submitted by the ICC Building Code Action Committee (BCAC). BCAC was established by the ICC Board of Directors in July 2011 to pursue opportunities to improve and enhance assigned International Codes or portions thereof. In 2020 and 2021 the BCAC has held several virtual meetings open to any interested party. In addition, there were numerous virtual Working Group meetings for the current code development cycle, which included members of the committee as well as interested parties. Related documents and reports are posted on the BCAC website at <https://www.iccsafe.org/products-and-services/i-codes/code-development/cs/building-code-action-committee-bcac/>.

Cost Impact: The code change proposal will not increase or decrease the cost of construction. The proposed changes are only editorial. This clarification of scope for IRC has no technical changes.

Staff Analysis: The scope and intent of the I-codes is subject to the approval of the ICC Board of Directors.

RB4-22

Public Hearing Results

This proposal includes unpublished errata

Section R101.2 Scope, Item 5 should also include 'that are' as struck out.

5. A day care facility for five or fewer persons receiving care ~~that are within a single family dwelling.~~

Committee Action:

Disapproved

Committee Reason: The proposal was disapproved because the committee felt that moving 'dwelling unit' to the start of the exceptions was not clear where working with lodging houses and live/work units since those are not exactly dwelling units. The phrase "constructed in accordance with this code" should not be struck because it could be interpreted that this would allow these 5 items to not have to comply with the limits for construction (e.g. number of stories, separation). (Vote: 6-5)

RB4-22

Individual Consideration Agenda

Public Comment 1:

IRC: R101.2

Proponents: Mike Nugent, representing Building Code Action Committee (bcac@iccsafe.org) requests As Modified by Public Comment

Modify as follows:

2021 International Residential Code

R101.2 Scope. The provisions of this code shall apply to the construction, *alteration*, movement, enlargement, replacement, *repair*, equipment, use and occupancy, location, removal and demolition of detached one- and two-family dwellings and *townhouses* not more than three stories above *grade plane* in height with a separate means of egress and their *accessory structures* not more than three stories above *grade plane* in height.

Exception: The following uses shall be permitted to be constructed in accordance with this code where located within a dwelling unit that is provided with an automatic sprinkler system complying with Section P2904:

1. Live/work units complying with the requirements of Section 508.5 of the International Building Code.
2. Owner-occupied *lodging houses* with five or fewer guestrooms.
3. A care facility with five or fewer persons receiving custodial care.
4. A care facility with five or fewer persons receiving medical care .
5. A day care facility for five or fewer persons receiving care .

Commenter's Reason: The BCAC would first like to address the concerns of the committee and the opposition.

The modification restores the phrase 'to be constructed in accordance with this code' due to the IRC committee's concern that someone could misread the exceptions to be for all limitations in the IRC (e.g. three stories, separate means of egress), rather than just the use.

The opposition argued that a lodging house is not a dwelling unit. This is incorrect. Below is the definition.

[RB] LODGING HOUSE. A one-family dwelling where one or more occupants are primarily permanent in nature, and rent is paid for guestrooms.

The primary focus of this change continues to be removal of other limits in the current definitions:

- that a Live/work unit should be permitted in one- and two-family homes, not just townhouses; and
- that day care facilities should be permitted in townhouses, not just single-family homes.

The intent of this proposal is:

- Item 1 - To allow for live/work units to be all types of dwelling units, not just townhouses.
- Item 5 - To allow for day care facilities in all types of dwelling units, not just single family dwellings
- Remove redundant language in Item 3 and 4.

It should be noted that Section AY101.1.1 of RB314-22 AS also contains this list. BCAC would support coordination between those two sections as code correlation.

Cost Impact: The net effect of the public comment and code change proposal will not increase or decrease the cost of construction

This would allow for additional design options for live/work units and very small day care in in home. This clarification of scope for IRC has no technical changes.

RB5-22

IRC: R101.2

Proposed Change as Submitted

Proponents: Stephen Thomas, representing Colorado Chapter ICC (stthomas@coloradocode.net)

2021 International Residential Code

Revise as follows:

R101.2 Scope. The provisions of this code shall apply to the construction, *alteration*, movement, enlargement, replacement, *repair*, equipment, use and occupancy, location, removal and demolition of detached one- and two-family dwellings and *townhouses* not more than three stories above *grade plane* in height with a separate means of egress and their *accessory structures* not more than three stories above *grade plane* in height.

Exception: The following shall be permitted to be constructed in accordance with this code where provided with an automatic sprinkler system complying with Section P2904:

1. Live/work units located in townhouses and complying with the requirements of Section 508.5 of the International Building Code.
2. Owner-occupied *lodging houses* with five or fewer guestrooms.
3. A care facility with five or fewer persons receiving custodial care within a *dwelling unit*.
4. A care facility with five or fewer persons receiving medical care within a *dwelling unit*.
5. A day care facility for five or fewer ~~persons~~ children receiving care ~~that are~~ within a ~~single-family~~ dwelling unit.

Reason: This proposal is designed to provide consistent language between the IBC and the IRC regarding small day care facilities. IBC Section 305.2.3 permits a day care facility within a dwelling unit to comply with the IRC where there are five or fewer children receiving day care. However, there is no scoping in the IRC for this type of use. The cross references were added in the 2018 IBC but we missed the day care provision and just made a general comment for persons receiving care. We no longer need that language since we are addressing each type of care that the IBC permits to comply with the IRC in the different uses in the exception.

Cost Impact: The code change proposal will not increase or decrease the cost of construction. This change is a clarification and does not change any technical provisions.

Staff Analysis: The scope and intent of the I-codes is subject to the approval of the ICC Board of Directors.

RB5-22

Public Hearing Results

Committee Action:

As Modified

Committee Modification:

R101.2Scope.

The provisions of this code shall apply to the construction, *alteration*, movement, enlargement, replacement, *repair*, equipment, use and occupancy, location, removal and demolition of detached one- and two-family dwellings and *townhouses* not more than three stories above *grade plane* in height with a separate means of egress and their *accessory structures* not more than three stories above *grade plane* in height.

Exception: The following shall be permitted to be constructed in accordance with this code where provided with an automatic sprinkler system complying with Section P2904:

1. Live/work units located in townhouses and complying with the requirements of Section 508.5 of the International Building Code.
2. Owner-occupied *lodging houses* with five or fewer guestrooms.
3. A care facility with five or fewer persons receiving custodial care within a *dwelling unit*.
4. A care facility with five or fewer persons receiving medical care within a *dwelling unit*.
5. A day care facility for five or fewer children receiving care within a dwelling unit.

6. A care facility for five or fewer persons receiving care within a dwelling unit.

Committee Reason: The modification was approved because it restored the current exception 5 with the additional modification of allowing for for adult day care to be located within a townhouse or a single family home. The original proposal was approved because it specifically addressed child day care and allowed for child day care to be located within a townhouse or single family home. (Vote: 10-0)

RB5-22

Individual Consideration Agenda

Public Comment 1:

IRC: R101.2

Proponents: Mike Nugent, representing Building Code Action Committee (bcac@iccsafe.org) requests As Modified by Public Comment

Further modify as follows:

2021 International Residential Code

R101.2 Scope. The provisions of this code shall apply to the construction, *alteration*, movement, enlargement, replacement, *repair*, equipment, use and occupancy, location, removal and demolition of detached one- and two-family dwellings and *townhouses* not more than three stories above *grade plane* in height with a separate means of egress and their *accessory structures* not more than three stories above *grade plane* in height.

Exception: The following shall be permitted to be constructed in accordance with this code where provided with an automatic sprinkler system complying with Section P2904:

1. Live/work units located in townhouses and complying with the requirements of Section 508.5 of the International Building Code.
2. Owner-occupied *lodging houses* with five or fewer guestrooms.
3. A care facility with five or fewer persons receiving custodial care within a *dwelling unit*.
4. A care facility with five or fewer persons receiving medical care within a *dwelling unit*.
5. A day care facility for five or fewer ~~children~~ persons of any age receiving care within a dwelling unit.
6. ~~A care facility for five or fewer persons receiving care within a dwelling unit.~~

Commenter's Reason: The original proposal was too limiting as it said day care was only for children. The IBC Sections 308.5, 308.5.4 and 310.4.1 allow for day care for any age. While the BCAC agrees this should be indicated as 'day' care, adult day care should also be permitted. The proponent put in a floor modification to add the current exception 5 back into the list of exceptions as a new exception 6. That would be redundant. The clarification can be in one exception.

2021 IBC

308.5 Institutional Group I-4, day care facilities. Institutional Group I-4 occupancy shall include buildings and structures occupied by more than five persons of any age who receive custodial care for fewer than 24 hours per day by persons other than parents or guardians; relatives by blood, marriage or adoption; and in a place other than the home of the person cared for. This group shall include, but not be limited to, the following:

Adult day care

Child day care308.5.4 Five or fewer persons receiving care in a dwelling unit. A facility such as the above within a dwelling unit and having five or fewer persons receiving custodial care shall be classified as a Group R-3 occupancy or shall comply with the International Residential Code.

310.4.1 Care facilities within a dwelling. Care facilities for five or fewer persons receiving care that are within a single-family dwelling are permitted to comply with the International Residential Code provided an automatic sprinkler system is installed in accordance with Section 903.3.1.3 or Section P2904 of the International Residential Code.

It should be noted that Section AY101.1.1 of RB314-22 AS also contains this list. BCAC would support coordination between those two sections as code correlation.

BCAC was established by the ICC Board of Directors in July 2011 to pursue opportunities to improve and enhance assigned International Codes or portions thereof. In 2020, 2021 and 2022 the BCAC has held several virtual meetings open to any interested party. In addition, there were numerous virtual Working Group meetings for the current code development cycle, which included members of the committee as well as interested parties. Related documents and reports are posted on the BCAC website at <https://www.iccsafe.org/products-and-services/i-codes/code-development/cs/building-code-action-committee-bcac/>.

Cost Impact: The net effect of the public comment and code change proposal will not increase or decrease the cost of construction. This change is a clarification and does not change any technical provisions.

Public Comment# 3026

RB6-22

IRC: R101.3

Proposed Change as Submitted

Proponents: Mike Nugent, representing Building Code Action Committee (bcac@iccsafe.org)

2021 International Residential Code

Revise as follows:

R101.3 Purpose. The purpose of this code is to establish minimum requirements to provide a reasonable level of safety, health and general welfare through affordability, structural strength, means of egress, stability, sanitation, light and ventilation, energy conservation ~~and safety to life~~ providing a reasonable level of life safety and property protection from fire and other hazards and to provide a reasonable level of safety to fire fighters and emergency responders during emergency operations.

Reason: The purpose of this proposal is for consistency in language for the sections related to the purpose of the codes throughout the ICC family of codes. This would be consistent with IFC, IBC, IEBC, ISPC, and IZC – which were passed with ADM10-19. The change in the title reflects the language in the first sentence. The IRC code development committee objected to the proposal last cycle because it included “explosions”; which has been removed. The revision is for consistency with “providing a reasonable level of life safety and property protection”.

This proposal is submitted by the ICC Building Code Action Committee (BCAC). BCAC was established by the ICC Board of Directors in July 2011 to pursue opportunities to improve and enhance assigned International Codes or portions thereof. In 2020 and 2021 the BCAC has held several virtual meetings open to any interested party. In addition, there were numerous virtual Working Group meetings for the current code development cycle, which included members of the committee as well as interested parties. Related documents and reports are posted on the BCAC website at <https://www.iccsafe.org/products-and-services/i-codes/code-development/cs/building-code-action-committee-bcac/>.

Cost Impact: The code change proposal will not increase or decrease the cost of construction. This change is for coordination across codes for the purpose statements and does not change any technical requirements.

RB6-22

Public Hearing Results

Committee Action:

Disapproved

Committee Reason: The committee disapproved this proposal because the felt the issue of safety was already addressed in the code. (Vote: 9-1)

RB6-22

Individual Consideration Agenda

Public Comment 1:

IRC: R101.3

Proponents: Mike Nugent, representing Building Code Action Committee (bcac@iccsafe.org) requests As Modified by Public Comment

Modify as follows:

2021 International Residential Code

R101.3 Purpose. The purpose of this code is to establish minimum requirements to provide a reasonable level of life safety, health and general welfare through affordability, structural strength, means of egress, stability, sanitation, light and ventilation, energy conservation ~~providing a reasonable level of life safety~~ and property protection from fire and other hazards and to provide a reasonable level of safety to fire fighters and emergency responders during emergency operations.

Commenter's Reason: The BCAC feels that this proposal should be reconsidered. This is an editorial change that makes the codes consistent. The IRC committee rejected this change because the issue of safety is already addressed in the code. 'Safety' is already in the revised sentence; this is just a reformat. We are proposing only to add "life" to the existing text to be "The purpose of this code is to establish minimum requirements to provide a reasonable level of life safety" and remove the redundant language while maintaining the new text of "and property protection".

Cost Impact: The net effect of the public comment and code change proposal will not increase or decrease the cost of construction. This is an editorial change with no changes to technical requirements.

Public Comment# 3030

RB7-22

IRC: R102.7.1, R102.7.2 (New), SECTION 202, SECTION 202 (New), CHAPTER 44 (New), APPENDIX AJ

Proposed Change as Submitted

Proponents: Sue Coffman, representing Washington Association of Building Officials Technical Code Development Committee (sue.coffman@cityoftacoma.org); Hoyt Jeter, representing WABO TCD (hjeter@cityoftacoma.org); Micah Chappell, representing Washington Association of Building Officials Technical Code Development Committee (micah.chappell@seattle.gov); Micah Chappell, representing Washington Association of Building Officials Technical Code Development Committee (micah.chappell@seattle.gov)

2021 International Residential Code

Revise as follows:

R102.7.1 Additions, alterations or repairs or relocations. ~~Additions, alterations or repairs~~ to any structure shall conform to the requirements for a new structure without requiring the existing structure to comply with the requirements of this code, unless otherwise stated. ~~Additions, alterations, repairs~~ and relocations shall not cause an existing structure to become less compliant with the provisions of this code than the existing building or structure was prior to the ~~addition, alteration or repair~~ or relocation. An existing building together with its ~~additions~~ shall comply with the height limits of this code. ~~Where the alteration causes the use or occupancy to be changed to one not within the scope of this code, the provisions of the International Existing Building Code shall apply.~~

Add new text as follows:

R102.7.2 Repairs, renovations, alterations, or reconstructions. Repairs, renovations, alterations, or reconstructions shall conform to the requirements of the provisions of Chapter 44. Where the renovation, alteration, or reconstruction causes the use or occupancy to be changed to one not within the scope of this code, the provisions of the International Existing Building Code shall apply.

Revise as follows:

[RB] ALTERATION. Any construction, reconfiguration, retrofit or renovation to an existing structure other than *repair* or *addition* that requires a *permit*. Also, a change in a building, electrical, gas, mechanical or plumbing system that involves ~~an~~ a reconfiguration or extension, addition, installation, or change to the equipment or arrangement, type or purpose of the original installation that requires a permit. For the definition applicable in Chapter 11, see Section N1101.6.

Add new definition as follows:

CATEGORIES OF WORK. The nature and extent of construction work undertaken in an existing building, which include repair, renovation, alteration, and reconstruction.

DANGEROUS. Where the stresses in any member; the condition of the building, or any of its components or elements or attachments; or other condition that results in an overload exceeding 150 percent of the stress allowed for the member or material in this code.

MATERIALS AND METHODS REQUIREMENTS. Those requirements in this code that specify material standards; details of installation and connection; joints, penetrations; and continuity of any element, component or system in the building. The required quantity, fire resistance, flame spread, acoustic or thermal performance, or other performance attribute is specifically excluded from materials and methods requirements.

RECONSTRUCTION. The reconfiguration of a space that affects an exit, a renovation or alteration where the work area is not permitted to be occupied because existing means-of-egress and fire protection systems, or their equivalent, are not in place or continuously maintained; or there are extensive alterations.

REHABILITATION. Any repair, renovation, alteration or reconstruction work undertaken in an existing building.

RENOVATION. The change, strengthening or addition of load-bearing elements; or the refinishing, replacement, bracing, strengthening, upgrading or extensive repair of existing materials, elements, components, equipment or fixtures. Renovation does not involve reconfiguration of spaces. Interior and exterior painting are considered refinishing for the purposes of this definition, and are not renovation.

Revise as follows:

[RB] REPAIR. The reconstruction, replacement, patching, restoration, minor replacement, or renewal of any part materials, elements, components, equipment, or fixtures of an existing building for the purpose of its maintenance, maintaining those materials, elements, components, equipment, or fixtures in good or sound condition, or to correct damage.
For the definition applicable in Chapter 11, see Section N1101.6.

Add new definition as follows:

WORK AREA. That portion of a building affected by any renovation, alteration or reconstruction work as initially intended by the owner and

indicated as such in the construction documents. Work area excludes other portions of the building where incidental work entailed by the intended work must be performed, and portions of the building where work not initially intended by the owner is specifically required by the provisions for the renovation, alteration or reconstruction.

Add new text as follows:

CHAPTER 44 **EXISTING BUILDINGS AND STRUCTURES**

SECTION R4401 **SCOPE**

R4401.1 General. The specific provisions in this chapter shall apply to the repair, renovation, alteration, and reconstruction of existing buildings and structures. These standards shall apply where construction does not fully comply with construction standards in this code for new construction.

SECTION R4402 **CATEGORIES OF WORK**

R4402.1 General. Work in existing buildings and structures shall be categorized as repair, renovation, alteration, and reconstruction, and comply with the requirements in this chapter.

Work of more than one category shall be part of a single work project and related work permitted within a 12-month period shall be considered a single work project. Where a project includes one category of work in one building area and another category of work in a separate and unrelated area of the building, each project area shall comply with the requirements of the respective category of work. Where a project with more than one category of work is performed in the same area or in related areas of the building, the project shall comply with the requirements of the more stringent category of work.

SECTION R4403 **COMPLIANCE**

R4403.1 General. Regardless of the category of work being performed, the work shall not cause the structure to become unsafe or adversely affect the performance of the building; shall not cause an existing mechanical or plumbing system to become unsafe, hazardous, insanitary or overloaded; and unless expressly permitted by these provisions, shall not make the building any less compliant with this code or to any previously approved alternative arrangements than it was before the work was undertaken.

R4403.2 Requirements by category of work. Repairs shall conform with the requirements in Section R4405. Renovations shall conform to the requirements of Section R4406. Alterations shall conform to the requirements of Section 4407 and the requirements for renovations. Reconstructions shall conform to the requirements of Section R4408 and the requirements of alterations and renovations.

R4403.3 Smoke alarms. Regardless of the category of work, smoke alarms shall be provided where required by Section R314.2.2.

R4403.4 Replacement windows. Regardless of the category of work, where an existing window, including the sash and glazed portion, or safety glazing is replaced, the replacement window or safety glazing shall comply with the requirements of Sections R4403.4.1 through R4403.4.3, as applicable.

R4403.4.1 Energy efficiency. Replacement windows shall comply with the requirements of Chapter 11.

R4403.4.2 Safety glazing. Replacement glazing in hazardous locations shall comply with the safety glazing requirements of Section R308.

R4403.4.3 Replacement windows for emergency escape and rescue openings. Replacement windows for emergency escape and rescue openings shall comply with Section R310.5.

4403.4.4 Window control devices. Window opening control devices and fall prevention devices shall be installed compliant with the requirements in R312.2 where all of the following apply to the replacement window:

1. The window is operable.
2. One of the following applies:
 - 2.1 The window replacement includes replacement of the sash and the frame.
 - 2.2. The window replacement includes the sash only when the existing frame remains.
3. The bottom of the clear opening of the window opening is at a height less than 24 inches (610 mm) above the finished floor.
4. The window will permit openings that will allow passage of a 4-inch-diameter (102 mm) sphere where the window is in its largest opened position.

5. The vertical distance from the top of the sill of the window opening to the finished grade or other surface below, on the exterior of the building, is greater than 72 inches (1829 mm).

R4403.5 Flood hazard areas. Work performed in existing buildings located in a flood hazard area as established by Table R301.2(1) shall be subject to the provisions of Section R105.3.1.1.

R4403.6 Features exceeding code requirements. Elements, components and systems of existing buildings with features that exceed the requirements of this code for new construction, and are not otherwise required as part of approved alternative arrangements or deemed by the building official to be required to balance other building elements not complying with this code for new construction, shall not be prevented by these provisions from being modified as long as they remain in compliance with the applicable requirements for new construction.

SECTION R4404

EVALUATION OF AN EXISTING BUILDING

R4404.1 General. The building official shall have authority to require an existing building to be investigated and evaluated by a registered design professional in the case of proposed reconstruction of any portion of a building. The evaluation shall determine the existence of any potential nonconformities to these provisions, and shall provide a basis for determining the impact of the proposed changes on the performance of the building. The evaluation shall use the following sources of information, as applicable:

1. Available documentation of the existing building.
 - 1.1. Field surveys.
 - 1.2. Tests (nondestructive and destructive).
 - 1.3. Laboratory analysis.

Exception: Detached one- or two-family dwellings that are not irregular buildings under Section R301.2.2.6 and are not undergoing and extensive reconstruction shall not be required to be evaluated.

SECTION R4405

REPAIRS

R4405.1 Materials and methods. Except as otherwise required herein, repairs shall be done using like materials or methods permitted by this code for new construction.

R4405.1.1 Hazardous materials. Hazardous materials no longer permitted, such as asbestos and lead-based paint, shall not be used.

R4405.1.2 Plumbing materials and supplies. The following plumbing materials and supplies shall not be used:

1. All-purpose solvent cement, unless listed for the specific application.
2. Flexible traps and tailpieces, unless listed for the specific application.
3. Solder having more than 0.2-percent lead in the repair of potable water systems.

R4405.2 Water closets. Where any water closet is replaced with a newly manufactured water closet, the replacement water closet shall comply with the requirements of Section P2903.2.

R4405.3 Electrical. Repair or replacement of existing electrical wiring and equipment undergoing repair with like material shall be permitted.

Exceptions:

1. Replacement of electrical receptacles shall comply with the requirements of Chapters 34 through 43.
2. Plug fuses of the Edison-base type shall be used for replacements only where there is not evidence of overfusing or tampering in accordance with the applicable requirements of Chapters 34 through 43.
3. For replacement of nongrounding-type receptacles with grounding-type receptacles and for branch circuits that do not have an equipment grounding conductor in the branch circuitry, the grounding conductor of a grounding-type receptacle outlet shall be permitted to be grounded to any accessible point on the grounding electrode system, or to any accessible point on the grounding electrode conductor, as allowed and described in Chapters 34 through 43.

R4405.4 Structural. The minimum design loads for the structure shall be the loads applicable at the time the building was constructed, provided that a dangerous condition is not created. Structural elements that are uncovered during the course of the alteration and that are found to be unsound or dangerous shall be made to comply with the applicable requirements of this code.

SECTION R4406

RENOVATIONS

R4406.1 Materials and methods. Except as otherwise required herein, renovations shall comply with the materials and methods requirements of this code for new construction.

R4406.2 Door and window dimensions. Minor reductions in the clear opening dimensions of replacement doors and windows that result from the use of different materials shall be allowed, whether or not they are permitted by this code.

R4406.3 Interior finish. Wood paneling and textile wall coverings used as an interior finish shall comply with the flame spread requirements of Section R302.9.

R4406.4 Structural. Unreinforced masonry buildings located in Seismic Design Category D2 or E shall have parapet bracing and wall anchors installed at the roofline whenever a reroofing permit is issued. Such parapet bracing and wall anchors shall be of an approved design.

SECTION R4407

ALTERATIONS

R4407.1 Newly constructed elements. Newly constructed elements, components and systems shall comply with the requirements of this code for new construction.

Exceptions:

1. Added openable windows are not required to comply with the light and ventilation requirements of Section R303.
2. Newly installed electrical equipment shall comply with the requirements of Section 4508.5

R4407.2 Nonconformities. Alterations shall not increase the extent of noncompliance with the requirements of Section 4408 or create nonconformity to those requirements that did not previously exist.

R4407.3 Extensive alterations. Where the total area of all of the work areas included in an *alteration* exceeds 50 percent of the area of the dwelling unit, the work shall be considered to be a reconstruction and shall comply with the requirements of Section 4408.

Exception: Work areas in which the alteration work is exclusively plumbing, mechanical or electrical shall not be included in the computation of the total area of all work areas.

R4407.4 Structural. The minimum design loads for the structure shall be the loads applicable at the time the building was constructed, provided that a dangerous condition is not created. Structural elements that are uncovered during the course of the alteration and that are found to be unsound or dangerous shall be made to comply with the applicable requirements of this code for new construction.

R4407.5 Electrical equipment and wiring. Electrical equipment and wiring in alterations shall comply with Sections R4407.5.1 through R4407.5.5.

R4407.5.1 Materials and methods. Newly installed electrical equipment and wiring relating to work done in any work area shall comply with the materials and methods requirements of Chapters 34 through 43.

Exception: Electrical equipment and wiring in newly installed partitions and ceilings shall comply with the applicable requirements of Chapters 34 through 43.

R4407.5.2 Electrical service. Service to the dwelling unit shall not be less than 100 ampere, three-wire capacity and service equipment shall be dead front having no live parts exposed that could allow accidental contact. Type "S" fuses shall be installed where fused equipment is used.

Exception: Existing service of 60 ampere, three-wire capacity, and feeders of 30 ampere or larger two- or three-wire capacity shall be accepted if adequate for the electrical load being served.

R4407.5.3 Additional electrical requirements. Where the work area includes any of the following areas within a dwelling unit, the requirements of Sections R4407.5.3.1 through R4407.5.3.5 shall apply.

R4407.5.3.1 Enclosed areas. Enclosed areas other than closets, kitchens, basements, garages, hallways, laundry areas and bathrooms shall have not less than two duplex receptacle outlets, or one duplex receptacle outlet and one ceiling- or wall-type lighting outlet.

R4407.5.3.2 Kitchen and laundry areas. Kitchen areas shall have not less than two duplex receptacle outlets. Laundry areas shall have not less than one duplex receptacle outlet located near the laundry equipment and installed on an independent circuit.

R4407.5.3.3 Ground-fault circuit interruption. Ground-fault circuit interruption shall be provided on newly installed receptacle outlets where required by Chapters 34 through 43.

R4407.5.3.4 Lighting outlets. Not less than one lighting outlet shall be provided in every bathroom, hallway, stairway, attached garage and detached garage with electric power to illuminate outdoor entrances and exits, and in utility rooms and basements where these spaces are used for storage or contain equipment requiring service.

R4407.5.3.5 Clearance. Clearance for electrical service equipment shall be provided in accordance with Chapters 34 through 43.

R4407.6 Ventilation. Reconfigured spaces intended for occupancy and spaces converted to habitable or occupiable space in any work area shall be provided with ventilation in accordance with Section R303.

R4407.7 Ceiling height. Habitable spaces created in existing basements shall have ceiling heights of not less than 6 foot 8 inches (2032mm), except that the ceiling height at obstructions shall be not less than 6 foot 4 inches (1930 mm) from the basement or attic floor. Existing finished ceiling heights in nonhabitable basements shall not be reduced.

R4407.8 Stairs. Except as noted otherwise herein, stairs shall comply with the requirements of Section R311.

R4407.8.1 Stair width. Existing basement stairs and handrails not otherwise being altered or modified shall be permitted to maintain their current clear width at, above and below existing handrails.

R4407.8.2 Stair headroom. Headroom height on existing basement stairs being altered or modified shall not be reduced below the existing stairway finished headroom. Existing basement stairs not otherwise being altered shall be permitted to maintain the current finished headroom.

R4407.8.3 Stair landing. Landings serving existing basement stairs being altered or modified shall not be reduced below the existing stairway landing depth and width. Existing basement stairs not otherwise being altered shall be permitted to maintain the current landing depth and width.

SECTION R4408 **RECONSTRUCTION**

R4408.1 Materials and methods. Except as otherwise required herein, reconstruction shall be done using materials or methods permitted by this code for new construction.

R4408.2 Stairways. Stairways within the work area shall be provided with illumination in accordance with Section R303.6.

R4408.3 Handrails. Every required exit stairway that has four or more risers, is part of the means of egress for any work area, and does not have handrails, or in which the existing handrails are judged to be in danger of collapsing, shall be provided with handrails designed and installed in accordance with Section R311 for the full length of the run of steps on not less than one side.

R4408.4 Guards. Every open portion of a stair, landing or balcony that is more than 30 inches (762 mm) above the floor or grade below, is part of the egress path for any work area, and does not have guards, or in which the existing guards are judged to be in danger of collapsing, shall be provided with guards designed and installed in accordance with Section R312.

R4408.5 Wall and ceiling finish. The interior finish of walls and ceilings in any work area shall comply with the requirements of Section R302.9. Existing interior finish materials that do not comply with those requirements shall be removed or shall be treated with an approved fire-retardant coating in accordance with the manufacturer's instructions to secure compliance with the requirements of this section.

R4408.6 Separation walls. Where the work area is in an attached dwelling unit, walls separating dwelling units that are not continuous from the foundation to the underside of the roof sheathing shall be constructed to provide a continuous fire separation using construction materials consistent with the existing wall or complying with the requirements for new structures. Performance of work shall be required only on the side of the wall of the dwelling unit that is part of the work area.

Revise as follows:

APPENDIX AJ **EXISTING BUILDINGS AND STRUCTURES** ***(Delete all of Appendix J)***

Reason: This proposed code change deletes Appendix Chapter J of the 2021 IRC and moves most of its provisions into the body of the IRC code as a new chapter 44. Definitions from the appendix chapter are also moved into the body of the code as new definitions, or modified if the definitions already existed in the body of the code.

While there are provisions for existing buildings in the IRC, they are scattered throughout different sections of the code and it is sometimes not clear when certain sections apply. There is also a need for clarity surrounding code standards for existing IRC buildings to provide an understanding of when the International Existing Building Code applies vs individual sections within the body of the code.

This proposal consolidates standards for alterations, renovations, reconstructions and repairs into a single chapter, which is referenced in a new section in Chapter R102.7.1. By moving code requirements for existing buildings into a separate chapter within the body of the code, there are

distinct requirements that can be specifically applied to the variations options for modifying an existing IRC building, including repairs, renovations, alterations, and reconstructions. This is also contrasted with additions, to which only new code standards apply and the proposed code specifically addresses additions along with renovations in this section.

In addition to a need for consolidation and clarity of code requirements in the IRC, more reasonable standards are also needed for residential buildings that were built decades ago that potentially have windows, ceiling heights and stairs that don't comply with new code standards.

With many of these spaces potentially already being used for decades as habitable spaces by the homeowner who may not be familiar with building code requirements, the risk of allowing these spaces to be converted to legal habitable space is small. The ability to apply reasonable code standards with a reasonable level of safety gives the homeowner effective use these existing buildings without requiring major reconstruction such as raising the house above the foundation, or other expensive construction techniques that may not add any substantial level of safety to the use of the building.

These proposed provisions also increase the sustainability of our IRC building code because they allows reasonable re-use of buildings. The ability to add additional bedrooms or other habitable spaces to existing buildings enables the homeowner to maximize the use of their home within the same building footprint. This provides additional value to the home without the high cost of new construction.

Although the existing building standards in Appendix J are available as an option for any jurisdiction to adopt, it is a burden to many jurisdictions who have to petition their state building code councils or governing bodies to individually adopt it for their individual jurisdiction. Appendix chapters are therefore infrequently used and most jurisdictions, especially those without a lot capacity for code development, stick to the standard provisions of the state codes and do not adopt optional provisions such as Appendix J. There is a need for the model codes to take the leap and incorporate these requirements into the body of the code, which will therefore be adopted by the states and available to all jurisdictions.

Cost Impact: The code change proposal will decrease the cost of construction
More reasonable standards to allow for existing spaces to be compliant with code requirements will not require extensive costly alterations.

RB7-22

Public Hearing Results

Committee Action:

Disapproved

Committee Reason: The committee disapproved this proposal because they believed the option of using IEBC should remain. In addition, the definitions currently in Appendix J were inconsistent and conflicting with the IEBC (e.g. renovation, rehabilitation). The provisions for existing building currently into the code should be relocated to be grouped in one location. Appendix J should be updated, and then moved into the new existing building chapter. (Vote: 10-0)

RB7-22

Individual Consideration Agenda

Public Comment 1:

IRC: APPENDIX AJ, SECTION AJ106, AJ106.1, AJ110.1.1, AJ110.1.2, AJ110.1.3, AJ110.3, AJ110.2, SECTION AJ107, AJ107.1, AJ107.1.1, AJ107.1.2 (New)

Proponents: Julie Furr, representing FEMA ATC Seismic Code Support Committee (jfurr@rimkus.com); Michael Mahoney, representing FEMA (mike.mahoney@fema.dhs.gov); Kelly Cobeen, representing Federal Emergency Management Agency/Applied Technology Council - Seismic Code Support Committee (kcobeen@wje.com) requests As Modified by Public Comment

Replace as follows:

2021 International Residential Code

APPENDIX AJ EXISTING BUILDINGS AND STRUCTURES SECTION AJ106

DEFINITIONS

AJ106.1 General. For purposes of this appendix, the The terms used in this appendix, and not provided in Chapter 2 of the *International Residential Code*, are defined as follows:

ALTERATION. The reconfiguration of any space; the addition or elimination of any door or window; the reconfiguration or extension of any system; or the installation of any additional equipment.

DANGEROUS. Any building, structure or portion thereof that meets any of the conditions described below shall be deemed dangerous: Where the stresses in any member; the condition of the building, or any of its components or elements or attachments; or other condition that results in an overload exceeding 150 percent of the stress allowed for the member or material in this code:

1. The building or structure has collapsed, has partially collapsed, has moved off its foundation or lacks the necessary support of the ground.
2. There exists a significant risk of collapse, detachment or dislodgement of any portion, member, appurtenance or ornamentation of the building or structure under permanent, routine or frequent loads; under actual loads already in effect; or under snow, wind, rain, flood, earthquake aftershock or other environmental loads when such loads are imminent.

REHABILITATION. Any work, as described by the categories of work defined herein, undertaken in an *existing building*. ~~Any repair, renovation, alteration or reconstruction work undertaken in an existing building.~~

REPAIR. The patching, restoration or minor replacement of materials, elements, components, equipment or fixtures for the purposes of maintaining those materials, elements, components, equipment or fixtures in good or sound condition.

WORK AREA. That portion or portions of a building consisting of all reconfigured spaces as indicated on the construction documents. Work area excludes other portions of the building where incidental work entailed by the intended work must be performed and portions of the building where work not initially intended by the owner is specifically required by this code. ~~That portion of a building affected by any renovation, alteration or reconstruction work as initially intended by the owner and indicated as such in the permit. Work area excludes other portions of the building where incidental work entailed by the intended work must be performed, and portions of the building where work not initially intended by the owner is specifically required by these provisions for a renovation, alteration or reconstruction.~~

SECTION AJ107 REPAIRS

AJ107.1 Materials. Materials used during repairs shall comply with this section. ~~Except as otherwise required herein, work shall be done using like materials or materials permitted by this code for new construction.~~

AJ107.1.1 Hazardous materials- New and replacement materials. Except as otherwise required or permitted by this code, materials permitted by this code for new construction shall be used. Like materials shall be permitted for repairs and alterations, provided that unsafe conditions are not created. ~~Hazardous materials no longer permitted, such as asbestos and lead-based paint, shall not be used where this code would not permit their use in buildings of similar occupancy, purpose, and location.~~

AJ107.1.2 Existing materials. Materials already in use in a building in compliance with requirements or approvals in effect at the time of their erection or installation shall be permitted to remain in use unless determined by the building official to be unsafe.

Commenter's Reason: New language addressing new and existing materials has been included clarifying when new materials have to be used and when materials matching the existing materials are allowed to be used instead.

Structural definitions have been deleted where already defined in Chapter 2 of the IRC or revised to match definitions already defined in Chapter 2 of the IEBC.

In developing this public comment, we have collaborated with WABO and other interested parties. This public comment will work in conjunction with WABO's code change proposals and public comments. The link below is to a document showing how Appendix AJ is intended to look, if all of the related Appendix AJ proposals and public comments are approved. Where proposals and public comments operate on the same section, this combined document identifies which text is intended to control.

https://www.cdpassess.com/public-comment/3547/27869/files/download/3681/FEMA_IRC%20APP%20J%20compiled%2007-21-22.docx

- This shows what Appendix AJ would look like if these proposals were approved with floor modifications and public comments: RB7, RB162, RB163, RB206, and RB297

Cost Impact: The net effect of the public comment and code change proposal will not increase or decrease the cost of construction. Because the main body of the code is the default resource used given the present limitations of Appendix AJ, this proposal with floor modifications and public comments will not increase the cost of construction within the IRC. This is a long overdue cleanup that begins to align the Appendix provisions with the requirements of the main body of the code as they are frequently interpreted and used in the field.

Staff Analysis: Public comments to RB7, RB162, RB163, RB206 and RB297 addresses requirements for Appendix J in a different or contradicting

Public Comment 2:

IRC: APPENDIX AJ, SECTION AJ101, AJ101.1, AJ101.2, AJ101.3, SECTION AJ102, AJ102.1, AJ102.2, AJ102.3, AJ102.3 (New), AJ102.4, AJ102.4.1, AJ102.4.2, AJ102.4.3, AJ102.4.3.1, AJ102.4.4, AJ102.5, AJ102.6, AJ102.7, AJ102.8, AJ102.9, SECTION AJ103, AJ103.1, SECTION AJ104, AJ104.1, SECTION AJ106, AJ106.1, SECTION 202, SECTION AJ107, AJ104.1 (New), AJ107.1, AJ107.1.1, AJ107.1.2, AJ107.2, AJ107.3, SECTION AJ108, AJ108.1, AJ108.2, AJ108.3, SECTION AJ109, AJ105.1 (New), AJ109.1, AJ109.2, AJ109.3, AJ109.4, AJ108.4, AJ109.5, AJ109.5.1, AJ109.5.2, AJ109.5.3, AJ109.5.3.1, AJ109.5.3.2, AJ109.5.3.3, AJ109.5.3.4, AJ109.5.3.5, AJ109.6, AJ109.7, AJ109.8, AJ109.8.1, AJ109.8.2, AJ109.8.3, AJ105.8.4 (New), AJ105.8.5 (New), AJ105.8.6 (New), SECTION AJ106 (New), AJ106.1 (New), SECTION AJ107 (New), AJ107.1 (New), SECTION AJ110, AJ110.1, AJ110.1.1, AJ110.1.2, AJ110.1.3, AJ110.2, AJ110.3, AJ110.4, SECTION AJ111, AJ111.1, TABLE AJ111.1

Proponents: Ardel Jala, representing Washington Association of Building Officials Technical Code Dev Committee (ardel.jala@seattle.gov); Micah Chappell, representing Washington Association of Building Officials Technical Code Development Committee (micah.chappell@seattle.gov) requests As Modified by Public Comment

Replace as follows:

2021 International Residential Code

APPENDIX AJ EXISTING BUILDINGS AND STRUCTURES

SECTION AJ101 PURPOSE AND INTENT

AJ101.1 General. The purpose of these provisions is to encourage the continued use or reuse of legally existing buildings and structures. ~~These provisions are intended to permit work in existing buildings that is consistent with the purpose of this code. Compliance with these provisions shall be deemed to meet the requirements of this code.~~ Repairs, alterations, additions, and relocation of existing buildings and structures shall comply with the provisions of this code for new construction, except as modified by this appendix.

AJ101.2 Classification of work. ~~For purposes of this appendix, work in existing buildings shall be classified into the categories of repair, renovation, alteration and reconstruction. Specific requirements are established for each category of work in these provisions.~~

AJ101.3 Multiple categories of work. ~~Work of more than one category shall be part of a single work project. Related work permitted within a 12-month period shall be considered to be a single work project. Where a project includes one category of work in one building area and another category of work in a separate and unrelated area of the building, each project area shall comply with the requirements of the respective category of work. Where a project with more than one category of work is performed in the same area or in related areas of the building, the project shall comply with the requirements of the more stringent category of work.~~

SECTION AJ102 COMPLIANCE

AJ102.1 General. ~~Regardless of the category of work being performed, the~~ The work shall not cause the structure to become unsafe or adversely affect the performance of the building; shall not cause an existing mechanical or plumbing system to become unsafe, hazardous, insanitary or overloaded; and unless expressly permitted by these provisions, shall not make the building any less compliant with this code or to any previously *approved* alternative arrangements than it was before the work was undertaken.

AJ102.2 Requirements by category of work. ~~Repairs shall conform to the requirements of Section AJ107. Renovations shall conform to the requirements of Section AJ108. Alterations shall conform to the requirements of Section AJ109 and the requirements for renovations. Reconstructions shall conform to the requirements of Section AJ110 and the requirements for alterations and renovations.~~

AJ102.2AJ102.3 Smoke detectors alarms. ~~Regardless of the category of work, smoke detectors~~ Smoke alarms shall be provided where required by Section R314.2.2.

AJ102.3 Carbon monoxide alarms. Carbon monoxide alarms shall be provided where required by Section R315.2.2.

AJ102.4 Replacement windows. ~~Regardless of the category of work, where~~ Where an existing window, including the sash and glazed portion, or

safety glazing is replaced, the replacement window or safety glazing shall comply with the requirements of Sections AJ102.4.1 through AJ102.4.4, as applicable.

AJ102.4.1 Energy efficiency. Replacement windows shall comply with the requirements of Chapter 11.

AJ102.4.2 Safety glazing. Replacement glazing in hazardous locations shall comply with the safety glazing requirements of Section R308.

AJ102.4.3 Replacement windows for emergency escape and rescue openings. Where windows are required to provide emergency escape and rescue openings, replacement windows shall be exempt from Sections R310.2 and R310.4.4 provided that the replacement window meets the following conditions:

1. The replacement window is the manufacturer's largest standard size window that will fit within the existing frame or existing rough opening. The replacement window shall be permitted to be of the same operating style as the existing window or a style that provides for an equal or greater window opening area than the existing window.
2. Where the replacement window is not part of a change of occupancy.

~~Window opening control devices and fall prevention devices complying with ASTM F2090 shall be permitted for use on windows serving as required emergency escape and rescue openings.~~

~~**AJ102.4.3.1 Control Window opening control devices and fall protection device height.** Emergency escape and rescue openings with window opening control devices or fall prevention devices shall be located at a height in accordance with Section R310.1.1 or at as low a height as can be installed within the existing clear opening, complying with ASTM F2090, after operation to release the control device allowing the window to fully open, shall not reduce the net clear opening area of the window unit. Emergency escape and rescue openings shall be operational from the inside of the room without the use of keys or tools.~~

~~**AJ102.4.4 Window control devices fall protection.** Window fall protection shall be installed in accordance with Section R312.2.~~

~~Window opening control devices or fall prevention devices complying with ASTM F2090 shall be installed where an existing window is replaced and where all of the following apply to the replacement window:~~

- ~~1. The window is operable.~~
- ~~2. One of the following applies:~~
 - ~~2.1. The window replacement includes replacement of the sash and the frame.~~
 - ~~2.2. The window replacement includes the sash only when the existing frame remains.~~
- ~~3. The bottom of the clear opening of the window opening is at a height less than 24 inches (610 mm) above the finished floor.~~
- ~~4. The window will permit openings that will allow passage of a 4-inch diameter (102 mm) sphere where the window is in its largest opened position.~~
- ~~5. The vertical distance from the top of the sill of the window opening to the finished grade or other surface below, on the exterior of the building, is greater than 72 inches (1829 mm).~~

AJ102.5 Flood hazard areas. Work performed in existing buildings located in a flood hazard area as established by Table R301.2 shall be subject to the provisions of Section R105.3.1.1.

AJ102.6 Equivalent alternatives. Work performed in accordance with the *International Existing Building Code* shall be deemed to comply with the provisions of this appendix. These provisions are not intended to prevent the use of any alternative material, alternative design or alternative method of construction not specifically prescribed herein, provided that any alternative has been deemed to be equivalent and its use authorized by the *building official*.

~~**AJ102.7 Other alternatives.** Where compliance with these provisions or with this code as required by these provisions is technically infeasible or would impose disproportionate costs because of construction or dimensional difficulties, the building official shall have the authority to accept alternatives. These alternatives include materials, design features and operational features.~~

~~**AJ102.7/AJ102.8 More restrictive requirements.** Buildings or systems in compliance with the requirements of this code for new construction shall not be required to comply with any more restrictive requirement of these provisions.~~

~~**AJ102.9 Features exceeding code requirements.** Elements, components and systems of existing buildings with features that exceed the requirements of this code for new construction, and are not otherwise required as part of *approved* alternative arrangements or deemed by the *building official* to be required to balance other building elements not complying with this code for new construction, shall not be prevented by these provisions from being modified as long as they remain in compliance with the applicable requirements for new construction.~~

SECTION AJ103 PRELIMINARY MEETING

AJ103.1 General. If a building *permit* is required at the request of the prospective *permit* applicant, the *building official* or his or her designee shall meet with the prospective applicant to discuss plans for any proposed work under these provisions prior to the application for the *permit*. The purpose of this preliminary meeting is for the *building official* to gain an understanding of the prospective applicant's intentions for the proposed work, and to determine, together with the prospective applicant, the specific applicability of these provisions.

SECTION AJ104 EVALUATION OF AN EXISTING BUILDING

AJ104.1 General. The *building official* shall have the authority to require an existing building to be investigated and evaluated by a *registered design professional* in the case of proposed reconstruction of any portion of a building. The evaluation shall determine the existence of any potential nonconformities to these provisions, and shall provide a basis for determining the impact of the proposed changes on the performance of the building. The evaluation shall use the following sources of information, as applicable:

1. Available documentation of the existing building:
 - 1.1. Field surveys.
 - 1.2. Tests (nondestructive and destructive).
 - 1.3. Laboratory analysis.

Exception: Detached one- or two-family dwellings that are not irregular buildings under Section R301.2.2.6 and are not undergoing an extensive reconstruction shall not be required to be evaluated.

SECTION AJ103AJ106 DEFINITIONS

AJ103.1AJ106.1 General. For purposes of this appendix, the terms used are defined as follows: ~~The terms used in this appendix, and not provided in Chapter 2 of the International Residential Code, are defined as follows:~~

ALTERATION. The reconfiguration of any space; the addition or elimination of any door or window; the reconfiguration or extension of any system; or the installation of any additional equipment

CATEGORIES OF WORK. The nature and extent of construction work undertaken in an existing building. The categories of work covered in this appendix, listed in increasing order of stringency of requirements, are *repair*, *renovation*, *alteration* and *reconstruction*.

DANGEROUS.

Any building, structure or portion thereof that meets any of the conditions described below shall be deemed dangerous:

1. The building or structure has collapsed, has partially collapsed, has moved off its foundation or lacks the necessary support of the ground.
2. There exists a significant risk of collapse, detachment or dislodgement of any portion, member, appurtenance or ornamentation of the building or structure under permanent, routine or frequent loads; under actual loads already in effect; or under snow, wind, rain, flood, earthquake or other environmental loads when such loads are imminent.

Where the stresses in any member; the condition of the building, or any of its components or elements or attachments; or other condition that results in an overload exceeding 150 percent of the stress allowed for the member or material in this code.

EQUIPMENT OR FIXTURE. Any plumbing, heating, electrical, ventilating, air conditioning, refrigerating and fire protection equipment; and elevators, dumb waiters, boilers, pressure vessels, and other mechanical facilities or installations that are related to building services.

MATERIALS AND METHODS REQUIREMENTS. Those requirements in this code that specify material standards; details of installation and connection; joints; penetrations; and continuity of any element, component or system in the building. The required quantity, fire resistance, flame spread, acoustic or thermal performance, or other performance attribute is specifically excluded from materials and methods requirements.

RECONSTRUCTION. The reconfiguration of a space that affects an exit, a renovation or *alteration* where the work area is not permitted to be occupied because existing means of egress and fire protection systems, or their equivalent, are not in place or continuously maintained; or there are extensive *alterations* as defined in Section AJ109.3.

REHABILITATION. Any *repair*, *renovation*, *alteration* or *reconstruction* work undertaken in an existing building.

RENOVATION. The change, strengthening or addition of load-bearing elements; or the refinishing, replacement, bracing, strengthening, upgrading or extensive repair of existing materials, elements, components, equipment or fixtures. Renovation does not involve reconfiguration of spaces. Interior and exterior painting are not considered refinishing for purposes of this definition, and are not renovation.

REPAIR. The patching, restoration or minor replacement of materials, elements, components, equipment or fixtures for the purposes of maintaining those materials, elements, components, equipment or fixtures in good or sound condition.

WORK AREA. That portion of a building affected by any renovation, *alteration* or reconstruction work as initially intended by the *owner* and indicated as such in the *permit*. Work area excludes other portions of the building where incidental work entailed by the intended work must be performed, and portions of the building where work not initially intended by the *owner* is specifically required by these provisions for a renovation, *alteration* or reconstruction.

SECTION ~~AJ104~~AJ107 REPAIRS

AJ104.1 General. Repairs shall comply with the applicable provisions of the *International Residential Code* for new construction or as permitted by this appendix.

AJ104.2~~AJ107-1~~ **Materials. Except as otherwise required herein, *repairs* work shall be done using like materials or materials permitted by this code for new construction.**

AJ104.2.1~~AJ107-1.1~~ **Hazardous materials. Hazardous materials no longer permitted, such as asbestos and lead-based paint, shall not be used.**

AJ104.1.2~~AJ107-1.2~~ **Plumbing materials and supplies. The following plumbing materials and supplies shall not be used:**

1. All-purpose solvent cement, unless *listed* for the specific application.
2. Flexible traps and tailpieces, unless *listed* for the specific application.
3. Solder having more than 0.2-percent lead in the repair of potable water systems.

AJ104.3~~AJ107-2~~ **Water closets. Where any water closet is replaced with a newly manufactured water closet, the replacement water closet shall comply with the requirements of Section P2903.2.**

AJ104.4~~AJ107-3~~ **Electrical. Repair or replacement of existing electrical wiring and equipment ~~undergoing repair with like material shall be permitted.~~ shall comply with Chapters 34 through 43.**

Exceptions:

1. Replacement of electrical receptacles shall comply with the requirements of Chapters 34 through 43.
2. Plug fuses of the Edison base type shall be used for replacements only where there is not evidence of overfusing or tampering in accordance with the applicable requirements of Chapters 34 through 43.
3. For replacement of nongrounding type receptacles with grounding type receptacles and for branch circuits that do not have an equipment grounding conductor in the branch circuitry, the grounding conductor of a grounding type receptacle outlet shall be permitted to be grounded to any accessible point on the grounding electrode system, or to any accessible point on the grounding electrode conductor, as allowed and described in Chapters 34 through 43.

SECTION AJ108 RENOVATIONS

AJ108.1 Materials and methods. The work shall comply with the materials and methods requirements of this code.

AJ108.2 Door and window dimensions. Minor reductions in the clear opening dimensions of replacement doors and windows that result from the use of different materials shall be allowed, whether or not they are permitted by this code.

AJ108.3 Interior finish. Wood paneling and textile wall coverings used as an interior finish shall comply with the flame spread requirements of Section R302.9.

SECTION ~~AJ105~~AJ109 ALTERATIONS

AJ105.1 General. *Alterations* to existing buildings shall comply with the provisions of this code for new construction, except as permitted by Sections AJ105.2 through AJ105.8. Engineered design in accordance with Section R301.1.3 shall be permitted to meet the requirements of this section. *Alterations* shall not cause the existing building to become less compliant with the provisions of this code for new construction than the existing building was prior to the work.

AJ105.2~~AJ109-1~~ **Newly constructed elements. Newly constructed elements, components and systems shall comply with the requirements of this code.**

Exceptions:

1. Added openable windows are not required to comply with the light and *ventilation* requirements of Section R303.
2. Newly installed electrical equipment shall comply with the requirements of Section ~~AJ109.5~~ AJ105.5.

~~**AJ105.3AJ109.2 Nonconformities.**~~ The work shall not increase the extent of noncompliance with the requirements of Section ~~AJ110~~, or create nonconformity to those requirements that did not previously exist.

~~**AJ109.3 Extensive alterations.**~~ Where the total area of all of the work areas included in an *alteration* exceeds 50 percent of the area of the *dwelling unit*, the work shall be considered to be a reconstruction and shall comply with the requirements of these provisions for reconstruction work.

~~**Exception:**~~ Work areas in which the *alteration* work is exclusively plumbing, mechanical or electrical shall not be included in the computation of the total area of all work areas.

~~**AJ105.4AJ109.4 Structural.**~~ Altered structural elements and systems shall comply with Section R102.7.1 and the structural provisions of this appendix. The minimum design loads for the structure shall be the loads applicable at the time the building was constructed, provided that a dangerous condition is not created. Structural elements that are uncovered during the course of the *alteration* and that are found to be unsound or dangerous shall be made to comply with the applicable requirements of this code.

~~**AJ105.4.1AJ108.4 Structural Unreinforced masonry walls.**~~ Unreinforced masonry buildings located in Seismic Design Category D₂ or E shall have parapet bracing and wall anchors installed at the roofline whenever a *reroofing permit* is issued. Such parapet bracing and wall anchors shall be of an *approved design*.

~~**AJ105.5AJ109.5 Electrical equipment and wiring.**~~ Electrical equipment and wiring shall comply with this section.

~~**AJ105.5.1AJ109.5.1 Materials and methods.**~~ Newly installed electrical equipment and wiring relating to work done in any work area, including in newly installed partitions and ceilings, shall comply with the materials and methods requirements of Chapters 34 through 43.

~~**Exception:**~~ Electrical equipment and wiring in newly installed partitions and ceilings shall comply with the applicable requirements of Chapters 34 through 43.

~~**AJ105.5.2AJ109.5.2 Electrical service.**~~ Service to the *dwelling unit* shall be not less than 100 ampere, three-wire capacity and service *equipment* shall be dead front having no live parts exposed that could allow accidental contact. Type "S" fuses shall be installed where fused equipment is used.

~~**Exception:**~~ Existing service of 60 ampere, three-wire capacity, and feeders of 30 ampere or larger two- or three-wire capacity shall be accepted if adequate for the electrical load being served.

~~**AJ105.5.3AJ109.5.3 Additional electrical requirements.**~~ Where the work area includes any of the following areas within a *dwelling unit*, the requirements of Sections ~~AJ109.5.3.1~~ AJ105.5.3.1 through ~~AJ109.5.3.5~~ AJ105.5.3.5 shall apply.

~~**AJ105.5.3.1AJ109.5.3.1 Enclosed areas.**~~ Enclosed areas other than closets, kitchens, *basements*, garages, hallways, laundry areas and bathrooms shall have not less than two duplex receptacle outlets, or one duplex receptacle outlet and one ceiling- or wall-type lighting outlet.

~~**AJ105.5.3.2AJ109.5.3.2 Kitchen and laundry areas.**~~ Kitchen areas shall have not less than two duplex receptacle outlets. Laundry areas shall have not less than one duplex receptacle outlet located near the laundry equipment and installed on an independent branch circuit.

~~**AJ105.5.3.3AJ109.5.3.3 Ground-fault circuit interruption.**~~ Ground-fault circuit interruption shall be provided on newly installed receptacle outlets if required by Chapters 34 through 43.

~~**AJ105.5.3.4AJ109.5.3.4 Lighting outlets.**~~ Not less than one lighting outlet controlled by a listed wall-mounted device shall be provided in every bathroom, hallway, *stairway*, attached garage and detached garage with electric power to illuminate outdoor entrances and exits, and in utility rooms and *basements* where these spaces are used for storage or contain equipment requiring service. The wall-mounted control device shall be located near an entrance to the room.

~~**AJ105.5.3.5AJ109.5.3.5 Clearance.**~~ Clearance for electrical service equipment shall be provided in accordance with Chapters 34 through 43.

~~**AJ105.6AJ109.6 Ventilation.**~~ Reconfigured spaces intended for occupancy and spaces converted to habitable or occupiable space in any work area shall be provided with *ventilation* in accordance with Section R303.

~~**AJ105.7AJ109.7 Ceiling height.**~~ *Habitable spaces created in existing basements shall have* Where a habitable attic or habitable space is created in an existing building, ceiling heights shall not be ~~of not less than 6 feet, 8 inches (2032 mm)~~, except that the ceiling height at obstructions shall be not less than 6 feet 4 inches (1930 mm) from the basement floor. Existing finished ceiling heights in nonhabitable spaces in *basements* shall not be reduced. Bathrooms, toilet rooms, and laundry rooms shall have a ceiling height of not less than 6 feet 4 inches (1930 mm).

Exceptions:

1. For rooms with sloped ceilings, the required floor area of the room shall have a ceiling height of not less than 5 feet (1524 mm), and not less than 50 percent of the required floor area shall have a ceiling height of not less than 6 feet 8 inches (2134 mm).

2. At beams, girders, ducts, or other obstructions, the ceiling height shall be not less than 6 feet 4 inches (1931 mm) from the finished floor.

~~AJ105.8~~**AJ109.8 Stairs, handrails, and guards.** Stairs, handrails, and guards shall comply with this section.

~~AJ105.8.1~~**AJ109.8-1 Stair width.** Existing *basement* stairs and *handrails* not otherwise being altered or modified shall be permitted to maintain their current clear width at, above and below existing *handrails*.

~~AJ105.8.2~~**AJ109.8-2 Stair headroom.** Headroom height on existing *basement* stairs being altered or modified shall not be reduced below the existing *stairway* finished headroom. Existing *basement* stairs not otherwise being altered shall be permitted to maintain the current finished headroom.

~~AJ105.8.3~~**AJ109.8-3 Stair landing.** Landings serving existing *basement* stairs being altered or modified shall not be reduced below the existing *stairway* landing depth and width. Existing *basement* stairs not otherwise being altered shall be permitted to maintain the current landing depth and width.

AJ105.8.4 Stair treads and riser. An existing stairway shall not be required to comply with Section R311.7.5 where the existing space and construction does not allow a reduction in pitch or slope. Where risers are added to an existing stair, the tread and riser dimension of the added risers shall match the existing stair.

AJ105.8.5 Stairway Illumination. Stairways within the work area shall be provided with illumination in accordance with Section R303.6.

AJ105.8.6 Handrails and Guards. If a stair or any portion of a stair is altered, a handrail and guard, where required, shall be provided in accordance with Section R311 and R312.

SECTION AJ106 **ADDITIONS**

AJ106.1 General. Where the existing building with an addition is within the scope of the International Residential Code, the addition shall comply with the applicable provisions of the International Residential Code for new construction or as permitted by this appendix.

SECTION AJ107 **RELOCATED BUILDINGS**

AJ107.1 General. Residential buildings or structures moved into or within the jurisdiction are not required to comply with the requirements for new construction under the International Residential Code provided they comply with all of the following conditions:

1. The building shall be safe for human occupancy as determined by the International Fire Code and the International Property Maintenance Code.
2. Any repair, alteration or change of use undertaken within the relocated structure shall comply with the requirements of this code applicable to the work being performed.
3. Any field fabricated elements shall comply with the applicable requirements of this code.

SECTION AJ110 **RECONSTRUCTION**

AJ110.1 **Stairways, handrails and guards**

AJ110.1.1 Stairways. Stairways within the work area shall be provided with illumination in accordance with Section R303.7.

AJ110.1.2 Handrails. Every required exit *stairway* that has four or more risers, is part of the means of egress for any work area, and is not provided with not fewer than one *handrail*, or in which the existing *handrails* are judged to be in danger of collapsing, shall be provided with *handrails* designed and installed in accordance with Section R311 for the full length of the run of steps on not less than one side.

AJ110.1.3 Guards. Every open portion of a *stair*, landing or balcony that is more than 30 inches (762 mm) above the floor or *grade* below, is part of the egress path for any work area, and does not have *guards*, or in which the existing *guards* are judged to be in danger of collapsing, shall be provided with *guards* designed and installed in accordance with Section R312.

AJ110.2 Wall and ceiling finish. The interior finish of walls and ceilings in any work area shall comply with the requirements of Section R302.9. Existing interior finish materials that do not comply with those requirements shall be removed or shall be treated with an *approved* fire-retardant coating in accordance with the manufacturer's instructions to secure compliance with the requirements of this section.

AJ110.3 Separation walls. Where the work area is in an attached *dwelling unit*, walls separating *dwelling units* that are not continuous from the

foundation to the underside of the roof sheathing shall be constructed to provide a continuous fire separation using construction materials consistent with the existing wall or complying with the requirements for new structures. Performance of work shall be required only on the side of the wall of the *dwelling unit* that is part of the work area.

AJ110.4 Ceiling height. *Habitable spaces* created in existing *basements* shall have ceiling heights of not less than 6 feet, 8 inches (2032 mm); except that the ceiling height at obstructions shall be not less than 6 feet 4 inches (1930 mm) from the *basement* floor. Existing finished ceiling heights in nonhabitable spaces in *basements* shall not be reduced.

SECTION ~~AJ111~~ AJ108

REFERENCED STANDARDS

~~AJ111.1~~ AJ108.1 General. See Table ~~AJ111.1~~ AJ108.1 for standards that are referenced in various sections of this appendix. Standards are listed by the standard identification with the effective date, the standard title and the section or sections of this appendix that reference the standard.

TABLE AJ111.1-AJ108.1 REFERENCED STANDARDS

STANDARD ACRONYM	STANDARD NAME	SECTION HEREIN REFERENCED
ASTM F2090—17	<i>Specification for Window Fall Prevention Devices with Emergency Escape (Egress) Release Mechanisms</i>	AJ102.4.3, AJ102.4.4
IEBC—21_24	<i>International Existing Building Code</i>	AJ102.6
IFC - 24	<i>International Fire Code</i>	AJ107.1
IPMC-24	<i>International Property Maintenance Code</i>	AJ107.1

Commenter's Reason: This public comment is being submitted in response to the direction given by the IRC-Building Committee to improve Appendix AJ before trying to move its provisions into the body of the code. To that end, we have taken many of the provisions from our originally-proposed Chapter 44 and incorporated them into Appendix AJ. Along the way, we have cleaned up the appendix by deleting unfamiliar terms in the appendix in favor of more familiar terms, clarifying the scope, and updating provisions that have not been updated since the appendix was created. This comprehensive public comment results in an appendix that is a clearer, updated, reasonable, and more usable and enforceable—and therefore, more adoptable. A clean version of the final result of RB7-22 incorporating this public comment, without strike-throughs and underlines, can be viewed via this link:

https://www.cdpassess.com/public-comment/3211/27823/files/download/3670/RB7_WABO_clean%20%28final%29%20V2.pdf

In developing this public comment, we have collaborated with the FEMA/ATC Seismic Code Support Committee, and this public comment will work in conjunction with their code change proposals and public comments. Attached is a document showing how Appendix AJ is intended to look, if this public comment and all the SCSC proposals and public comments are approved

https://www.cdpassess.com/public-comment/3211/27823/files/download/3671/WABO_FEMA%20Combined%20Proposals_V2.pdf

OVERVIEW

Relation of Appendix to Code:

The underlying philosophy for this public comment is that the appendix, when adopted, is to be added to the code. It is not a standalone existing buildings code. This is true of the existing appendix, despite its “deemed to comply” provision in the existing AJ101.1. Given that philosophy, the “deemed to comply” language has been deleted, since it could imply that none of the rest of the code applies—which is clearly erroneous, as we would expect items not in the appendix to be regulated by the rest of the IRC. In its place, the appendix now clearly says to comply with the IRC for new construction, except where Appendix AJ modifies those provisions. Carrying this philosophy through results in the deletion of many redundant provisions and definitions (further explanations below).

Reorganization:

This public comment deletes several unnecessary and outdated sections, as follows. Deletion of these sections results in the editorial renumbering of the subsequent sections, as shown in this public comment.

- Section AJ103 (Preliminary Meeting). This section required the building official to meet with a permit applicant, at the applicant’s request. The stated purpose of the meeting is for the building official to understand the applicant’s intention for the work, and for the building official and the applicant to collaborate on what’s required. This requirement is unnecessary, as this is a service that a reasonable building department will provide on request. In addition, many the issues can be handled in other ways other than a meeting.
- AJ104 (Evaluation of an Existing Building). This provision that allows the building official to require an evaluation of the existing building by a registered design professional is tied to “reconstruction.” Aside from the fact that provisions relating to “reconstruction” are being deleted (see below), Section R106.1 already gives the building official this authority.
- Sections AJ108 (Renovations) and AJ110 (Reconstruction). See "Terminology and Definitions" below.

New Sections AJ106 (Additions) and AJ107 (Relocations) have been added to regulate those classifications of work.

SPECIFIC CHANGES

Purpose and Intent (AJ101):

- The scope now refers to repairs, alterations, additions and relocations, consistent with the changes described in “Terminology and Definitions” below.
- The scope also clearly states that the rest of the code applies, where it’s not modified by Appendix AJ.

- Sections AJ101.2 (classification of work) and AJ101.3 (multiple categories of work) have been deleted since they are unnecessary. The text in AJ101.2 doesn't do anything. Most of AJ101.3 is clear with the new classifications of work and their definitions. Regarding the 12-month period in AJ101.3, this is something that should be covered by building department procedures and policies for each jurisdiction, and reflect how flexible they want to be. Having a set period of time unnecessarily ties the building official's hands, and encourages gaming of the system

Compliance (AJ102):

- Carbon monoxide alarms are required to be installed, consistent with Section R315.2.2 (AJ102.3).
- The sections relating to replacement EERO windows has been reorganized and modified for clarity and flexibility (AJ102.4.3). The current provisions provide a break on full compliance for replacement windows for emergency escape and rescue openings. This public comment provides flexibility for the vertical height of the window opening control devices and fall protection devices in existing openings. It also clarifies that window opening control devices and fall protection are not required when window replacement is of the glazing only. These changes are consistent with the concept approved by the Committee in RB99-22.
- Sections AJ102.7 (Other Alternatives) and AJ102.9 (Features exceeding code requirements) are deleted because they are unnecessary. AJ102.7 is covered in Chapter 1, and there are never restrictions on exceeding code requirements (AJ102.9).
- This public comment also makes editorial changes to this section, deleting unnecessary verbiage ("regardless of the category of work being performed") and updating the terminology (smoke alarms vs detectors)

Terminology and Definitions (AJ103):

The end result of the changes to the definitions is that only the additional definitions that are needed to apply the provisions of the appendix remain in Section AJ103.

- This public comment deletes the unfamiliar terms "reconstruction," "rehabilitation," and "renovation" from the definitions, along with the sections regulating them. Instead, the appendix now exclusively uses "repair," "alteration," "addition," and "relocation" to refer to the work being done on an existing building. These terms are familiar to users of the I-codes, and more closely correspond with the terms used in Section 107.2.1 of the IRC.
- Unnecessary definitions for "equipment or fixture" and "materials and methods requirements," and "rehabilitation" have been deleted. "Equipment" and "fixtures" are well understood to users of the code. Alternate materials and methods are covered in Chapter 1. "Rehabilitation" was defined, but the term is not used in either the existing appendix or the appendix as modified by this public comment.
- The definition for "dangerous" is being added since it is not defined in Chapter 2. The language is taken from the IEBC.

Repairs (AJ104):

The modifications this public comment makes to the section on repairs are editorial. The change in Section AJ104.1 from "work" to "repair" clarifies the scope of the section is about repair work, not work in general. The modification Section AJ104.3 consolidates the exceptions which required compliance with IRC Chapters 34 through 43 anyway.

Alterations (AJ105):

- New Section AJ105.1 scopes the alterations section, as well as clearly states newly-installed elements need to comply with the code for new construction. The "do no harm" provision is included as well, consistent with Section R102.7.1.
- The existing section on extensive alterations is being deleted because it referred to the deleted section on reconstruction. For further discussion of the technical changes, see the discussion on Reconstruction below.
- AJ105.4 provides a pointer to the sections regulating structural alterations. Note that other code change proposals and public comments would add further structural provisions to the appendix.
- Section AJ105.4.1 on unreinforced masonry walls has been relocated from the deleted section on renovations.
- Substantive changes to Section AJ105.5 on electrical equipment and wiring add a requirement that lighting outlets must be controlled by a wall-mounted switch, located near an entrance to the room, consistent with IRC Section E3903.2 (AJ105.5.3.4). The other changes are editorial, including the clarification that the circuit is a "branch" circuit, consistent with the definitions in IRC Section E3501.1 (AJ105.5.3.2). The exception to AJ105.5.1 isn't really an exception and still refers to the same chapters, so it has been integrated into the main charging language.
- The existing appendix permits a ceiling height of not less than 6 feet 8 inches. This public comment further extends the relief on ceiling height in existing buildings to include existing attics (AJ105.7). Bathrooms, toilet rooms and laundry rooms are allowed to have a ceiling height not less than 6 feet 4 inches, similar to a break these occupiable spaces receive in new construction (R305.1, Exception 3). The first exception maintains the sloped ceiling height provisions per R305.1 for new construction but lowers the minimum ceiling height requirement for 50% of the room from 7 feet to 6 feet 8 inches, consistent with the general requirement. The second exception maintains the allowance for beams, girders, and other obstructions that is permitted in new construction. This concept was supported by the Committee in their approval of RB82-22.
- Section AJ105.8 is expanded to include requirements for stairway illumination (AJ105.8.5) and handrails and guards at stairs (AJ105.8.6). The provision for stairway illumination is relocated from the deleted section on reconstruction. In a substantive change to the current appendix provisions, if the stair is altered, compliant handrails and guards must be installed (AJ105.8.6). This remedies an unsafe condition.

The new section on stair treads and risers (AJ105.8.4) gives a break for stair treads and risers that is consistent with a more general break for existing stairs in IEBC Section 506.3. The concept of the break was supported by the Committee in their approval of RB114-22.

Additions (AJ106):

This is a new section in this appendix. The requirement for additions to comply with new construction is consistent with the principles in Section R102.7.1 and the IEBC.

Relocations (AJ107):

This is a new section in this appendix. The provisions are consistent with how the IEBC treats moved buildings (see IEBC Section 1401.2).

Referenced Standards (AJ108):

- ASTM F2090 is stricken from Table AJ108.1. Section AJ102.4.3 is revised to refer to Section R312.2 which contains the reference to this standard within the body of the code.
- Reference to the International Existing Building Code is updated to the 2024 edition.
- Reference to the International Fire Code and to the International Property and Maintenance Code is added as reference to these codes is added in Section AJ107 Relocated Buildings.

PROVISIONS IN DELETED SECTIONS ON RENOVATIONS AND RECONSTRUCTION

Renovations:

All of the sections in the section on renovations have been deleted without relocating them. The sections on materials and methods and on interior finish are unnecessary because this appendix is only about modifications to the code. The section on door and window dimensions is deleted because “minor reductions” is ambiguous, and unnecessary.

Reconstruction:

Sections on stairway illumination, handrails, and guards have either been moved to new Section AJ105.8, or are already covered by that section. The ceiling height allowance is now located in the Alterations section (AJ105.7).

The sections on wall and ceiling finish and separation walls have been deleted without substitution because they were incomplete, and it is unreasonable to trigger these retroactive requirements for the following reasons:

- The current provisions are incomplete because they only deal with common wall separations as you would find in townhouse-style units (vertical), and not with duplexes with horizontal separations.
- As far as it being unreasonable, the section on wall and ceiling finishes would require additional costs to comply, both to provide the materials, and to comply with permit requirements. It requires an accounting of every wall and ceiling finish in the work area in terms of the actual materials, and then whether they comply with the flame spread and smoke development requirements. In older construction, this could be difficult to determine, and from a plan review standpoint, would likely result in at least two rounds of corrections—the first to request the information, the second to tell them to fix it.

Cost Impact: The net effect of the public comment and code change proposal will not increase or decrease the cost of construction. Since the public comment moves these provisions into an optional appendix, there will be no effect on the cost of construction.

Staff Analysis: Public comments to RB7, RB162, RB163, RB206 and RB297 addresses requirements for Appendix J in a different or contradicting manner. Approved proposal to Appendix J but without a public comment are RB99, RB296, RB298 and RB299. The membership is urged to make their intention clear with their actions on these public comments.

RB11-22

IRC: R104.2

Proposed Change as Submitted

Proponents: Manny Muniz, representing Representing self (mannymuniz.mm@gmail.com)

2021 International Residential Code

Add new text as follows:

R104.2.1 Listed compliance. Listings required by this code shall be based on a test standard or approved listing evaluation that is germane to the provision requiring the listing. Anything required by this code, or a reference standard, to be listed shall be installed in accordance with the listing and the manufacturer's instructions. Copies of the listing standard and manufacturer's instructions shall be made available to the building official upon request.

Reason: When the code requires something to be listed, the test standard used or the listing evaluation must be germane to the code provision that is requiring the listing. Additionally, the installation must be in accordance with the manufacturer's instructions and copies of the listing standard and manufacturer's instructions must be made available to the building official.

Cost Impact: The code change proposal will not increase or decrease the cost of construction

This only clarifies that when something is required to be listed, the test standard used or the listing evaluation must be germane to the code provision that is requiring the listing. As with any listing, the installation must be in accordance with the manufacturer's instructions and the building official must have access to the listing standard and manufacturer's instructions.

RB11-22

Public Hearing Results

Committee Action:

Disapproved

Committee Reason: This proposal was disapproved based on the proponents request and the committee action on ADM 13-22. (Vote: 10-0)

RB11-22

Individual Consideration Agenda

Public Comment 1:

IRC: R104.2.1 (New)

Proponents: Manny Muniz, representing Representing self (mannymuniz.mm@gmail.com); Kristen Owen, representing Myself (kowen4568@gmail.com) requests As Modified by Public Comment

Replace as follows:

2021 International Residential Code

R104.2.1 Listed compliance. Where this code or a referenced standard requires equipment, materials, products or services to be listed and a listing standard is specified, the listing shall be based on the specified standard. Where a listing standard is not specified, the listing shall be based on an approved listing criteria. Listings shall be germane to the provision requiring the listing. Installation shall be in accordance with the listing and the manufacturer's instructions, and where required to verify compliance, the listing standard and manufacturer's instructions shall be made available to the building official.

Commenter's Reason: In response to the committee reason for disapproval, the proposed modification now uses the same language as ADM13 and now applies across the codes. If ADM13 is not approved, this proposed modification will allow this single code change to be considered on its own for approval.

Cost Impact: The net effect of the public comment and code change proposal will not increase or decrease the cost of construction
The proposal does not require additional listings other than what is already required by the code.

RB12-22

IRC: R104.11

Proposed Change as Submitted

Proponents: Manny Muniz, representing Representing self (mannymuniz.mm@gmail.com)

2021 International Residential Code

Revise as follows:

R104.11 Alternative materials, design and methods of construction and equipment. The provisions of this code are not intended to prevent the installation of any material or to prohibit any design or method of construction not specifically prescribed by this code. The *building official* shall have the authority to approve an alternative material, design or method of construction upon application of the *owner* or the owner's authorized agent. The *building official* shall first find that the proposed alternative meets all of the following:

1. The alternative material, design or method of construction is satisfactory and complies with the intent of the provisions of this code, ~~and that~~
2. The the material, method or work offered is, for the purpose intended, not less than the equivalent of that prescribed in this code in as it pertains to the following:
 - 2.1. Quality. quality,
 - 2.2. Strength. strength,
 - 2.3. Effectiveness. effectiveness,
 - 2.4. Fire fire-resistance.;
 - 2.5. Durability. durability, and
 - 2.6. Safety. safety

Compliance with the specific performance-based provisions of the International Codes shall be an alternative to the specific requirements of this code. Where the alternative material, design or method of construction is not *approved*, the *building official* shall respond in writing, stating the reasons why the alternative was not *approved*.

Reason: This section can be written more clearly as to the various criteria that must be met in order to be approved as an alternate material, design or method of construction. This will make it easier for the building official to make the necessary evaluation and decision. Should the alternate not be approved, it will also make it easier for the building official to cite the reasons for disapproval. There are no changes to the various requirements that the building official or fire code official must consider. During the last code cycle, this change was approved in the IBC and was well received by the committee and membership who agreed that it made it easier to read.

Cost Impact: The code change proposal will not increase or decrease the cost of construction
There are no changes to the requirements in this section.

RB12-22

Public Hearing Results

Committee Action:

Disapproved

Committee Reason: This proposal was disapproved based on the proponents request and the committee action on ADM 13-22. (Vote: 10-0)

RB12-22

Individual Consideration Agenda

Public Comment 1:

Proponents: Manny Muniz, representing Representing self (mannymuniz.mm@gmail.com); Kristen Owen, representing Myself (kowen4568@gmail.com) requests As Submitted

Commenter's Reason: This proposal is the same as ADM25-22 for the IFC, ADM26-22 for the IEBC, and ADM27 for the IWUIC which were all approved by the committee. This is how the 2021 IBC 104.11 now reads.
The reason I asked that RB12-22 be disapproved is because ADM13-22 had just been approved as noted in the committee reason statement and I was willing to have that version prevail.

If ADM13 is not approved, this proposed modification will allow this single code change to be considered on its own for approval.

Cost Impact: The net effect of the public comment and code change proposal will not increase or decrease the cost of construction
The proposal does not add any new requirements.

Public Comment# 3448

RB13-22

IRC: R104.11.2

Proposed Change as Submitted

Proponents: Manny Muniz, representing Representing self (mannymuniz.mm@gmail.com)

2021 International Residential Code

Add new text as follows:

R104.11.2 Research reports. Supporting data, where necessary to assist in the approval of materials or assemblies not specifically provided for in this code, shall consist of valid research reports from an approved agency accredited to evaluate or certify products. The alternative material, design or method of construction and product evaluated shall be within the scope of accreditation and the criteria used for the evaluation shall be referenced within the report.

Reason: It is sometimes difficult to determine the legitimacy of a research report. Agency accreditation is an excellent way to determine the legitimacy and reliability of research reports issued by such agencies. This is similar to R109.2 which authorizes the building official to accept reports from approved agencies, provided such agencies satisfy the requirement as to qualifications and reliability. The IBC, IEBC, IFC, IFGC, IMC, IPC, IPMC, IPSDC have provisions for the use of valid research reports as an aid to alternate approval. This will be valuable when the building official reviews a research report.

Cost Impact: The code change proposal will not increase or decrease the cost of construction. This new section does not require that a research report be submitted when requesting an alternate, only that when one is submitted to support a request for an alternate, the issuing agency be accredited to evaluate or certify products and that the alternative material, design or method of construction and product evaluated be within the scope of accreditation and the criteria used for the evaluation be referenced within the report.

RB13-22

Public Hearing Results

Committee Action:

Disapproved

Committee Reason: This proposal was disapproved based on the proponents request and the committee action on ADM 13-22. (Vote: 10-0)

RB13-22

Individual Consideration Agenda

Public Comment 1:

IRC: R104.11.2 (New), R104.11.2.1 (New), R104.11.2.2 (New)

Proponents: Manny Muniz, representing Representing self (mannymuniz.mm@gmail.com); Kristen Owen, representing Myself (kowen4568@gmail.com) requests As Modified by Public Comment

Replace as follows:

2021 International Residential Code

R104.11.2 Reports. Supporting documentation, where necessary to assist in the approval of materials or assemblies not specifically provided for in this code, shall comply with Sections 104.11.1.1 and 104.11.1.2.

R104.11.2.1 Evaluation reports. Evaluation reports shall be issued by an approved agency accredited to evaluate or certify products and use of the evaluation report shall require approval by the building official for the installation. The alternate material, design or method of construction and product evaluated shall be within the scope of the building official's recognition accreditation of the approved agency. Criteria used for the evaluation shall be identified within the report and where required, provided to the building official., developed using a process that includes input from the public and made available for review by the public.

R104.11.2.2 Other reports. Reports not complying with Section 104.11.1.1 shall describe criteria, including but not limited to any referenced testing

or analysis, used to determine compliance with code intent and justify code equivalence, including but not limited to any referenced testing or analysis. The report shall be prepared by a qualified engineer, specialist, laboratory or specialty organization acceptable to the building official. The building official is authorized to require design submittals to be prepared by, and bear the stamp of, a registered design professional.

Commenter's Reason: ADM30-22 for the IBC, ADM31-22 for the IEBC, ADM32-22 for the IFC, ADM33-22 for the IWUIC saw discussions regarding the difficulties of determining the legitimacy of research reports. This was also discussed in ADM13-22. At the end of the ADMIN hearings and after considerable discussions with various stake holders, ADM13 was approved with specific requirements for reports and supporting documentation.

The proposed modification now uses the same language as ADM13. If ADM13 is not approved, this proposed modification will allow this single code change to be considered on its own for approval.

Cost Impact: The net effect of the public comment and code change proposal will not increase or decrease the cost of construction. This proposal only clarifies what is required for reports.

RB45-22

IRC: R301.9 (New), R502.3, R802.4.1, R802.5

Proposed Change as Submitted

Proponents: Mike Nugent, representing Building Code Action Committee (bcac@iccsafe.org)

2021 International Residential Code

Add new text as follows:

R301.9 Framing Member Splices. Splices in floor, ceiling, or roof framing members shall occur over vertical supports or shall be designed by a registered design professional in accordance with Section R301.1.3. Purlins, purlin braces, and collar ties shall not be considered a vertical support for determining splice locations.

Revise as follows:

R502.3 Allowable joist spans. Spans for floor joists shall be in accordance with Tables R502.3.1(1) and R502.3.1(2). For other grades and species and for other loading conditions, refer to the AWC STJR. Joist splices shall comply with Section R301.9.

R802.4.1 Rafter size. Rafters shall be sized based on the rafter spans in Tables R802.4.1(1) through R802.4.1(8). Rafter spans shall be measured along the horizontal projection of the rafter. For other grades and species and for other loading conditions, refer to the AWC STJR. Joist splices shall comply with Section R301.9.

R802.5 Ceiling joists. Ceiling joists shall be continuous across the structure or securely joined where they meet over interior partitions in accordance with Section R802.5.2.1. Ceiling joists shall be fastened to the top plate in accordance with Table R602.3(1). Rafter splices shall comply with Section R301.9.

Reason: This proposal adds language to address members spliced between bearing walls. The clear spans and loads provided in all IRC tables assume a continuous condition between supports. Although a continuous member can be achieved by splicing two members together, the splice must be properly designed to transfer forces across the spliced connection and avoid a hinge condition. Where splices have not been properly designed, members (especially rafters) have displayed visible out-of-plane deformation. In these situations, the members have required repair or replacement to stop and reverse the deformation process. This proposal clarifies that framing member splices between bearing walls need to be engineered and references section R301.1.3. Engineered design.

“Where a building of otherwise conventional construction contains structural elements exceeding the limits of Section R301 or otherwise not conforming to this code, these elements shall be designed in accordance with accepted engineering practice. The extent of such design need only demonstrate compliance of nonconventional elements with other applicable provisions and shall be compatible with the performance of the conventional framed system. Engineered design in accordance with the International Building Code is permitted for buildings and structures, and parts thereof, included in the scope of this code.”

This proposal is submitted by the ICC Building Code Action Committee (BCAC).

BCAC was established by the ICC Board of Directors in July 2011 to pursue opportunities to improve and enhance assigned International Codes or portions thereof. In 2020 and 2021 the BCAC has held several virtual meetings open to any interested party. In addition, there were numerous virtual Working Group meetings for the current code development cycle, which included members of the committee as well as interested parties. Related documents and reports are posted on the BCAC website at <https://www.iccsafe.org/products-and-services/i-codes/code-development/cs/building-code-action-committee-bcac/>.

Cost Impact: The code change proposal will not increase or decrease the cost of construction

This proposal is a clarification change only; the intent is to clarify Rafter splices need to be engineered which is what required currently but it is not addressed in the code text.

RB45-22

Public Hearing Results

Committee Action:

Disapproved

Committee Reason: The proposal was disapproved because this is already addressed adequately in the wood sections. Splices have to be

engineered or should be prohibited; so they should not be promoted by including this in Chapter 3. This does not address all splices, some are not structural, so these provisions would be too restrictive. (Vote: 10-0)

Individual Consideration Agenda

Public Comment 1:

IRC: R301.9, R502.3, R802.4.1, R802.5

Proponents: Mike Nugent, representing Building Code Action Committee (bcac@iccsafe.org) requests As Modified by Public Comment

Modify as follows:

2021 International Residential Code

~~**R301.9 Framing Member Splices.** Splices in floor, ceiling, or roof framing members shall occur over vertical supports or shall be designed by a registered design professional in accordance with Section R301.1.3. Purlins, purlin braces, and collar ties shall not be considered a vertical support for determining splice locations.~~

R502.3 Allowable joist spans. Spans for floor joists shall be in accordance with Tables R502.3.1(1) and R502.3.1(2). For other grades and species and for other loading conditions, refer to the AWC STJR. Joist splices shall ~~comply with Section R301.9:~~ occur over vertical supports or shall be designed in accordance with R301.1.3.

R802.4.1 Rafter size. Rafters shall be sized based on the rafter spans in Tables R802.4.1(1) through R802.4.1(8). Rafter spans shall be measured along the horizontal projection of the rafter. For other grades and species and for other loading conditions, refer to the AWC STJR. ~~Joist Rafter~~ splices shall ~~comply with Section R301.9:~~ occur over vertical supports or shall be designed in accordance with R301.1.3. Purlins, purlin braces, and collar ties shall not be considered a vertical support for determining splice locations.

R802.5 Ceiling joists. Ceiling joists shall be continuous across the structure or securely joined where they meet over interior partitions in accordance with Section R802.5.2.1. Ceiling joists shall be fastened to the top plate in accordance with Table R602.3(1). ~~Rafter Ceiling joist~~ splices shall ~~comply with Section R301.9:~~ occur over vertical supports or shall be designed in accordance with R301.1.3.

Commenter's Reason: The Committee raised the concern that adding a generic splice section in Chapter 3 could lead to unintentionally requiring or promoting splices beyond the specific problematic framing conditions. In response, this public comment eliminates the generic splice section and relocates the proposed language into the three specific sections that address floor joists, rafters, and ceiling joists. This relocation of text will limit these specific splice requirements only to the three areas intended to be addressed by this proposal.

The allowable framing table spans in the IRC assume members are continuous between their supports. Without that continuity, the table spans and framing sizes are inadequate to support the required loads and result in localized and visible deflections. These deflections cause both cosmetic damage such as cracked gypsum board, and more functional damage such as racked doors that do not close or broken plumbing where it has been run through deflected floor joists. A continuous member can be achieved by using a single solid member or by using a splice that transfers the full member section capacity between pieces. This proposal addresses the spliced condition and typical field splice practices that are frequently inadequate to support the required loads.

The opposing testimony raised a concern that the proposed language could be interpreted to allow bearing walls only to be considered a vertical support. Where a splice occurs over a vertical support, the support provides the necessary restraint against deflection and meets the intent of the prescriptive framing table spans. Vertical supports include any IRC allowable bearing surface or support element, including but not limited to: girders, trusses, bearing walls, etc.

The final concern raised was that splices have not been an issue and this is unnecessary language. Field splices are frequently used to extend framing members that are too short to reach the bearing point (see photograph).

Where a splice occurs between vertical supports, the splice must transfer the full section capacity between pieces for the framing to achieve the expected performance based on the prescriptive framing tables. Specific member splice requirements will depend on the member size, material grade, and environmental exposure (interior, exterior, etc) and must be designed in accordance with accepted engineering practices. As roof pitches become increasingly steep longer rafter spans are required. As modern floor plans increase open spaces, longer ceiling and floor joist spans are required. As a result, field splices are regularly identified as deficient and the cause of framing performance issues or failures.



Cost Impact: The net effect of the public comment and code change proposal will not increase or decrease the cost of construction. These are existing requirements. There was a lot of confusion about the continuity of Joists, Rafters, and Ceiling joists. All the prescriptive provisions in the IRC are based on continuous Joists, Rafters, and Ceiling joists. This proposal provides clarification to the code users on the existing requirements without affecting the cost.

RB61-22

IRC: R302.3, R302.3.1 (New), R302.3.2 (New), R302.2.1

Proposed Change as Submitted

Proponents: Quyen Thai, representing Washington Association of Building Officials Technical Code Committee (qthai76@gmail.com); Micah Chappell, representing Washington Association of Building Officials Technical Code Development Committee (micah.chappell@seattle.gov)

2021 International Residential Code

Revise as follows:

R302.3 Two-family dwellings. *Dwelling units* in two-family dwellings shall be separated from each other by wall and floor assemblies ~~having not less than a 1-hour fire-resistance rating where tested in accordance with ASTM E119, UL 263 or Section 703.2.2 of the International Building Code constructed in accordance with Section R302.3.1 through R302.3.3.~~ Such separation shall be provided regardless of whether a *lot line* exists between the two *dwelling units* or not. ~~Fire-resistance-rated floor/ceiling and wall assemblies shall extend to and be tight against the exterior wall, and wall assemblies shall extend from the foundation to the underside of the roof sheathing.~~

Exceptions:

- ~~1. A fire-resistance rating of $\frac{1}{2}$ hour shall be permitted in buildings equipped throughout with an automatic sprinkler system installed in accordance with Section P2904.~~
- ~~2. Wall assemblies need not extend through attic spaces where the ceiling is protected by not less than $\frac{5}{8}$ -inch (15.9 mm) Type-X gypsum board, an attic draft stop constructed as specified in Section R302.12.1 is provided above and along the wall assembly separating the *dwellings* and the structural framing supporting the ceiling is protected by not less than $\frac{1}{2}$ -inch (12.7 mm) gypsum board or equivalent.~~

Add new text as follows:

R302.3.1 Separation. *Dwelling units* in two-family *dwellings* shall be separated from each other by wall and floor assemblies having not less than a 1-hour fire-resistance rating where tested in accordance with ASTM E 119, UL 263 or Section 703.3 of the *International Building Code*.

Exception: A fire-resistance rating of 1/2 hour shall be permitted in buildings equipped throughout with an automatic sprinkler system installed in accordance with Section P2904.

R302.3.2 Continuity. Fire-resistance-rated floor/ceiling and wall assemblies shall extend to and be tight against the *exterior wall*, and wall assemblies shall extend from the foundation to the underside of the roof sheathing.

Exception: Wall assemblies need not extend through attic spaces where the ceiling is protected by not less than 5/8-inch (15.9 mm) Type-X gypsum board, an attic draft stop constructed as specified in Section R302.12.1 is provided above and along the wall assembly separating the *dwellings* and the structural framing supporting the ceiling is protected by not less than 1/2-inch (12.7 mm) gypsum board or equivalent.

Revise as follows:

R302.3.3 ~~R302.2.4~~ Supporting construction. Where floor assemblies are required to be fire-resistance rated by Section R302.3, the supporting construction of such assemblies shall have an equal or greater fire-resistance rating.

Reason: The intent of this change is to pull out the construction requirement of the common wall as a subsection to align with proper code location. There is already a construction subsection in R302.3.1 and this just creates another subsection that discusses the construction of the common wall. All three subsections are not new language to the code but rather a reorganization.

Cost Impact: The code change proposal will not increase or decrease the cost of construction. There is no cost impact to this proposal because the language did not change. This is just a reorganization to create better readability.

RB61-22

Public Hearing Results

Committee Action:

As Modified

Committee Modification:

R302.3.1 Separation. *Dwelling units* in two-family *dwellings* shall be separated from each other by wall and floor assemblies having not less than a

1-hour fire-resistance rating where tested in accordance with ASTM E 119, UL 263 or Section ~~703.3~~ 703.2.2 of the *International Building Code*.

Exception: A fire-resistance rating of 1/2 hour shall be permitted in buildings equipped throughout with an automatic sprinkler system installed in accordance with Section P2904.

Committee Reason: The modification was a correction in the referenced section. This proposal is reorganization of the current requirements that adds clarity. There were concerns that Section R302.3.2 would disallow platform construction. (Vote: 7-3)

RB61-22

Individual Consideration Agenda

Public Comment 1:

IRC: R302.3.2

Proponents: Jason Smart, representing American Wood Council (jsmart@awc.org) requests As Modified by Public Comment

Further modify as follows:

2021 International Residential Code

R302.3.2 Continuity. Vertical and horizontal assemblies separating dwelling units shall be constructed in a manner that provides continuity of the fire-resistance rating between the dwelling units. ~~Fire-resistance-rated floor/ceiling and wall assemblies shall extend to and be tight against the exterior wall, and wall assemblies shall extend from the foundation to the underside of the roof sheathing.~~

Exception: Wall assemblies need not extend through attic spaces where the ceiling is protected by not less than 5/8-inch (15.9 mm) Type-X gypsum board, an attic draft stop constructed as specified in Section R302.12.1 is provided above and along the wall assembly separating the *dwelling*s and the structural framing supporting the ceiling is protected by not less than 1/2-inch (12.7 mm) gypsum board or equivalent.

Commenter's Reason: These modifications further clarify that the intent is to require continuity of the required fire-resistance rating of the horizontal or vertical assembly. This is consistent with the changes made to address platform construction under FS19-21.

Cost Impact: The net effect of the public comment and code change proposal will not increase or decrease the cost of construction. The cost impact statement for RB61-22 is neutral, and the modification presented in this public comment simply clarifies the intent of the section on continuity. This modification is intended to use terminology that works with platform construction, where horizontal assemblies support walls above, and are supported by walls of the story below.

Staff Analysis: RB61 and RB63 addresses requirements in a different or contradicting manner. The membership is urged to make their intention clear with their actions on these proposals.

Public Comment# 3115

Public Comment 2:

Proponents: Jeffrey Shapiro, representing Self (jeff.shapiro@intlcodeconsultants.com) requests Disapprove

Commenter's Reason: I will be asking that this proposal be heard after RB63, which also is re-writing the same section with additional requirements. If the membership supports RB63, then RB61 would not be necessary.

Cost Impact: The net effect of the public comment and code change proposal will not increase or decrease the cost of construction. No change to code.

Staff Analysis: RB61 and RB63 addresses requirements in a different or contradicting manner. The membership is urged to make their intention clear with their actions on these proposals.

Public Comment# 3398

Public Comment 3:

Proponents: David Tyree, representing American Wood Council (dtyree@awc.org) requests Disapprove

Commenter's Reason: Portions of the proposed provisions in RB61 conflict with RB63, which was approved as submitted. For example, proposed Section R302.3.2 (Continuity) conflicts with Section R302.3.3 of RB63. The proposed language in RB61 would require wall assemblies to be continuous from the foundation to the underside of the roof sheathing. This could be interpreted as precluding platform construction, in which the exterior walls are discontinuous at each story level where the floor/ceiling assembly bears on the wall below and the wall of the story above bears on the floor/ceiling assembly. The intent of the continuity provisions in both the IBC and the IRC is to ensure continuity of fire-resistance rating, rather than continuity of the wall. This is more accurately addressed in RB63.

It should also be noted that the committee did express concern at the Committee Action Hearings that proposed Section R302.3.2 "would disallow platform construction."

Furthermore, the proposed continuity language in RB61 would also conflict with 2024 IBC language that was approved in the Group A cycle under FS19-21.

For these reasons, we request disapproval of RB61 in favor of RB63.

Cost Impact: The net effect of the public comment and code change proposal will not increase or decrease the cost of construction

No change to code.

Staff Analysis: RB61 and RB63 addresses requirements in a different or contradicting manner. The membership is urged to make their intention clear with their actions on these proposals.

RB62-22

IRC: R302.3, R302.3.2 (New)

Proposed Change as Submitted

Proponents: Mike Nugent, representing Building Code Action Committee (bcac@iccsafe.org)

2021 International Residential Code

Revise as follows:

R302.3 Two-family dwellings. *Dwelling units* in two-family dwellings shall be separated from each other by wall and floor assemblies having not less than a 1-hour fire-resistance rating where tested in accordance with ASTM E119, UL 263 or Section 703.2.2 of the International Building Code. Such separation shall be provided regardless of whether a *lot line* exists between the two *dwelling units* or not. ~~Fire-resistance-rated floor/ceiling and wall assemblies shall extend to and be tight against the exterior wall, and wall assemblies shall extend from the foundation to the underside of the roof sheathing.~~

Exceptions:

1. A fire-resistance rating of $\frac{1}{2}$ hour shall be permitted in buildings equipped throughout with an automatic sprinkler system installed in accordance with Section P2904.
2. Wall assemblies need not extend through attic spaces where the ceiling is protected by not less than $\frac{5}{8}$ -inch (15.9 mm) Type X gypsum board, an attic draft stop constructed as specified in Section R302.12.1 is provided above and along the wall assembly separating the *dwellings* and the structural framing supporting the ceiling is protected by not less than $\frac{1}{2}$ -inch (12.7 mm) gypsum board or equivalent.

Add new text as follows:

R302.3.2 Continuity. The fire-resistance-rated floor/ceiling and wall assemblies separating dwelling units shall include extensions through and separating attached enclosed accessory structures. The fire-resistance rated assemblies shall extend to and be tight against the exterior wall, and wall assemblies shall extend from the foundation to the underside of the roof sheathing.

Reason: This proposal aligns the rated assembly requirements for a two-family dwelling in R302.3 with the current requirements for townhouses in R302.2.3. Rated assembly extensions through and separating attached enclosed accessory structures are not currently addressed for two-family dwellings, which allows for the creation of a discontinuity in the rated barrier.

Individual dwelling units may be separated in a two-family dwelling by a horizontal floor assembly (stacked duplex) or the more traditional vertical wall assemblies. Where attached enclosed accessory structures project above a horizontal or vertical assembly, careful consideration is required in the planning and construction to extend the assembly through/around the accessory structure in order to maintain the rated assembly continuity.

Therefore, this proposal adds a new sub-section, R302.3.2, for Continuity. The new 302.3.2 for Continuity includes the last sentence of R302.3 and the text required for townhouses to the two-family dwelling section since the need to maintain such separation is equally necessary for both building types.

This proposal is submitted by the ICC Building Code Action Committee (BCAC).

BCAC was established by the ICC Board of Directors in July 2011 to pursue opportunities to improve and enhance assigned International Codes or portions thereof. In 2020 and 2021 the BCAC has held several virtual meetings open to any interested party. In addition, there were numerous virtual Working Group meetings for the current code development cycle, which included members of the committee as well as interested parties. Related documents and reports are posted on the BCAC website at <https://www.iccsafe.org/products-and-services/i-codes/code-development/cs/building-code-action-committee-bcac/>.

Cost Impact: The code change proposal will increase the cost of construction

This is a technical change to two-family dwellings, despite the fact that the original intent has always been for the separation assemblies to continue through two-family attached accessory structures. Depending on the layout, this may require a longer wall to separate the units.

RB62-22

Public Hearing Results

Committee Reason: The proposal was disapproved because attached accessory structures are part of the structure. The accessory structure is defined as detached. There are concerns about the fire separation requirements in the proposal. This could be read to prohibit common garages for duplex units. (Vote: 8-2)

Individual Consideration Agenda

Public Comment 1:

IRC: R302.3, R302.3.2

Proponents: Mike Nugent, representing Building Code Action Committee (bcac@iccsafe.org) requests As Modified by Public Comment

Further modify as follows:

2021 International Residential Code

R302.3 Two-family dwellings. *Dwelling units* in two-family dwellings shall be separated from each other by wall and floor assemblies having not less than a 1-hour fire-resistance rating where tested in accordance with ASTM E119, UL 263 or Section 703.2.2 of the International Building Code. Such separation shall be provided regardless of whether a *lot line* exists between the two *dwelling units* or not.

Exceptions Exception:

- 1- A fire-resistance rating of 1/2 hour shall be permitted in buildings equipped throughout with an automatic sprinkler system installed in accordance with Section P2904.
- 2- ~~Wall assemblies need not extend through attic spaces where the ceiling is protected by not less than 5/8-inch (15.9 mm) Type X gypsum board, an attic draft stop constructed as specified in Section R302.12.1 is provided above and along the wall assembly separating the dwellings and the structural framing supporting the ceiling is protected by not less than 1/2-inch (12.7 mm) gypsum board or equivalent.~~

R302.3.2 Continuity. The fire-resistance-rated floor/ceiling and wall assemblies separating dwelling units shall include extensions through and separating attached enclosed ~~accessory structures - rooms~~. The fire-resistance rated assemblies shall extend to and be tight against the exterior wall, and wall assemblies shall extend from the foundation to the underside of the roof sheathing.

Exceptions:

1. Wall assemblies need not extend through attic spaces where the ceiling is protected by not less than 5/8 inch (15.9 mm) Type X gypsum board, an attic draft stop constructed as specified in Section R302.12.1 is provided above and along the wall assembly separating the dwellings and the structural framing supporting the ceiling is protected by not less than 1/2-inch (12.7 mm) gypsum board or equivalent.
2. The fire-resistance-rated floor/ceiling and wall assemblies are not required to extend through common rooms constructed in accordance with Section R302.3.3

Commenter's Reason: This proposal addresses the fire safety concern where two-family dwelling units have attached areas that fall outside of the definition for a dwelling unit that must be separated by the fire-rated assemblies to maintain continuity.

This public comment addresses the concerns from the committee by: 1. As the committee had a problem with attached accessory structures, This PC removing accessory and clarifies that the new section addresses "separating attached enclosed rooms" such as garages, mechanical closets and other storage spaces. "Room" is also used in the approved RB64-22.

2. The committee has a concern about "This could be read to prohibit common garages for duplex units." This PC incorporates the approved RB64-22, which allows for "Common" accessory rooms to simply be separated from the rest of the dwelling unit(s) rather than have all accessory rooms be split and dedicated to individual units. 3. This PC also moves the related exception #2 from the existing R302.3 to the new section R302.3.2.

The BCAC recognized that with the action on RB64-22, our proposal needed to include an exception that provides for those new provisions, while still addressing the original concern. The public comment ties everything together so that the code will work cleanly regardless as to whether there are adjacent spaces, such as garages, that are dedicated to the individual units or common to both, so that there is less confusion for the code user, consistency in application, and fully maintains the intended level of protection from one dwelling unit to the other.

Cost Impact: The net effect of the public comment and code change proposal will increase the cost of construction

This is a technical change to two-family dwellings, despite the fact that the original intent has always been for the separation assemblies to continue through two-family attached rooms and spaces. The cost of construction will be impacted as below:

- 1) No increase in cost: In most cases where the intent has already been followed, there will not be an increase in construction cost.
- 2) Could cause increase in cost: where the code may have been misinterpreted to allow the separation to only be through the interior of the living space only, there will be additional cost in creating a 1 hour separation wall through the other spaces, such as garages, and ensuring that such walls meet vertical continuity and penetration requirements.

With the addition of the provisions of the approved RB64 in conjunction with the new exception provided for in this PC, flexibility of design and allowances for common rooms may decrease the cost of construction in those instances.

RB63-22

IRC: R302.3, R302.3.1, R302.3.2 (New), R302.3.3 (New), R302.3.3.1 (New), R302.3.3.2 (New), R302.3.5 (New)

Proposed Change as Submitted

Proponents: Jeffrey Shapiro, representing Self (jeff.shapiro@intlcodeconsultants.com)

2021 International Residential Code

Delete and substitute as follows:

R302.3 Two-family dwellings. *Dwelling units* in two-family dwellings shall be separated from each other by wall and floor assemblies having not less than a 1-hour fire-resistance rating where tested in accordance with ASTM E119, UL 263 or Section 703.2.2 of the International Building Code. Such separation shall be provided regardless of whether a *lot line* exists between the two *dwelling units* or not. Fire-resistance-rated floor/ceiling and wall assemblies shall extend to and be tight against the exterior wall, and wall assemblies shall extend from the foundation to the underside of the roof sheathing.

Exceptions:

1. A fire-resistance rating of $\frac{1}{2}$ hour shall be permitted in buildings equipped throughout with an automatic sprinkler system installed in accordance with Section P2904.
2. Wall assemblies need not extend through attic spaces where the ceiling is protected by not less than $\frac{5}{8}$ -inch (15.9 mm) Type X gypsum board, an attic draft stop constructed as specified in Section R302.12.1 is provided above and along the wall assembly separating the *dwellings* and the structural framing supporting the ceiling is protected by not less than $\frac{1}{2}$ -inch (12.7 mm) gypsum board or equivalent.

R302.3 Two-family dwellings. *Dwelling units* in two-family dwellings shall be separated from each other in accordance with Sections 302.3.1 through 302.3.5, regardless of whether a *lot line* exists between two *dwelling units*.

Add new text as follows:

R302.3.1 Dwelling unit separation. The two dwelling units shall be separated by fire-resistance rated assemblies that are vertical, horizontal, or a combination thereof.

R302.3.2 Fire-resistance rating. Vertical and horizontal assemblies separating dwelling units shall have a fire-resistance rating of 1-hour, or a fire-resistance rating of 1/2 hour in buildings equipped throughout with an automatic sprinkler system installed in accordance with Section P2904. Fire-resistance ratings shall be based on testing in accordance with ASTM E119 or UL 263, or an analytical method in accordance with Section 703.2.2 of the International Building Code.

R302.3.3 Continuity. Vertical and horizontal assemblies separating dwelling units shall be constructed in a manner that provides a continuous and complete separation between the *dwelling units*.

R302.3.3.1 Horizontal assemblies. Horizontal assemblies separating dwelling units shall extend to and be tight against exterior walls or vertical separation assemblies complying with Section 302.3.2.

R302.3.3.2 Vertical assemblies. Vertical assemblies separating dwelling units shall extend to and be tight against any combination of the following:

1. The foundation.
2. A horizontal assembly complying with Section 302.3.2
3. The underside of roof sheathing.
4. The ceiling beneath an uninhabitable attic, provided that the ceiling is constructed using not less than 5/8-inch (15.9 mm) Type X gypsum board, an attic draft stop constructed as specified in Section R302.12.1 is provided above and along the vertical assembly terminating at the ceiling, and the structural framing supporting the ceiling is protected by not less than 1/2-inch (12.7 mm) gypsum board or equivalent.

Revise as follows:

R302.3.4 R302.3.1 Supporting construction. ~~Where floor assemblies are required to be fire-resistance rated by Section R302.3, the supporting construction of such assemblies have~~ Vertical and horizontal assemblies separating dwelling units shall be supported by construction having an equal or greater fire-resistance rating.

Add new text as follows:

R302.3.5 Vertically stacked dwelling units. Where one dwelling unit in a two-family dwelling is located above the other and an automatic sprinkler system complying with Section P2904 is not provided in both dwelling units, both of the following shall apply:

1. Horizontal and vertical assemblies separating the dwelling units, including an interior stairway serving as the means of egress for the upper dwelling unit, shall be constructed in a manner that limits the transfer of smoke.

2. A notification appliance connected to smoke alarms in the other dwelling unit shall be provided in each dwelling unit.

Reason: This proposal accomplishes two things. First, it provides a cleanup and update of Section R302.3, including moving the exceptions to the main code text. Provisions have been reorganized and divided into subsections to more clearly delineate current requirements, and the section has been broadened to recognize that separations between dwelling units might not be limited to either a floor assembly or a wall assembly. The current text restricts horizontal assemblies to only include floors, as opposed to floor-ceiling or ceiling-only assemblies, and it fails to clearly recognize and accommodate that separations may involve a combination of vertical and horizontal elements, which always occurs if an interior stairway is used as the means of egress for the upper unit. Terminology in IBC Section 707.3.10 has been used as guidance for the proposed IRC text. Second, Section 302.3.5 has been added to recognize that stacked duplexes are inherently more hazardous than side-by-side duplexes, particularly with respect to the upper unit due to the tendency of smoke and flames to spread vertically, which increases the risk of charging the upper unit with smoke and cutting off the means of egress and the means of escape if/when fire vents through exterior doors or windows. Providing a smoke separation, in addition to the current requirement for a fire-rated separation, will delay smoke transmission to the upper unit. The proposed text related to construction of the smoke separation is derived from the IBC definition of "smoke partition," which establishes the performance requirement "...is constructed to limit the transfer of smoke."

Providing a remote sounder for the opposite dwelling unit will allow more escape time for occupants who are not in the unit of origin, recognizing that smoke alarms are designed to provide sufficient warning to escape an incipient fire but not necessarily a well-developed fire spreading from another part of the building. Additional warning is particularly important where: 1) The downstairs unit occupants are not home or are home but don't or are unable to warn the upstairs occupants, and 2) The upstairs unit is two stories tall, perhaps even with a habitable attic above, which increases escape distance and the associated escape time, particularly for individuals who may have difficulty rapidly traversing stairs or using a means of escape window that would be 3 or 4 stories above grade.

For disclosure, I am a consultant to NFSA, but this proposal is not submitted on NFSA's behalf and was not provided to NFSA prior to submittal. It is submitted as a personal proposal based on my personal interest in this topic.

Cost Impact: The code change proposal will not increase or decrease the cost of construction. Technically, the IRC requires all buildings to be sprinklered, so this doesn't have a cost impact with respect to the model code. However, in jurisdictions that choose to amend the IRC by removing the sprinkler requirement, there would be a cost. Alternately, the increased flexibility provided for using additional types of separation assemblies and a combination of vertical and horizontal assemblies may provide a reduction in the cost of construction.

RB63-22

Public Hearing Results

Committee Action:

As Submitted

Committee Reason: The proposal addresses the continuity of horizontal and vertical separation for vertically stacked units. This is not addressed in the current text. This provides flexibility in design options. This would also address current housing needs that involves separating existing housing into two units. (Vote: 7-3)

RB63-22

Individual Consideration Agenda

Public Comment 1:

IRC: R302.3.5

Proponents: Jeffrey Shapiro, representing Self (jeff.shapiro@intlcodeconsultants.com) requests As Modified by Public Comment

Modify as follows:

2021 International Residential Code

R302.3.5 Vertically stacked dwelling units. Where one dwelling unit in a two-family dwelling is located above the other and an automatic sprinkler system complying with Section P2904 is not provided in both dwelling units, both of the following shall apply:

1. Horizontal and vertical assemblies separating the dwelling units, including an interior stairway serving as the means of egress for the upper dwelling unit, shall be constructed in a manner that limits the transfer of smoke, such as solid materials, self-closing door openings, sealed penetrations, and other approved methods that inhibit air flow.
2. A notification appliance connected to smoke alarms in the other dwelling unit shall be provided in each dwelling unit.

Commenter's Reason: A comment made at the committee hearing requested that additional clarity be provided with respect to the proposed requirement to limit smoke transfer. Although the original proposed text mirrored text in the IBC, and was therefore considered to be sufficient for inclusion in the IRC, I have submitted this public comment to provide an opportunity for the membership to consider whether examples of compliance methods might improve the proposed text. To be clear, I fully support APPROVAL AS SUBMITTED for this proposal, but I can also support APPROVAL AS MODIFIED by this public comment if that is preferred by the membership.

Cost Impact: The net effect of the public comment and code change proposal will not increase or decrease the cost of construction. The public comment simply adds clarity and options to the original text that was approved.

Staff Analysis: RB61 and RB63 addresses requirements in a different or contradicting manner. The membership is urged to make their intention clear with their actions on these proposals.

Public Comment# 3399

Public Comment 2:

IRC: R302.3.5

Proponents: Jenifer Gilliland, representing Seattle Department of Construction and Inspections (jenifer.gilliland@seattle.gov); Richard Pellingier, representing Seattle Department of Construction and Inspections (richard.pellingier@seattle.gov); Micah Chappell, representing Seattle Department of Construction & Inspections (micah.chappell@seattle.gov) requests As Modified by Public Comment

Modify as follows:

2021 International Residential Code

R302.3.5 Vertically stacked dwelling units. Where one dwelling unit in a two-family dwelling is located above the other and an automatic sprinkler system complying with Section P2904 is not provided in both dwelling units, both of the following shall apply:

- ~~1. Horizontal and vertical assemblies separating the dwelling units, including an interior stairway serving as the means of egress for the upper dwelling unit, shall be constructed in a manner that limits the transfer of smoke.~~
- ~~2. A notification appliance connected to smoke alarms in the other dwelling unit shall be provided in each dwelling unit.~~

Commenter's Reason: This PC includes two changes to the original proposal that was approved at the committee action hearings 7-3. While the proposal makes it clear that dwelling units in two-family dwellings are required to have vertical or horizontal separation or a combination of the two, it goes too far in two instances:

1. R302.3.5 Vertically stacked dwelling units (where a P2904 automatic sprinkler system is not provided). The proponent's reason statement says:

"stacked duplexes are inherently more hazardous than side-by-side duplexes, particularly with respect to the upper unit due to the tendency of smoke and flames to spread vertically, which increases the risk of charging the upper unit with smoke and cutting off the means of egress and the means of escape if/when fire vents through exterior doors or windows."

This is a theoretical statement based on general fire science, but the proponent provides no data or even anecdotal evidence to support that it has been a problem. It seems overly punitive on these types of structures and buys very little building safety for the cost increase for the vague requirement of "limiting the transfer of smoke". At least in the IBC there is a definition for smoke partition. Now building officials will need to determine what this means in the context of the IRC. It also implies that the required fire-resistive construction has no impact on the transfer of smoke between units. If all of your assemblies (horizontal, vertical or combination) are required to extend to and be tight against each other per 302.3.3.1 and 302.3.3.2 for more traditional duplex construction (side by side units), and there is no concern about smoke transfer in these types of units, what about stacked units lends itself to more smoke transfer?

2. Providing a remote sounder for the opposite dwelling unit will result in an increase of annoying neighbor burnt popcorn alarms with very little

additional safety. It is quite likely that these sounders would be disabled.

Because of these issues, this PC recommends striking Section R302.3.5 from the proposal.

Cost Impact: The net effect of the public comment and code change proposal will decrease the cost of construction. By adopting the public comment, the increased costs that would occur because of new requirements for stacked units would be reduced.

Staff Analysis: RB61 and RB63 addresses requirements in a different or contradicting manner. The membership is urged to make their intention clear with their actions on these proposals.

Public Comment# 3319

Public Comment 3:

IRC: R302.3.3

Proponents: Jason Smart, representing American Wood Council (jsmart@awc.org); David Tyree, representing American Wood Council (dtyree@awc.org) requests As Modified by Public Comment

Modify as follows:

2021 International Residential Code

R302.3.3 Continuity. Vertical and horizontal assemblies separating dwelling units shall be constructed in a manner that provides continuity of the fire-resistance rating ~~a continuous and complete separation~~ between the dwelling units.

Commenter's Reason: This modification further clarifies that the intent is to require continuity of the required fire-resistance rating of the horizontal or vertical assembly. This is consistent with the changes made to address platform construction under FS19-21.

Cost Impact: The net effect of the public comment and code change proposal will not increase or decrease the cost of construction. The cost impact statement for RB63-22 is neutral, and the modification presented in this public comment simply clarifies the intent of the section on continuity. This modification is intended to use terminology that works with platform construction, where horizontal assemblies support walls above, and are supported by walls of the story below.

Staff Analysis: RB61 and RB63 addresses requirements in a different or contradicting manner. The membership is urged to make their intention clear with their actions on these proposals.

Public Comment# 3287

RB64-22

IRC: R302.3.2 (New), TABLE R302.3.2 (New), R302.3.2.1 (New), R302.3.2.2 (New), R302.3.2.3 (New)

Proposed Change as Submitted

Proponents: Quyen Thai, representing Washington Association of Building Officials Technical Code Committee (qthai76@gmail.com); Micah Chappell, representing Washington Association of Building Officials Technical Code Development Committee (micah.chappell@seattle.gov)

2021 International Residential Code

Add new text as follows:

R302.3.2 Common accessory rooms. A common accessory room shall be separated as required by Table R302.3.2. Openings in a common accessory room shall comply with Section R302.3.2.1. Attachment of gypsum board shall comply with Table R702.3.5. The wall separation provisions of Table R302.3 shall not apply to common accessory room walls that are perpendicular to the adjacent dwelling unit wall.

TABLE R302.3.2 DWELLING-COMMON ACCESSORY ROOM SEPARATION

<u>SEPARATION</u>	<u>MATERIAL</u>
<u>From the dwelling units and attics</u>	<u>Not less than 1/2-inch gypsum board or equivalent applied to the accessory room side wall</u>
<u>From habitable rooms above or below the common accessory room</u>	<u>Not less than 5/8-inch Type X gypsum board or equivalent</u>
<u>Structures supporting floor/ceiling and wall assemblies used for separation required by this section</u>	<u>Not less than 1/2-inch gypsum board or equivalent</u>
<u>Common accessory rooms located less than 3 feet from a dwelling unit on the same lot</u>	<u>Not less than 1/2-inch gypsum board or equivalent applied to the interior side of exterior walls that are within this area</u>

For SI: 1 inch=25.4 mm, 1 foot=304.8 mm

R302.3.2.1 Opening protection. Openings from a common accessory room or area directly into a room used for sleeping purposes shall not be permitted. Other openings between the shared common accessory room or area and dwelling units shall be equipped with solid wood doors not less than 1 3/8 inches in thickness, solid or honeycomb core steel doors not less than 1 3/8 inches thick, or a fire door assembly with a 20-minute fire-protection rating, equipped with a self-closing or automatic-closing device.

R302.3.2.2 Duct penetration. Ducts penetrating the walls or ceilings separating the dwelling from the common accessory room shall be constructed of a minimum No. 26 gage (0.48 mm) sheet steel or other approved material and shall not have openings into the common accessory room.

R302.3.2.3 Other penetrations. Penetrations through the walls, ceiling, and floor level separation required in Section R302.3.2 shall be protected as required by Section R302.11, Item 4.

Reason: Designers are beginning to incorporate optional design common accessory rooms such as common laundry facilities and storage rooms that are connected to both dwelling units in their design. The IRC is currently silent on such a room but due to potential storage hazards as well as gas appliances of the washer/dryers and other appliances, there is a need to provide clear directions to protect the dwelling units from a shared common accessory space. The proposal is to treat these common rooms similar to garages and therefore, much of the proposed language draws from the dwelling-garage provision of the code.

Cost Impact: The code change proposal will not increase or decrease the cost of construction. Since this is just a clarifying addition where the code is silent, several jurisdictions have already required the construction of the separation wall between habitable space and their accessory spaces. Therefore no increase in cost is noted.

RB64-22

Public Hearing Results

Committee Action:

As Submitted

Committee Reason: The proposal addressed shared spaces in duplexes (e.g., bike storage, laundry facilities) where the code is currently silent. The proposal provides appropriate separation requirements. (Vote: 9-1)

RB64-22

Individual Consideration Agenda

Public Comment 1:

IRC: R302.3.2, TABLE R302.3.2, R302.3.2.1, R302.3.2.2, R302.3.2.3

Proponents: Jenifer Gilliland, representing Washington Association of Building Officials (jenifer.gilliland@seattle.gov); Richard Pelling, representing Washington Association of Building Officials (richard.pelling@seattle.gov); Micah Chappell, representing Seattle Department of Construction & Inspections (micah.chappell@seattle.gov) requests As Modified by Public Comment

Modify as follows:

2021 International Residential Code

R302.3.2 Common Shared accessory rooms. A ~~common~~ Shared accessory ~~room-rooms~~ shall be separated from each individual dwelling unit ~~as required by~~ in accordance with Table R302.3.2. Openings ~~in a common~~ between the shared accessory room and dwelling unit shall comply with Section R302.3.2.1. Attachment of gypsum board shall comply with Table R702.3.5. ~~The wall separation provisions of Table R302.3 shall not apply to common accessory room walls that are perpendicular to the adjacent dwelling unit wall.~~

TABLE R302.3.2 DWELLING-COMMON SHARED ACCESSORY ROOM SEPARATION

SEPARATION	MATERIAL
From the dwelling units and attics	Not less than 1/2-inch gypsum board or equivalent applied to the accessory room side wall
From habitable rooms above or below the common <u>shared</u> accessory room	Not less than 5/8-inch Type X gypsum board or equivalent
Structures supporting floor/ceiling and wall assemblies used for separation required by this section	Not less than 1/2-inch gypsum board or equivalent
Common accessory rooms located less than 3 feet from a dwelling unit on the same lot	Not less than 1/2-inch gypsum board or equivalent applied to the interior side of exterior walls that are within this area

For SI: 1 inch=25.4 mm, 1 foot=304.8 mm

R302.3.2.1 Opening protection. Openings from a ~~common~~ shared accessory room or area directly into a room used for sleeping purposes shall not be permitted. Other openings between the shared ~~common~~ accessory room or area and dwelling units shall be equipped with solid wood doors not less than 1 3/8 inches in thickness, solid or honeycomb core steel doors not less than 1 3/8 inches thick, or a fire door assembly with a 20-minute fire-protection rating, equipped with a self-closing or automatic-closing device.

R302.3.2.2 Duct penetration. Ducts penetrating the walls or ceilings separating the *dwelling* from the ~~common~~ shared accessory room shall be constructed of a minimum No. 26 gage (0.48 mm) sheet steel or other *approved* material and shall not have openings into the ~~common~~ shared accessory room.

R302.3.2.3 Other penetrations. Penetrations through the walls, ceiling, and floor level separation required in Section R302.3.2 shall be protected as required by Section R302.11, Item 4.

Commenter's Reason: This PC is being submitted by the proponents of the original code proposal and refines the original proposal by:

- Replacing the word “common” throughout the proposal with an easily understood, plain language substitute, “shared”.
- Adding language to clarify that the shared accessory room must be separated from each individual dwelling unit that shares the room.
- Eliminating the last sentence of the proposed R303.3.2 because it isn't needed and is confusing.
- Eliminating "and wall" in the fourth row of the table as it duplicates the requirement in the second row of the table for separation from the dwelling units and attics.
- Eliminating the last row of TABLE R302.3.2 because the information, originally taken from the garage separation provisions, isn't relevant in this situation where the shared accessory room is between the two units which are themselves within the two-family dwelling.

Designers are beginning to incorporate shared accessory rooms such as laundry facilities and storage rooms that are connected to both dwelling units in their design for two-family dwellings. The IRC is currently silent on such rooms, but due to potential storage hazards and the fossil fuel supplied to washer/dryers and other appliances, clear direction is needed to protect the dwelling units from a shared accessory space. The proposal treats these shared rooms in the same way that the separation of shared garages from dwelling units is handled in the code. As a result, much of the proposed language draws from the dwelling-garage provisions of the code.

Cost Impact: The net effect of the public comment and code change proposal will not increase or decrease the cost of construction. This public comment would make it clearer how to protect these shared accessory rooms between units in a two-family dwelling. Right now, the topic is unaddressed by the code which means jurisdictions may be under- or over-regulating them. So, depending on the jurisdiction this could be an increase or decrease in cost.

Public Comment# 3286

Public Comment 2:

IRC: R302.3.2, TABLE R302.3.2, R302.3.2.1, R302.3.2.2, R302.3.2.3

Proponents: Jeffrey Shapiro, representing Self (jeff.shapiro@intlcodeconsultants.com) requests As Modified by Public Comment

Modify as follows:

2021 International Residential Code

R302.3.6 ~~R302.3.2~~ Common accessory rooms. A common accessory room shall be separated as required by Table ~~R302.3.2~~ R302.3.6. Openings in a common accessory room shall comply with Section ~~R302.3.2.1~~ R302.3.6.1. Attachment of gypsum board shall comply with Table R702.3.5. The wall separation provisions of Table ~~R302.3.2~~ R302.3.6 shall not apply to common accessory room walls that are perpendicular to the

adjacent dwelling unit wall.

TABLE ~~R302.3.6~~ ~~R302.3.2~~ DWELLING-COMMON ACCESSORY ROOM SEPARATION

SEPARATION	MATERIAL
From the dwelling units and attics	Not less than 1/2-inch gypsum board or equivalent applied to the accessory room side wall
From habitable rooms above or below the common accessory room	Not less than 5/8-inch Type X gypsum board or equivalent
Structures supporting floor/ceiling and wall assemblies used for separation required by this section	Not less than 1/2-inch gypsum board or equivalent
Common accessory rooms located less than 3 feet from a dwelling unit on the same lot	Not less than 1/2-inch gypsum board or equivalent applied to the interior side of exterior walls that are within this area

For SI: 1 inch=25.4 mm, 1 foot=304.8 mm

R302.3.6.1 ~~R302.3.2.1~~ Opening protection. Openings from a common accessory room or area directly into a room used for sleeping purposes shall not be permitted. Other openings between the shared common accessory room or area and dwelling units shall be equipped with solid wood doors not less than 1 3/8 inches in thickness, solid or honeycomb core steel doors not less than 1 3/8 inches thick, or a fire door assembly with a 20-minute fire-protection rating, equipped with a self-closing or automatic-closing device.

R302.3.6.2 ~~R302.3.2.2~~ Duct penetration. Ducts penetrating the walls or ceilings separating the *dwelling* from the common accessory room shall be constructed of a minimum No. 26 gage (0.48 mm) sheet steel or other *approved* material and shall not have openings into the common accessory room.

R302.3.6.3 ~~R302.3.2.3~~ Other penetrations. Penetrations through the walls, ceiling, and floor level separation required in Section ~~R302.3.2–R302.3.6~~ shall be protected as required by Section R302.11, Item 4.

Commenter's Reason: Editorial clarification of how this section is best integrated into the rewrite accomplished by RB63-22.

Cost Impact: The net effect of the public comment and code change proposal will not increase or decrease the cost of construction editorial

RB66-22

IRC: R302.3.2 (New)

Proposed Change as Submitted

Proponents: Chad Sievers, representing Department of State (chad.sievers@dos.ny.gov); Jeanne Rice, representing NYSDOS (jeanne.rice@dos.ny.gov)

2021 International Residential Code

Add new text as follows:

R302.3.2 Opening Protectives. Where there are openings in the fire-rated wall or floor assemblies required by Section R302.3 the opening shall have a fire-protection rating of 3/4 hour as determined by tests specified in Section 716 of the *International Building Code*. Doors shall be self-latching and equipped with a self-closing or automatic closing device.

Exception: Solid wood doors not less than 1-3/8 inches (35 mm) in thickness, solid or honeycomb-core steel doors not less than 1-3/8 inches (35mm) thick, or a door with a 20-minute fire protection rating shall be permitted in buildings equipped throughout with an automatic sprinkler system installed in accordance with Section P2904. Doors shall be self-latching.

Reason: The code is currently silent on openings between dwelling units in a two-family dwelling. This silence neither prohibits nor allows doorways between the units, leaving the code enforcement officer unsure of their requirements when one is proposed. Often the code enforcement officer must use personal discretion to decide what is appropriate. The wall between the dwelling units is required to have a one-hour fire protection rating period to ensure the separation between the dwellings is not compromised.

There are several occasions when door openings between dwelling units of two-family dwellings are appropriate. The first instance is most common: the dwelling units share a common foyer for their entrance, either side-by-side unit entrances on a single story with a shared vestibule entrance; or a two-story building with a vestibule entrance on the first floor, an entrance to the first floor unit on the ground floor, and an entrance to the second floor unit at the top of a stairway that is within the vestibule. Another instance is the addition of a full mother-in-law apartment to a single-family dwelling unit. Less commonly, a single-family dwelling may be converted to a two-family dwelling with the option to convert the home back to a single-family dwelling depending on the occupant. Finally, other situations can arise where the occupants, typically extended families, may wish to share living space in a manner similar to the mother-in-law apartment situation but with a more traditional two-family home.

To stay consistent with the code, the language is mirrored after R302.3 including the leniency for sprinklers. The fire protection ratings were referenced from Table 716.1(2) of the IBC for "Other Fire Partitions" and language was utilized from R302.5 to maintain the prescriptive nature of the code and the allowance of "practical solutions". A requirement for a self-closing mechanism was not included because

Cost Impact: The code change proposal will increase the cost of construction

The cost of a two-family home may slightly increase, but only when a door between the two units is installed, as the door is now specifically required to be a fire-rated door. This code change will not have any impact on most two-family dwellings because and openings are not typically installed within the fire-rated wall assembly between dwelling units.

RB66-22

Public Hearing Results

Committee Action:

Disapproved

Committee Reason: This proposal was disapproved because a door between units is a security issue in a two-family dwelling unit. If there is a door between the units for a multi-generational situation, this is a single dwelling unit. (Vote: 6-5)

RB66-22

Individual Consideration Agenda

Public Comment 1:

IRC: R302.3.2

Proponents: Chad Sievers, representing Department of State (chad.sievers@dos.ny.gov) requests As Modified by Public Comment

Modify as follows:

2021 International Residential Code

R302.3.2 Opening Protectives. Where there are openings in the fire-rated wall or floor assemblies required by Section R302.3 the opening shall have a fire-protection rating of 3/4 hour as determined by tests specified in Section 716 of the *International Building Code*. Doors shall be independently lockable from either side, self-latching, and equipped with a self-closing or automatic closing device.

Exception: Solid wood doors not less than 1-3/8 inches (35 mm) in thickness, solid or honeycomb-core steel doors not less than 1-3/8 inches (35mm) thick, or a door with a 20-minute fire protection rating shall be permitted in buildings equipped throughout with an automatic sprinkler system installed in accordance with Section P2904. Doors shall be independently lockable from either side, self-latching, and equipped with a self-closing or automatic closing device.

Commenter's Reason: At the CAH the committee expressed concerns about the security with the doors this public comment addresses their concerns by requiring that both sides have independent locks; and extends the requirements for a self-closing devise to the scenario with a sprinkler.

Cost Impact: The net effect of the public comment and code change proposal will not increase or decrease the cost of construction The code is silent on openings and this provision will just give requirements when the designer chooses to install a door.

Public Comment# 3504

Public Comment 2:

Proponents: Jeanne Rice, representing NYSDOS (jeanne.rice@dos.ny.gov) requests As Submitted

Commenter's Reason: As two-family units adapt to different user needs the likely hood of a two-family home being comingled for a portion of the building's design life is high. potentially the mother-in-law apartment, children in their teens or twenties, siblings, or another extended family member or even a family. In reality, two-family homes that join are in our communities let us help make them safe.

Cost Impact: The net effect of the public comment and code change proposal will not increase or decrease the cost of construction This is an option that is not currently addressed in the code and the doorway is not mandated.

Public Comment# 3248

RB93-22

IRC: R310.1.1, R310.4.4, R311.2

Proposed Change as Submitted

Proponents: Glenn Mathewson, representing Self (glenn@glennmathewson.com)

2021 International Residential Code

Revise as follows:

R310.1.1 Operational constraints and opening control devices. *Emergency escape and rescue openings* shall be operational from the inside of the room without the use of ~~a key, tool, keys, tools or special knowledge, or effort.~~ Window opening control devices and fall prevention devices complying with ASTM F2090 shall be permitted for use on windows serving as a required *emergency escape and rescue opening* and shall be not more than 70 inches (178 cm) above the finished floor.

R310.4.4 Bars, grilles, covers and screens. Where bars, grilles, covers, screens or similar devices are placed over *emergency escape and rescue openings*, bulkhead enclosures or area wells that serve such openings, the minimum net clear opening size shall comply with Sections R310.2 through R310.2.2 and R310.4.1. Such devices shall be releasable or removable from the inside without the use of a key, tool, special knowledge or effort. ~~or tool or force greater than that required for the normal operation of the escape and rescue opening.~~

R311.2 Egress door. Not less than one egress door shall be provided for each *dwelling* unit. The egress door shall be side-hinged, and shall provide a clear width of not less than 32 inches (813 mm) where measured between the face of the door and the stop, with the door open 90 degrees (1.57 rad). The clear height of the door opening shall be not less than 78 inches (1981 mm) in height measured from the top of the threshold to the bottom of the stop. Other doors shall not be required to comply with these minimum dimensions. Egress doors shall be readily operable from inside the *dwelling* without the use of a key, tool, ~~or~~ special knowledge or effort.

Reason: The operational constraints of these three features need to be functional to one person. I presume this person's cognitive ability to operate these three features as described is not as varied as the requirements in these three sections.

The door can require a tool, but not effort. The EERO can't require special knowledge, but can require unlimited effort. The area well cover can require special knowledge but it can't require force. Well it can, but not more than the force to open the window... which is unlimited... What if I get a new window that opens easier? Now I have to get a new lighter cover?

In this proposal, no expectations of this occupant to free themselves from a building have been altered. The capabilities of the human are the same. The only terms proposed for modification are terms already used. I expect some may have small opposition to certain words in certain sections, but those words are capabilities that we already expect or don't expect of the occupant.

My motivation for this proposal was from developing and teaching a course specific to sections 310 and 311 where the complete intent of each section is discussed. I was unable to explain the rationale behind these three sections without leaving the student rolling their eyes and distrusting the inconsistency and seemingly arbitrary requirements. I was also quite surprised when "special knowledge" was removed from covers in 2021.

No effort, tools, keys or special knowledge to get you out of the house. Easy. Reliable. Understandable.

Cost Impact: The code change proposal will not increase or decrease the cost of construction

Nothing in this proposal changes minimum code in a manner that would require the purchase or increase of cost of a construction product or required installation.

RB93-22

Public Hearing Results

Committee Action:

Disapproved

Committee Reason: This proposal was disapproved. While this is correlation between sections, the proposal is moving in the wrong direction. Ambiguous terms should be removed from the code, not added back in. (Vote: 6-5)

RB93-22

Individual Consideration Agenda

Public Comment 1:

IRC: R310.1.1, R310.4.4, R311.2

Proponents: Glenn Mathewson, representing Self (glenn@glennmathewson.com) requests As Modified by Public Comment

Modify as follows:

2021 International Residential Code

R310.1.1 Operational constraints and opening control devices. *Emergency escape and rescue openings* shall be operational from the inside of the room without the use of a key; or tool, ~~special knowledge, or effort~~. Window opening control devices and fall prevention devices complying with ASTM F2090 shall be permitted for use on windows serving as a required *emergency escape and rescue opening* and shall be not more than 70 inches (178 cm) above the finished floor.

R310.4.4 Bars, grilles, covers and screens. Where bars, grilles, covers, screens or similar devices are placed over *emergency escape and rescue openings*, bulkhead enclosures or area wells that serve such openings, the minimum net clear opening size shall comply with Sections R310.2 through R310.2.2 and R310.4.1. Such devices shall be releasable or removable from the inside without the use of a key; or tool, ~~special knowledge or effort~~.

R311.2 Egress door. Not less than one egress door shall be provided for each *dwelling* unit. The egress door shall be side-hinged, and shall provide a clear width of not less than 32 inches (813 mm) where measured between the face of the door and the stop, with the door open 90 degrees (1.57 rad). The clear height of the door opening shall be not less than 78 inches (1981 mm) in height measured from the top of the threshold to the bottom of the stop. Other doors shall not be required to comply with these minimum dimensions. Egress doors shall be readily openable from inside the *dwelling* without the use of a key; or tool, ~~special knowledge or effort~~.

Commenter's Reason: The intent of this proposal was to make the IRC as a whole more trustworthy and sensible. All three of these features require a human to operate them, so why wouldn't the operational limitations be the same? There was no opposition to this goal. The opposition was in the expanded use of "special knowledge" and "effort". If these human capabilities are not acceptable means to operate one of these features then they probably should not be acceptable for any. They have been removed to addresses the concerns of the committee and spoken opposition, while still achieving the goal of consistency in the IRC provisions.

NOTE: I do not believe these terms should be removed from my original proposal. However, I believe consistency and sensibility of the IRC is more important than my opinion of it.

Cost Impact: The net effect of the public comment and code change proposal will not increase or decrease the cost of construction. The proposal and public comment simply offer more choice to the end user. Cost is only affected after they make a choice.

RB100-22

IRC: R311.3.2, R311.7.6

Proposed Change as Submitted

Proponents: Mike Nugent, representing Building Code Action Committee (bcac@iccsafe.org)

2021 International Residential Code

R311.3 Floors and landings at exterior doors. There shall be a landing or floor on each side of each exterior door. The width of each landing shall be not less than the door served. Landings shall have a dimension of not less than 36 inches (914 mm) measured in the direction of travel. The slope at exterior landings shall not exceed $\frac{1}{4}$ unit vertical in 12 units horizontal (2 percent).

Exception: Exterior balconies less than 60 square feet (5.6 m²) and only *accessed* from a door are permitted to have a landing that is less than 36 inches (914 mm) measured in the direction of travel.

R311.3.1 Floor elevations at the required egress doors. Landings or finished floors at the required egress door shall be not more than 1 $\frac{1}{2}$ inches (38 mm) lower than the top of the threshold.

Exception: The landing or floor on the exterior side shall be not more than 7 $\frac{3}{4}$ inches (196 mm) below the top of the threshold provided that the door does not swing over the landing or floor.

Where exterior landings or floors serving the required egress door are not at *grade*, they shall be provided with access to *grade* by means of a *ramp* in accordance with Section R311.8 or a *stairway* in accordance with Section R311.7.

Revise as follows:

R311.3.2 Floor elevations at other exterior doors. At exterior Doors- doors other than the required egress door, the exterior side shall be provided with landings or floors not more than 7 $\frac{3}{4}$ inches (196 mm) below the top of the threshold.

Exception: ~~A top~~ An exterior landing or floor is not required at the exterior doorway where a *stairway* of not more than two *risers* is located on the exterior side of the door, provided that the door does not swing over the *stairway*.

R311.3.3 Storm and screen doors. Storm and screen doors shall be permitted to swing over exterior stairs and landings.

Revise as follows:

R311.7.6 Landings for stairways. There shall be a floor or landing at the top and bottom of each *stairway*. The width perpendicular to the direction of travel shall be not less than the width of the flight served. For landings of shapes other than square or rectangular, the depth at the walk line and the total area shall be not less than that of a quarter circle with a radius equal to the required landing width. Where the *stairway* has a straight run, the depth in the direction of travel shall be not less than 36 inches (914 mm).

~~Exception~~ Exceptions:

1. A floor or landing is not required at the top of an interior flight of stairs, including stairs in an enclosed garage, provided that a door does not swing over the stairs.
2. At an enclosed garage, the top landing at the stair shall be permitted to be not more than 7 3/4 inches (196 mm) below the top of the threshold.
3. At exterior doors, a top landing is not required for an exterior stairway of not more than two risers, provided that the door does not swing over the stairway.

R311.7.8 Handrails. *Handrails* shall be provided on not less than one side of each flight of stairs with four or more *risers*.

Reason: This proposal started as question – Can the landing or steps into a garage be the same as permitted for exterior doors or not? The following are current requirements - There is a requirement for landings at exterior doors (R311.3) and a requirement for landings at the top and bottom of stairways (R311.7.6). The required egress door has to open directly into a public way, yard or court (R311.1), so it has to be an exterior door. Egress is not permitted through a garage (R311.1).

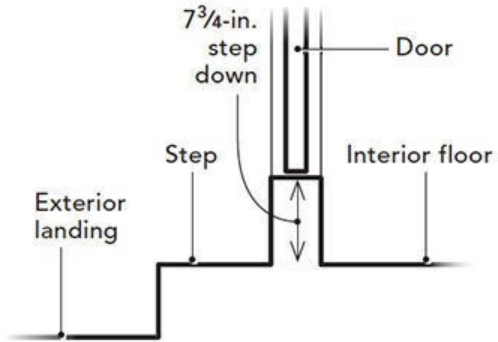
Interior doors not have requirements for landings, so going out to a single step or multiple steps would be covered by the stairway landing requirement in Section R311.7.6. The current exception clarifies that steps into a garage are considered interior stairways.

The modifications –

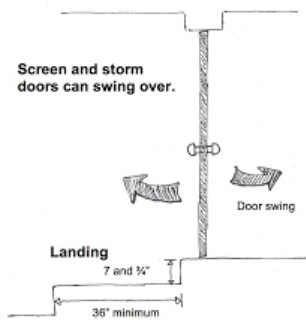
R311.3.2 – This is a requirement for a landing or floor at both sides of an exterior doorway. This section has 'exterior' in the title, and is a subsection of 'exterior doors', but does not have 'exterior' in the text. Since titles are not part of the text, this could be read as all door, or it could be read to allow a 7-3/4" drop between the floor and the threshold on both sides of the door. The modification to the body of the text would limit this to exterior

doors and the exterior side for the step down. The current exception is for a stairway landing, not a door landing, so this needs to be more specific to door landings to match the requirement in the main paragraph. "Floor" is added to address balconies and decks.

This is what is permitted with current text for exterior doors other than the means of egress doorway. While perhaps there should be a threshold limit (not proposed here), the current allowances is a serious tripping hazard.



Was this not the intended allowance?



R311.7.6 – This is the section for stairway landings. Interior doors do not have a doorway landing requirement in the IRC. The new exception #2 allows for a garage access door to swing out over a landing that is a step down, similar to an exterior door. The current exception #1 says the door has to swing in. Exception 3 for stairway landings at exterior stairways is added so that R311.3.2 and R311.7.6 are coordinated for landings at exterior doors with steps – literally this is the same landing space, but from two different requirements.

This is an example of the R311.7.6 with the current Exception 1.



This is an example of R311.7.6 new exception 2 – allowing for a step down to a landing or floor in a garage – the door can swing in or out. This is currently permitted for exterior doors (R311.3.2)





This is an example of R311.7.6 new exception 3 – which is equal to the intent of R311.3.2 exception.





This proposal is submitted by the ICC Building Code Action Committee (BCAC)..

BCAC was established by the ICC Board of Directors in July 2011 to pursue opportunities to improve and enhance assigned International Codes or portions thereof. In 2020 and 2021 the BCAC has held several virtual meetings open to any interested party. In addition, there were numerous virtual Working Group meetings for the current code development cycle, which included members of the committee as well as interested parties. Related documents and reports are posted on the BCAC website at <https://www.iccsafe.org/products-and-services/i-codes/code-development/cs/building-code-action-committee-bcac/>.

Cost Impact: The code change proposal will not increase or decrease the cost of construction

This proposal clarifies existing requirements and provides additional design options for door leading into attached garages. This option could improve safety without additional costs.

RB100-22

Public Hearing Results

Committee Action:

Disapproved

Committee Reason: The proposal was disapproved because a 7-3/4" high threshold is needed to help at exterior doors with snow and water intrusion. (Vote: 10-0).

RB100-22

Individual Consideration Agenda

Public Comment 1:

IRC: R311.3.2

Proponents: Mike Nugent, representing Building Code Action Committee (bcac@iccsafe.org) requests As Modified by Public Comment

Modify as follows:

2021 International Residential Code

R311.3.2 Floor elevations at other exterior doors. ~~At the~~ Exterior doors other than the required egress door, ~~the exterior side~~ shall be provided with landings or floors not more than $7\frac{3}{4}$ inches (196 mm) below the top of the threshold.

Exception: An exterior landing or floor is not required at the exterior doorway where a *stairway* of not more than two *risers* is located on the exterior side of the door, provided that the door does not swing over the *stairway*.

Commenter's Reason: The testimony and committee reason were all against not loosing the 7-3/4" threshold at exterior doors due to water and snow infiltration. That portion has been removed from the change with the above deletion. The rest of the language at this section is strictly a clarification that Section R311.3.2 is applicable to exterior doors. This was in the title, but not in the text.

The original intent of this proposal was to allow for a step or landing in step down at a door into a garage similar to what is permitted at an exterior door. That remains as submitted. There was no testimony against this idea.

Cost Impact: The net effect of the public comment and code change proposal will not increase or decrease the cost of construction. This proposal clarifies existing requirements and provides additional design options for door leading into attached garages. This option could improve safety without additional costs.

RB122-22

IRC: R314.1.1, R314.1.2 (New)

Proposed Change as Submitted

Proponents: Jonathan Roberts, representing UL (jonathan.roberts@ul.com)

2021 International Residential Code

Revise as follows:

R314.1.1 Listings. Smoke alarms shall be *listed and labeled* in accordance with UL 217. Combination smoke and carbon monoxide alarms shall be *listed* in accordance with UL 217 and UL 2034.

Add new text as follows:

R314.1.2 Installation. Smoke alarms shall be installed in accordance with their listing and the manufacturer's instructions.

Reason: This proposal adds requirement for these devices to be listed and labeled, since listed alarms will include a listing mark (label). It also requires smoke alarms to be installed in accordance with the listing and the manufacturer's installation instructions. "Listed" and "Labeled" are both defined terms.

Cost Impact: The code change proposal will not increase or decrease the cost of construction. Listed smoke alarms are already identified by a label, and there is no additional cost associated with verifying they are installed in accordance with their listing and the manufacturer's instructions.

RB122-22

Public Hearing Results

Committee Action:

As Modified

Committee Modification:

R314.1.1 Listings. Smoke alarms shall be *listed and labeled* in accordance with UL 217. Combination smoke and carbon monoxide alarms shall be *listed and labeled* in accordance with UL 217 and UL 2034.

Committee Reason: The committee felt that the modification adding "and labeled" to the 2nd sentence of Section 314.1.1 is important for the combination smoke and carbon monoxide alarms - and would be consistent with the rest of the proposal. The committee concluded this proposal as modified is an improvement for the installation requirements for the alarms. The committee would like to see combination smoke and carbon monoxide alarms added to the installation Section R314.1.2 through public comment. See also RB124-22. (Vote 10-0)

RB122-22

Individual Consideration Agenda

Public Comment 1:

IRC: R314.1.2

Proponents: Jonathan Roberts, representing UL (jonathan.roberts@ul.com) requests As Modified by Public Comment

Further modify as follows:

2021 International Residential Code

R314.1.2 Installation. Smoke alarms and combination smoke and carbon monoxide alarms shall be installed in accordance with their listing and the manufacturer's instructions.

Commenter's Reason: This proposal adds the requirement for combination smoke and carbon monoxide alarms to be installed in accordance with

the listing and the manufacturer's installation instructions. The same requirement currently exists for smoke alarms, and this expands the requirement to include combination alarms as well similar to what was done in RB124-22.

Cost Impact: The net effect of the public comment and code change proposal will not increase or decrease the cost of construction. Listed smoke alarms and combination smoke and carbon monoxide alarms are already being installed in the same fashion so there is no additional cost associated with verifying they are installed in accordance with their listing and the manufacturer's instructions.

RB144-22

IRC: SECTION 202 (New), R323.1.2 (New)

Proposed Change as Submitted

Proponents: Stephen Skalko, representing Masonry Alliance for Codes and Standards (svskalko@svskalko-pe.com); Scott Campbell, representing NRMCA (scampbell@nrmca.org)

2021 International Residential Code

[RB] STORM SHELTER. A building, structure or portion thereof, constructed in accordance with ICC 500 and designated for use during a severe wind storm event, such as a hurricane or tornado.

Add new definition as follows:

Community storm shelter. A storm shelter not defined as a "Residential storm shelter." This includes storm shelters intended for use by the general public, by building occupants or a combination of both.

Residential storm shelter. A storm shelter serving occupants of dwelling units and having a design occupant capacity not exceeding 16 persons.

Add new text as follows:

R323.1.2 Shelters required. In areas where the shelter design wind speed for tornados is 250 mph in accordance with Figure 304.2(1) of ICC 500, a storm shelter shall be provided in accordance with ICC 500. *Residential storm shelters* serving dwelling units shall be located in accordance with ICC 500 Section 403.2. *Community storm shelters* shall be located where the maximum distance of travel from not fewer than one exterior door of each dwelling unit to a door of the shelter serving that dwelling unit does not exceed 1,000 feet (305 m).

Exception: Dwellings meeting the requirements for shelter design in ICC 500.

Reason: Section R323 of the IRC tells the code user to use ICC 500, *Standard for the Design and Construction of Storm Shelters* for requirements to be met if storm shelters associated with one-and two-family dwellings are provided. However, the code does not require that such shelters be provided. Recent tornado events continue to show the need to provide such shelters for one-and two-family dwellings in high tornado wind regions. Experience has shown that storm shelters in high tornado wind regions provide protection for persons from injury or death due to structural collapse and/or wind-borne debris.

This proposal will require storm shelters be provided for one-and two-family dwellings built in areas where the tornado wind speeds are 250 mph or higher according to ICC 500 Figure 304.2(1). The area covered by this tornado wind speed is consistent with the areas in five states that recently experienced devastating damage, reportedly over 100 deaths and many more injured from a series of tornado events occurring within a 24-hour period December 10-11, 2021.

The proposal also permits a stand-alone shelter, either as an accessory building to the dwelling or a community shelter, to meet the requirements of this section. Where a stand-alone storm shelter is provided, the proposal limits the travel distance to the stand-alone shelter based on ICC 500 Section 403.2 for Residential storm shelters, or within 1000 feet from at least one exterior door of the dwelling unit to a Community storm shelter door.

Bibliography: Satellites Spot Tornado Tracks Across Midwest (nasa.gov)

Cost Impact: The code change proposal will increase the cost of construction including a storm shelter within a dwelling unit or as a stand-alone structure will increase the cost of construction. The actual costs will depend on the materials of choice and design features of the shelter. Insofar as any cost-benefit conclusion, that is extremely difficult to quantify when considering actions to save lives. However, it can be stated that a shelter does increase the probability that persons are more likely to survive an event with the shelter rather than being exposed to the elements outside the shelter.

RB144-22

Public Hearing Results

Committee Action:

Disapproved

Committee Reason: The committee felt that requiring a storm shelter is beyond reasonable expectation for a new dwelling or townhouse. Installation of a storm shelter should be something that is voluntary. This could be read to require community shelters and residential shelters for the

same properties. The need for storm shelters should be based on the evaluation or risk. Not all home in the tornado belt are in exposed areas.
(Vote: 10-0)

RB144-22

Individual Consideration Agenda

Public Comment 1:

IRC: APPENDIX AY (New), (New), AY101 (New), AY101.1 (New), AY102 (New), AY102.1 (New), AY103 (New), AY103.1 (New), AY104 (New), AY104.1 (New)

Proponents: Stephen Skalko, representing Masonry Alliance for Codes and Standards (svskalko@svskalko-pe.com); Scott Campbell, representing NRMCA (scampbell@nrmca.org) requests As Modified by Public Comment

Replace as follows:

2021 International Residential Code

APPENDIX AY **STORM SHELTERS**

The provisions contained in this appendix are not mandatory unless specifically referenced in the adopting ordinance

User note: About this appendix: Section 323 has the basic information to guide the code user on storm shelter design in accordance with ICC 500. Appendix AY provides the criteria to assist jurisdictions in determining where storm shelters should be provided. The provisions also allow an option to use Community Shelters within a reasonable distance of the dwelling units as an alternate to providing a storm shelter within the dwelling unit.

AY101 **SCOPE**

AY101.1 General. This appendix applies to storm shelters where constructed as separate detached buildings or where constructed as safe rooms within buildings for the purpose of providing refuge from storms that produce high winds, such as tornados and hurricanes. In addition to other applicable requirements in this appendix, storm shelters shall be constructed in accordance with Section R323.

AY102 **DEFINITIONS**

AY102.1 General. The following terms shall, for the purpose of this appendix, have the meaning shown herein.

STORM SHELTER. A building, structure or portion thereof, constructed in accordance with ICC 500 and designated for use during a severe wind storm event, such as a hurricane or tornado.

Community storm shelter. A storm shelter not defined as a "Residential storm shelter." This includes storm shelters intended for use by the general public, by building occupants or a combination of both.

Residential storm shelter. A storm shelter serving occupants of dwelling units and having a design occupant capacity not exceeding 16 persons.

AY103 **WHERE REQUIRED**

AY103.1 Shelters required. A storm shelter shall be provided in areas where the shelter design wind speed for tornados is 250 mph in accordance with Figure 304.2(1) of ICC 500. Residential storm shelters shall be located within dwellings they serve or shall be located in accordance with ICC 500 Section 403.2. Where multiple dwelling units share a community storm shelter, the maximum distance of travel from at least one exterior door of each dwelling unit to a door of the shelter serving that dwelling unit shall not exceed 1,000 feet (305 m).

Exception: Dwellings meeting the requirements for shelter design in ICC 500.

AY104

REFERENCED STANDARDS

AY104.1 General. See Table AY104.1 for standards that are referenced in various section of this appendix. Standards are listed by the standard indentification with the effective date, the standard title, and the section or sections of this appendix that reference this standard.

AY104.1 REFERENCED STANDARDS

<u>STANDARD ACRONYM</u>	<u>STANDARD NAME</u>	<u>SECTIONS HEREIN REFERENCED</u>
<u>ICC 500-2020</u>	<u>ICC/NSSA Standard for the Design and Construction of Storm Shelters</u>	<u>AY103.1</u>

Commenter's Reason: Section R323 of the IRC tells the code user to use ICC 500, *Standard for the Design and Construction of Storm Shelters* for requirements to be met if storm shelters associated with one-and two-family dwellings are provided. However, the code does not require that such shelters be provided. Recent tornado events continue to show the need to provide such shelters for one-and two-family dwellings in high tornado wind regions. Experience has shown that storm shelters in high tornado wind regions provide protection for persons from injury or death due to structural collapse and/or wind-borne debris.

The original code change proposal would make the use of shelters in the areas defined mandatory. This public comment places the requirements in an optional appendix in the IRC that State and local jurisdictions may adopt where they deem storm shelters are a necessary component for the safety of their citizens. If adopted, storm shelters would be required for one-and two-family dwellings built in areas where the tornado wind speeds are 250 mph or higher according to ICC 500 Figure 304.2(1). The area covered by this tornado wind speed is consistent with the areas in five states that experienced devastating damage, reportedly over 100 deaths, and many more injured from a series of tornado events occurring within a 24-hour period December 10-11, 2021.

The proposal also permits a stand-alone shelter (e.g., accessory to the dwelling or a community shelter) to be provided for dwellings. Where a community shelter option is used for multiple dwelling units, the shelter must be reached within 1000 feet of at least one exterior door to each dwelling unit served by that shelter.

Biography: [Satellites Spot Tornado Tracks Across Midwest \(nasa.gov\)](https://www.nasa.gov)

Cost Impact: The net effect of the public comment and code change proposal will increase the cost of construction. Where jurisdictions adopt this appendix there will be an additional cost to provide the needed storm shelter protection.

RB151-22

IRC: R325.2

Proposed Change as Submitted

Proponents: Mike Nugent, representing Building Code Action Committee (bcac@iccsafe.org)

2021 International Residential Code

SECTION R325 MEZZANINES

Revise as follows:

R325.2 Mezzanines. The clear height above and below *mezzanine* floor construction shall be not less than 7 feet (2134 mm).

Exception: The ceiling height above the mezzanine shall be permitted to comply with Section R305.1 where the mezzanine meets the minimum room size in Section R304.

SECTION R326 HABITABLE ATTICS

R326.2 Minimum dimensions. A habitable attic shall have a floor area in accordance with Section R304 and a ceiling height in accordance with Section R305.

Reason: The provisions for minimum room area (R304) and ceiling height (R305) provide criteria for with habitable rooms/spaces and basements, but neither specifically mentions mezzanines (R325) or habitable attics (R326). Habitable attics does reference R304 and R305 for minimum size and height, so you can do sloped ceilings or beams in the habitable attic. However, the current text does not address a sloped ceiling or beams in a mezzanine. While I do not believe it is the intent to require a mezzanine to be at least 70 sq.ft. or at least 7 feet in each direction the same as a room (per R304), the proposal would allow for mezzanines with sloped ceilings beams where the mezzanine was the size of a room. Below are sections R304 and R305 for reference. Mezzanines are habitable spaces.

SECTION R304

MINIMUM ROOM AREAS

304.1 Minimum area. Habitable rooms shall have a floor area of not less than 70 square feet (6.5 m²).

Exception: Kitchens.

304.2 Minimum dimensions. Habitable rooms shall be not less than 7 feet (2134 mm) in any horizontal dimension.

Exception: Kitchens.

304.3 Height effect on room area. Portions of a room with a sloping ceiling measuring less than 5 feet (1524 mm) or a furred ceiling measuring less than 7 feet (2134 mm) from the finished floor to the finished ceiling shall not be considered as contributing to the minimum required habitable area for that room.

SECTION R305

CEILING HEIGHT

R305.1 Minimum height. Habitable space, hallways and portions of basements containing these spaces shall have a ceiling height of not less than 7 feet (2134 mm). Bathrooms, toilet rooms and laundry rooms shall have a ceiling height of not less than 6 feet 8 inches (2032 mm).

Exceptions:

1. For rooms with sloped ceilings, the required floor area of the room shall have a ceiling height of not less than 5 feet (1524 mm) and not less than 50 percent of the required floor area shall have a ceiling height of not less than 7 feet (2134 mm).
2. The ceiling height above bathroom and toilet room fixtures shall be such that the fixture is capable of being used for its intended purpose. A shower or tub equipped with a showerhead shall have a ceiling height of not less than 6 feet 8 inches (2032 mm) above an area of not less than 30 inches (762 mm) by 30 inches (762 mm) at the showerhead.
3. Beams, girders, ducts or other obstructions in basements containing habitable space shall be permitted to project to within 6 feet 4 inches (1931 mm) of the finished floor.

4. Beams and girders spaced apart not less than 36 inches (914 mm) in clear finished width shall project not more than 78 inches (1981 mm) from the finished floor.

R305.1.1 Basements. Portions of basements that do not contain habitable space or hallways shall have a ceiling height of not less than 6 feet 8 inches (2032 mm).

Exception: At beams, girders, ducts or other obstructions, the ceiling height shall be not less than 6 feet 4 inches (1931 mm) from the finished floor.

This proposal is submitted by the ICC Building Code Action Committee (BCAC).

BCAC was established by the ICC Board of Directors in July 2011 to pursue opportunities to improve and enhance assigned International Codes or portions thereof. In 2020 and 2021 the BCAC has held several virtual meetings open to any interested party. In addition, there were numerous virtual Working Group meetings for the current code development cycle, which included members of the committee as well as interested parties. Related documents and reports are posted on the BCAC website at <https://www.iccsafe.org/products-and-services/i-codes/code-development/cs/building-code-action-committee-bcac/>.

Cost Impact: The code change proposal will not increase or decrease the cost of construction. This is a clarification only for mezzanines constructed under sloped roofs. It will increase design options without increasing requirements.

RB151-22

Public Hearing Results

This proposal includes unpublished errata

In Section R325.2 Mezzanines, the reference in the new exception should be R305.1 instead of 305.1.

Committee Action:

Disapproved

Committee Reason: The committee felt that this ceiling height limit could limit design options for bathrooms and closets on mezzanines and would not match the pointer to habitable space. Some of the committee supported the proposal feeling it makes sense that a mezzanine used for habitable space should meet the same ceiling height as the rest of the building. (Vote: 6-3)

RB151-22

Individual Consideration Agenda

Public Comment 1:

Proponents: Mike Nugent, representing Building Code Action Committee (bcac@iccsafe.org) requests As Submitted

Commenter's Reason: The BCAC is urging members to overturn the split committee decision for Disapproval of this code change proposal and support this public comment for (AS) Approval As Submitted. There was a concern that bathrooms are not addressed but bathrooms are allowed in Mezzanines. This proposed exception to Section R325.2 Mezzanines would allow the same ceiling height reductions above mezzanines that are currently allowed in the IRC for habitable attics.

This proposed language correlates Mezzanines requirements with current typical ceiling height requirements in R305.1. This exception is limited to spaces above the mezzanine only and addresses a common field condition of how to work with sloped roofs

We urge your support.

Cost Impact: The net effect of the public comment and code change proposal will not increase or decrease the cost of construction. This is a clarification only for mezzanines constructed under sloped roofs. It will increase design options without increasing requirements.

Public Comment# 3092

RB251-22

IRC: R902.1

Proposed Change as Submitted

Proponents: Aaron Phillips, representing Asphalt Roofing Manufacturers Association (ARMA) (aphillips@asphaltroofing.org)

2021 International Residential Code

Revise as follows:

R902.1 Roof covering materials. Roofs shall be covered with materials as set forth in Sections R904 and R905. Class A, B or C roof assemblies shall be installed in *jurisdictions* designated by law as requiring their use or where the edge of the roof is less than 3 feet (914 mm) from a *lot line*. Where Class A, B, or C roof assemblies are required, they shall be tested in accordance with ASTM E108 or UL 790. Where required, the roof assembly shall be listed and identified as to Class by an approved testing agency. Class A, B and C roofing required by this section to be listed shall be tested in accordance with ASTM E108 or UL 790.

Exceptions:

1. Class A *roof assemblies* include those with coverings of brick, masonry and exposed concrete *roof deck*.
2. Class A *roof assemblies* include ferrous or copper shingles or sheets, metal sheets and shingles, clay or concrete roof tile, or slate installed on noncombustible decks.
3. Class A *roof assemblies* include minimum 16 ounces per square foot copper sheets installed over combustible decks.
4. Class A *roof assemblies* include slate installed over *underlayment* over combustible decks.

Reason: Changing "roofing" to "roof assemblies" in Section R902.1 is important to recognize that roof assemblies are classified, not "roofing." The additional changes create a logical progression of thought that establishes when fire classification is required, what tests are to be done when fire classification is necessary, and provisions for listing when that additional step is appropriate.

Cost Impact: The code change proposal will not increase or decrease the cost of construction. This proposal corrects language and restates and reorders existing provisions to reduce opportunities for confusion. Since there are no technical changes introduced, no change in cost of construction is anticipated if the proposal is approved.

RB251-22

Public Hearing Results

Committee Action:

As Submitted

Committee Reason: The committee determined that the proposal corrects that the roof assembly should be listed and identified as to Class by an approved testing agency. The committee also agreed with replacing of "roofing" with "roof assemblies" in the roof covering materials section's charging statement to emphasize that roof assemblies need to be classified (Vote: 6-4).

RB251-22

Individual Consideration Agenda

Public Comment 1:

IRC: R902.1

Proponents: Marcelo Hirschler, representing GBH International (mmh@gbhint.com); Aaron Phillips, representing Asphalt Roofing Manufacturers Association (ARMA) (aphillips@asphaltroofing.org) requests As Modified by Public Comment

Modify as follows:

2021 International Residential Code

R902.1 Roof assemblies covering materials. Roofs shall be covered with materials as set forth in Sections R904 and with roof coverings as set forth in Section R905. Class A, B or C *roof assemblies* shall be installed in *jurisdictions* designated by law as requiring their use or where the edge of the roof is less than 3 feet (914 mm) from a *lot line*. Where Class A, B, or C *roof assemblies* are required, they shall be tested in accordance with ASTM E108 or UL 790. Where required by a jurisdiction, the *roof assembly* shall be *listed* and identified as to Class by an *approved* testing agency.

Exceptions:

1. Class A *roof assemblies* include those with coverings of brick, masonry and exposed concrete *roof deck*.
2. Class A *roof assemblies* include ferrous or copper shingles or sheets, metal sheets and shingles, clay or concrete roof tile, or slate installed on noncombustible decks.
3. Class A *roof assemblies* include minimum 16 ounces per square foot copper sheets installed over combustible decks.
4. Class A *roof assemblies* include slate installed over *underlayment* over combustible decks.

Commenter's Reason: HIRSCHLER: The revisions recommended by the public comment are basic clarifications. Section R904 addresses materials (always required to be met) and section R905 addresses roof coverings. It is important to stress that the requirement for listing must come from a jurisdiction.

PHILLIPS: RB251 is one of three proposals that addresses Section R902.1, the other two being RB252 and RB253. In response to input from the Committee on these three proposals, this comment makes two clarifications. First, it revises the section title to align with the remainder of the section and to correctly indicate it is roof assemblies rather than roof coverings that are classified. Second, it clarifies that listing is triggered where required by the jurisdiction. In contrast to RB252, this proposal includes a requirement that, when listed, the specific class (i.e., A, B, or C) is to be identified by an approved testing agency. RB251 offers a simpler approach to improve Section R902.1 that does not incorporate the more significant reorganization offered by RB253.

Cost Impact: The net effect of the public comment and code change proposal will not increase or decrease the cost of construction

HIRSCHLER: This PC does not change the scope of the original proposal. This PC provides additional clarification to the original proposal without affecting the cost of construction.

PHILLIPS: The original proposal is not expected to affect cost of construction and the additional changes offered in this public comment do not affect technical requirements and therefore do not increase or decrease cost of construction.

Staff note: RB251-22, RB252-22 and RB253-22 address Section R902.1 (RB253-22 renumbers the section to be R903.1) in differing or conflicting ways. The voting membership is encouraged to make their intentions clear.

Public Comment# 3304

Public Comment 2:

Proponents: Mike Nugent, representing Building Code Action Committee (bcac@iccsafe.org) requests Disapprove

Commenter's Reason: While the proposal addresses the problem with the use of the term "roofing" instead of the code defined term of "roof assemblies", There are still serious issues and confusion as to:

- 1) What triggers the requirement for listing of the roof assembly? This further confuses the language and the intent. Listing provides the means for the building official to determine compliance with the requirements for achieving a fire classification rating.
- 2) This proposal does not address problem that the IRC is missing how fire-retardant-treated wood roof coverings are to be additionally in accordance with ASTM D2898.

This PC is submitted by the ICC Building Code Action Committee (BCAC).

BCAC was established by the ICC Board of Directors in July 2011 to pursue opportunities to improve and enhance assigned International Codes or portions thereof. In 2020 and 2021 the BCAC has held several virtual meetings open to any interested party. In addition, there were numerous virtual Working Group meetings for the current code development cycle, which included members of the committee as well as interested parties. Related documents and reports are posted on the BCAC website at <https://www.iccsafe.org/products-and-services/i-codes/code-development/cs/buildingcode-action-committee-bcac/>.

Cost Impact: The net effect of the public comment and code change proposal will not increase or decrease the cost of construction
No change to code.

Staff note: RB251-22, RB252-22 and RB253-22 address Section R902.1 (RB253-22 renumbers the section to be R903.1) in differing or conflicting

ways. The voting membership is encouraged to make their intentions clear.

Public Comment# 3219

Public Comment 3:

Proponents: David Tyree, representing American Wood Council (dtyree@awc.org); Jason Smart, representing American Wood Council (jsmart@awc.org) requests Disapprove

Commenter's Reason: The IRC defines *roof assembly* as a system designed to provide not only weather protection, but also resistance to design loads. Conversely, a *roof coving* may consist of a system of multiple components, but it does not necessarily constitute the entire "roof assembly," which always includes the structural elements of the roof that carry design loads.

ASTM E108, which is the standard used to classify *roof coverings* as either Class A, B or C, does not use the term *roof assembly*. The structural components of a roof assembly, such as framing members, are not required to be included within the system tested under ASTM E108. Roof coverings classified under ASTM E108 should not be referred to as "roof assemblies," except in cases where the tested system also includes the structural members of the roof.

Misapplication of the term *roof assembly* in the context of an ASTM E108-classified roof covering can create unnecessary confusion in demonstrating compliance with structural design provisions, as well as for roof assemblies that are required to achieve a fire-resistance rating based on an ASTM E119 exposure.

Cost Impact: The net effect of the public comment and code change proposal will not increase or decrease the cost of construction
No change to code.

Staff note: RB251-22, RB252-22 and RB253-22 address Section R902.1 (RB253-22 rennumbers the section to be R903.1) in differing or conflicting ways. The voting membership is encouraged to make their intentions clear.

Public Comment# 3126

RB252-22

IRC: R902.1

Proposed Change as Submitted

Proponents: Marcelo Hirschler, representing GBH International (mmh@gbhint.com)

2021 International Residential Code

Revise as follows:

R902.1 Roof covering materials- assemblies. Roofs shall be covered with materials as set forth in Section Sections R904 and or with roof coverings as set forth in Section R905. Class A, B or C ~~roofing~~ roof assemblies shall be installed in *jurisdictions* designated by law as requiring their use or where the edge of the roof is less than 3 feet (914 mm) from a *lot line*. Where Class A, B or C roof assemblies are required, they shall be tested in accordance with ASTM E108 or UL 790. Where required, the roof assembly shall be listed Class A, B and C roofing required by this section to be listed shall be tested in accordance with ASTM E108 or UL 790.

Exceptions:

1. Class A *roof assemblies* include those with coverings of brick, masonry and exposed concrete *roof deck*.
2. Class A *roof assemblies* include ferrous or copper shingles or sheets, metal sheets and shingles, clay or concrete roof tile, or slate installed on noncombustible decks.
3. Class A *roof assemblies* include minimum 16 ounces per square foot copper sheets installed over combustible decks.
4. Class A *roof assemblies* include slate installed over *underlayment* over combustible decks.

Reason: This proposal clarifies the section and makes the terminology consistent with chapter 2 definitions, with the subsections (all of which describe roof assemblies) and with sections 904 and 905.

Chapter 2 defines "roof assembly" as "A system designed to provide weather protection and resistance to design loads. The system consists of a roof covering and roof deck or a single component serving as both the roof covering and the roof deck. A roof assembly can include an underlayment, thermal barrier, ignition barrier, insulation or a vapor retarder. For the definition applicable in Chapter 11, see Section N1101.6." Chapter 2 does not define "roofing" or "roof covering material" but it defines "roof covering" as "The covering applied to the roof deck for weather resistance, fire classification or appearance."

The section contains the words "roof covering materials" and "roofing" as well as "roof assembly" (or actually its plural, roof assemblies).

The fire test in ASTM E108 or UL 790 must be conducted on the "roof assembly", meaning that it must be conducted on the entire roof covering system and not on the individual roofing material or roof covering (the chapter on definitions clarifies that "roof covering system" is the same as "roof assembly").

Cost Impact: The code change proposal will not increase or decrease the cost of construction. This proposal simply corrects the terminology for consistency.

RB252-22

Public Hearing Results

Committee Action:

As Submitted

Committee Reason: The committee determined that the proposal clarifies the section and makes the terminology consistent with Chapter 2 definitions for roof assemblies. The proposal does include roof coverings in the roof assembly definitions (Vote: 8-2)..

RB252-22

Individual Consideration Agenda

Public Comment 1:

IRC: R902.1

Proponents: Marcelo Hirschler, representing GBH International (mmh@gbhint.com) requests As Modified by Public Comment

Modify as follows:

2021 International Residential Code

R902.1 Roof assemblies. Roofs shall be covered with materials as set forth in Section R904 and ~~or~~ with roof coverings as set forth in Section R905. Class A, B or C roof assemblies shall be installed in *jurisdictions* designated by law as requiring their use or where the edge of the roof is less than 3 feet (914 mm) from a *lot line*. Where Class A, B or C roof assemblies are required, they shall be tested in accordance with ASTM E108 or UL 790. Where required by a jurisdiction, the roof assembly shall be listed and identified as to Class by an approved testing agency.

Exceptions:

1. Class A *roof assemblies* include those with coverings of brick, masonry and exposed concrete *roof deck*.
2. Class A *roof assemblies* include ferrous or copper shingles or sheets, metal sheets and shingles, clay or concrete roof tile, or slate installed on noncombustible decks.
3. Class A *roof assemblies* include minimum 16 ounces per square foot copper sheets installed over combustible decks.
4. Class A *roof assemblies* include slate installed over *underlayment* over combustible decks.

Commenter's Reason: The public comment clarifies that any material in a roof assembly must meet the requirements of section R904, which would appear to be appear to be optional with the language in the proposal as approved. It also clarifies that the testing has to be by an approved testing agency, for consistency.

Cost Impact: The net effect of the public comment and code change proposal will not increase or decrease the cost of construction. This PC does not change the scope of the original proposal. This PC provides additional clarification to the original proposal without affecting the cost of construction.

Staff note: RB251-22, RB252-22 and RB253-22 address Section R902.1 (RB253-22 renumbers the section to be R903.1) in differing or conflicting ways. The voting membership is encouraged to make their intentions clear.

Public Comment# 3301

Public Comment 2:

Proponents: Mike Nugent, representing Building Code Action Committee (bcac@iccsafe.org) requests Disapprove

Commenter's Reason: While the proposal addresses the problem with the use of the term "roofing" instead of the code defined term of "roof assemblies", There are still serious issues and confusion as to:

- 1) What triggers the requirement for listing of the roof assembly. This further confuses the language and the intent. Listing provides the means for the building official to determine compliance with the requirements for achieving a fire classification rating.
- 2) This proposal does not address problem that the IRC is missing how fire-retardant-treated wood roof coverings are to be additionally in accordance with ASTM D2898.
- 3) The covering of roofs needs to comply with both R904 and R905. By changing the word "and" to "or" in the first sentence completely alters the intent and applicability of those requirements. R904 provides general requirements that are applicable to all roofs.

This PC is submitted by the ICC Building Code Action Committee (BCAC).

BCAC was established by the ICC Board of Directors in July 2011 to pursue opportunities to improve and enhance assigned International Codes or portions thereof. In 2020 and 2021 the BCAC has held several virtual meetings open to any interested party. In addition, there were numerous virtual Working Group meetings for the current code development cycle, which included members of the committee as well as interested parties. Related documents and reports are posted on the BCAC website at <https://www.iccsafe.org/products-and-services/i-codes/code-development/cs/buildingcode-action-committee-bcac/>.

Cost Impact: The net effect of the public comment and code change proposal will not increase or decrease the cost of construction

No change to code.

Staff note: RB251-22, RB252-22 and RB253-22 address Section R902.1 (RB253-22 renumbers the section to be R903.1) in differing or conflicting ways. The voting membership is encouraged to make their intentions clear.

Public Comment# 3221

Public Comment 3:

Proponents: David Tyree, representing American Wood Council (dtyree@awc.org); Jason Smart, representing American Wood Council (jsmart@awc.org) requests Disapprove

Commenter's Reason: The IRC defines *roof assembly* as a system designed to provide not only weather protection, but also resistance to design loads. Conversely, a *roof coving* may consist of a system of multiple components, but it does not necessarily constitute the entire "roof assembly," which always includes the structural elements of the roof that carry design loads.

ASTM E108, which is the standard used to classify *roof coverings* as either Class A, B or C, does not use the term *roof assembly*. The structural components of a roof assembly, such as framing members, are not required to be included within the system tested under ASTM E108. Roof coverings classified under ASTM E108 should not be referred to as "roof assemblies," except in cases where the tested system also includes the structural members of the roof.

Misapplication of the term *roof assembly* in the context of an ASTM E108-classified roof covering can create unnecessary confusion in demonstrating compliance with structural design provisions, as well as for roof assemblies that are required to achieve a fire-resistance rating based on an ASTM E119 exposure.

Cost Impact: The net effect of the public comment and code change proposal will not increase or decrease the cost of construction
No change to code.

Staff note: RB251-22, RB252-22 and RB253-22 address Section R902.1 (RB253-22 renumbers the section to be R903.1) in differing or conflicting ways. The voting membership is encouraged to make their intentions clear.

Public Comment# 3139

RB253-22

IRC: R324.4.2, R324.5.2, R703.6.3, R806.4, SECTION R901, R901.1, R901.2 (New), SECTION R902, R902.1, R902.2, R902.3, R902.4, SECTION R903, R903.1, R903.2, R903.2 (New), R903.2.2, R903.3, R903.3 (New), R903.4, R903.4 (New), R903.4.1, R905.7.5, R905.8.6, R908.1

Proposed Change as Submitted

Proponents: Mike Nugent, representing Building Code Action Committee (bcac@iccsafe.org)

2021 International Residential Code

SECTION R901 GENERAL

R901.1 Scope. The provisions of this chapter shall govern the design, materials, construction and quality of *roof assemblies*.

Add new text as follows:

R901.2 Roof covering. Roofs shall be covered with materials as set forth in Sections R904 and R905.

Revise as follows:

~~SECTION R903- R902~~ WEATHER PROTECTION

~~**R903.1- R902.1 General.** *Roof decks* shall be covered with *approved* roof coverings secured to the building or structure in accordance with the provisions of this chapter. *Roof assemblies* shall be designed and installed in accordance with this code and the *approved* manufacturer's instructions such that the *roof assembly* shall serve to protect the building or structure.~~

~~**R903.2- R902.2 Flashing.** Flashings shall be installed in a manner that prevents moisture from entering the wall and roof through joints in copings, through moisture permeable materials and at intersections with parapet walls and other penetrations through the roof plane.~~

~~**R903.2.1- R902.2.1 Locations.** Flashings shall be installed at wall and roof intersections, wherever there is a change in roof slope or direction and around roof openings. A flashing shall be installed to divert the water away from where the eave of a sloped roof intersects a vertical sidewall. Where flashing is of metal, the metal shall be corrosion resistant with a thickness of not less than 0.019 inch (0.5 mm) (No. 26 galvanized sheet).~~

~~**R903.2.2- R902.2.2 Crickets and saddles.** A cricket or saddle shall be installed on the ridge side of any chimney or penetration more than 30 inches (762 mm) wide as measured perpendicular to the slope. Cricket or saddle coverings shall be sheet metal or of the same material as the roof covering.~~

~~**Exception:** *Unit skylights* installed in accordance with Section R308.6 and flashed in accordance with the manufacturer's instructions shall be permitted to be installed without a cricket or saddle.~~

~~**R903.3- R902.3 Coping.** Parapet walls shall be properly coped with noncombustible, weatherproof materials of a width not less than the thickness of the parapet wall.~~

~~**R903.4- R902.4 Roof drainage.** Unless roofs are sloped to drain over roof edges, roof drains shall be installed at each low point of the roof.~~

~~**R903.4.1- R902.4.1 Secondary (emergency overflow) drains or scuppers.** Where roof drains are required, secondary emergency overflow roof drains or *scuppers* shall be provided where the roof perimeter construction extends above the roof in such a manner that water will be entrapped if the primary drains allow buildup for any reason. Overflow drains having the same size as the roof drains shall be installed with the inlet flow line located 2 inches (51 mm) above the low point of the roof, or overflow *scuppers* having three times the size of the roof drains and having a minimum opening height of 4 inches (102 mm) shall be installed in the adjacent parapet walls with the inlet flow located 2 inches (51 mm) above the low point of the roof served. The installation and sizing of overflow drains, leaders and conductors shall comply with Sections 1106 and 1108 of the International Plumbing Code, as applicable.~~

~~Overflow drains shall discharge to an *approved* location and shall not be connected to roof drain lines.~~

~~SECTION R902- R903~~ FIRE CLASSIFICATION

~~**R902.1- R903.1 Roof covering materials- General.** ~~Roofs shall be covered with materials as set forth in Sections R904 and R905.~~ Fire classification of roof assemblies shall be in accordance with Section R903. Class A, B or C roof assemblies and roof coverings ~~roofing~~ shall be installed in *jurisdictions* designated by law as requiring their use or where the edge of the roof is less than 3 feet (914 mm) from a *lot line*. Class A, B and C roof assemblies and roof coverings ~~roofing~~ required to be listed by this section ~~to be listed~~ shall be tested in accordance with ASTM E108 or UL 790. In addition, fire-retardant-treated wood roof coverings shall be tested in accordance with ASTM D2898.~~

~~**Exception:**~~

EXCEPTIONS.

1. *Class A roof assemblies* include those with coverings of brick, masonry and exposed concrete roof deck.
2. *Class A roof assemblies* include ferrous or copper shingles or sheets, metal sheets and shingles, clay or concrete roof tile, or slate installed on noncombustible decks.
3. *Class A roof assemblies* include minimum 16 ounces per square foot copper sheets installed over combustible decks.
4. *Class A roof assemblies* include slate installed over *underlayment* over combustible decks.

Add new text as follows:

R903.2 Class A roof assemblies. Class A roof assemblies are those that are effective against severe fire test exposure. Class A roof assemblies and roof coverings shall be listed and identified as Class A by an approved testing agency. Class A roof assemblies shall be permitted for use in buildings or structures of all types of construction.

Exceptions:

1. Class A roof assemblies include those with coverings of brick, masonry or an exposed concrete roof deck.
2. Class A roof assemblies also include ferrous or copper shingles or sheets, metal sheets and shingles, clay or concrete roof tile or slate installed on noncombustible decks or ferrous, copper or metal sheets installed without a roof deck on noncombustible framing.
3. Class A roof assemblies include minimum 16 ounce per square foot (0.0416 kg/m²) copper sheets installed over combustible decks.
4. Class A roof assemblies include slate installed over ASTM D226, Type II underlayment over combustible decks or ASTM D4869, Type IV.

R903.3 Class B roof assemblies. Class B roof assemblies are those that are effective against moderate fire-test exposure. Class B roof assemblies and roof coverings shall be listed and identified as Class B by an approved testing agency.

R903.4 Class C roof assemblies.

Class C roof assemblies are those that are effective against light fire-test exposure. Class C roof assemblies and roof coverings shall be listed and identified as Class C by an approved testing agency.

Revise as follows:

R902.2- R903.5 Fire-retardant-treated shingles and shakes. Fire-retardant-treated wood shakes and shingles shall be treated by impregnation with chemicals by the full-cell vacuum-pressure process, in accordance with AWWA C1. Each bundle shall be marked to identify the manufactured unit and the manufacturer, and shall be *labeled* to identify the classification of the material in accordance with the testing required in Section ~~R902.4~~ R903.1, the treating company and the quality control agency.

R902.3- R903.6 Building-integrated photovoltaic (BIPV) product . *Building-integrated photovoltaic (BIPV) products* installed as the roof covering shall be tested, *listed* and *labeled* for fire classification in accordance with UL 7103. Class A, B or C BIPV products shall be installed where required in accordance with Section R903.1. ~~the edge of the roof is less than 3 feet (914 mm) from a lot line.~~

R902.4- R903.7 Rooftop-mounted photovoltaic (PV) panel systems. Rooftop-mounted *photovoltaic panel systems* installed on or above the roof covering shall be tested, *listed* and identified with a fire classification in accordance with UL 2703. Systems tested, listed and identified with a fire classification shall be installed in accordance with the manufacturer's installation instructions and their listing. Class A, B or C rooftop-mounted photovoltaic panel systems and modules shall be installed where required in accordance with Section R903.1 ~~in jurisdictions designated by law as requiring their use or where the edge of the roof is less than 3 feet (914 mm) from a lot line.~~

R324.4.2 Fire classification. Rooftop-mounted *photovoltaic panel systems* shall have the same fire classification as the *roof assembly* required in Section ~~R902- R903.~~

R324.5.2 Fire classification. *Building-integrated photovoltaic systems* shall have a fire classification in accordance with Section ~~R902.3- R903.3.~~

R703.6.3 Attachment. Wood shakes or shingles shall be installed according to this chapter and the manufacturer's instructions. Each shake or shingle shall be held in place by two stainless steel Type 304, Type 316 or hot-dipped zinc-coated galvanized corrosion-resistant box nails in accordance with Table R703.6.3(1) or R703.6.3(2). The hot-dipped zinc-coated galvanizing shall be in compliance with ASTM A153, 1.0 ounce per square foot. Alternatively, 16-gage stainless steel Type 304 or Type 316 staples with crown widths $\frac{7}{16}$ inch (11 mm) minimum, $\frac{3}{4}$ inch (19 mm) maximum, shall be used and the crown of the staple shall be placed parallel with the butt of the shake or the shingle. In single-course application, the fasteners shall be concealed by the course above and shall be driven approximately 1 inch (25 mm) above the butt line of the succeeding course and $\frac{3}{4}$ inch (19 mm) from the edge. In double-course applications, the exposed shake or shingle shall be face-nailed with two fasteners, driven approximately 2 inches (51 mm) above the butt line and $\frac{3}{4}$ inch (19 mm) from each edge. Fasteners installed within 15 miles (24 km) of saltwater coastal areas shall be stainless steel Type 316. Fasteners for fire-retardant-treated shakes or shingles in accordance with Section ~~R902 R903~~ or pressure-impregnated-preservative-treated shakes or shingles in accordance with AWWA U1 shall be stainless steel Type 316. The fasteners shall penetrate the sheathing or furring strips by not less than $\frac{1}{2}$ inch (13 mm) and shall not be overdriven. Fasteners for untreated (natural) and treated

products shall comply with ASTM F1667.

R806.4 Installation and weather protection. Ventilators shall be installed in accordance with manufacturer's instructions. Installation of ventilators in roof systems shall be in accordance with the requirements of Section ~~R903~~ R902. Installation of ventilators in wall systems shall be in accordance with the requirements of Section R703.1.

R905.7.5 Application. Wood shingles shall be installed in accordance with this chapter and the manufacturer's instructions. Wood shingles shall be laid with a side lap not less than 1½ inches (38 mm) between joints in courses, and two joints shall not be in direct alignment in any three adjacent courses. Spacing between shingles shall be not less than ¼ inch to ⅜ inch (6.4 mm to 9.5 mm). Weather exposure for wood shingles shall not exceed those set in Table R905.7.5(1). Fasteners for untreated (naturally durable) wood shingles shall be box nails in accordance with Table R905.7.5(2). Nails shall be stainless steel Type 304 or 316 or hot-dipped galvanized with a coating weight of ASTM A153 Class D (1.0 oz/ft²). Alternatively, two 16-gage stainless steel Type 304 or 316 staples with crown widths 7/16 inch (11.1 mm) minimum, ¾ inch (19.1 mm) maximum, shall be used. Fasteners installed within 15 miles (24 km) of saltwater coastal areas shall be stainless steel Type 316. Fasteners for fire-retardant-treated shingles in accordance with Section ~~R902~~ R903 or pressure-impregnated-preservative-treated shingles of naturally durable wood in accordance with AWP A U1 shall be stainless steel Type 316. Fasteners shall have a minimum penetration into the sheathing of ¾ inch (19.1 mm). For sheathing less than ¾ inch in (19.1 mm) thickness, each fastener shall penetrate through the sheathing. Wood shingles shall be attached to the roof with two fasteners per shingle, positioned in accordance with the manufacturer's installation instructions. Fastener packaging shall bear a *label* indicating the appropriate grade material or coating weight.

R905.8.6 Application. Wood shakes shall be installed in accordance with this chapter and the manufacturer's installation instructions. Wood shakes shall be laid with a side lap not less than 1½ inches (38 mm) between joints in adjacent courses. Spacing between shakes in the same course shall be ⅜ inch to ⅝ inch (9.5 mm to 15.9 mm) including tapersawn shakes. Weather exposures for wood shakes shall not exceed those set in Table R905.8.6. Fasteners for untreated (naturally durable) wood shakes shall be box nails in accordance with Table R905.7.5(2). Nails shall be stainless steel Type 304, or Type 316 or hot-dipped with a coating weight of ASTM A153 Class D (1.0 oz/ft²). Alternatively, two 16-gage Type 304 or Type 316 stainless steel staples, with crown widths 7/16 inch (11.1 mm) minimum, ¾ inch (19.1 mm) maximum, shall be used. Fasteners installed within 15 miles (24 km) of saltwater coastal areas shall be stainless steel Type 316. Wood shakes shall be attached to the roof with two fasteners per shake positioned in accordance with the manufacturer's installation instructions. Fasteners for fire-retardant-treated (as defined in Section ~~R902~~ R903) shakes or pressure-impregnated-preservative-treated shakes of *naturally durable wood* in accordance with AWP A U1 shall be stainless steel Type 316. Fasteners shall have a minimum penetration into the sheathing of ¾ inch (19.1 mm). Where the sheathing is less than ¾ inch (19.1 mm) thick, each fastener shall penetrate through the sheathing. Fastener packaging shall bear a *label* indicating the appropriate grade material or coating weight.

R908.1 General. Materials and methods of application used for recovering or replacing an existing roof covering shall comply with the requirements of Chapter 9.

Exceptions:

1. *Reroofing* shall not be required to meet the minimum design slope requirement of one-quarter unit vertical in 12 units horizontal (2-percent slope) in Section R905 for roofs that provide *positive roof drainage*.
2. For roofs that provide positive drainage, recovering or replacing an existing roof covering shall not require the secondary (emergency overflow) drains or *scuppers* of Section ~~R903.4.1~~ R902.4.1 to be added to an existing roof.

Reason: Reason: This proposal is intended to provide consistency and clarification within Section R902 Fire Classification. Section R902.1 has been revised several times since the initial 2000 IRC, and Sections R902.3 on BIPV and R902.4 on rooftop PV added recently. This proposal includes the below elements:

- 1) The first sentence of R902.1 "Roofs shall be covered with materials as set forth in Sections R904 and R905" is relocated to a new subsection under R901 using the same text. This requirement applies to all roofs, not only ones where a fire classification is required. While the first sentence of R903.1 under Weather Protection similarly requires all roof decks to be provided with approved roof coverings, it was felt best to state right from the start that roof assemblies are expected to have roof coverings, and that material and installation requirements can be found in R904 and R905 respectively.
- 2) Since R902.1 is generic to all roof covering materials and specifies when and where Class A, B or C roofing is required, it is not necessary to restate in R902.3 and R902.4 where such classifications are required. The redundant requirements for where BIPV products or rooftop PV systems are required to be Class A, B or C are deleted and replaced with references to R902.1.
- 3) The proposal moves Section R902 behind Section R903 Weather Protection. In addition to the fact Section R903.1 requires roof decks be provided with a roof covering, this will provide consistency with IBC Chapter 15 where Section 1505 Fire Classification follows Section 1503 Weather Protection and Section 1504 Performance Requirements.
- 4) The proposed revisions in section R902.1 old (R903.1 new) within this Section are in alignment with IBC Section 1505.1, and the actions taken on S1-21 from Group A.

- 5) The IRC is missing how fire-retardant-treated wood roof coverings are to be tested. Therefore, a sentence have been added to section R902.1 old (R903.1 new) states "fire-retardant-treated wood roof coverings shall be tested in accordance with ASTM D2898."
- 6) The exception in section R902.1 old (R903.1 new) are not correct as exceptions to R902.1 old (R903.1 new). These are exceptions to the different fire classifications of A, B, and C. Furthermore, these are not aligned with the conditions for these exceptions in IBC Section 1505.2.
- 7) Class A, B, and C have been added as R903.2, R903.3 and R903.4. This would align more appropriately with IBC Sections 1505.2, 1505.3, and 1505.4.
- 8) In the new section R903.2, exception #4, " ASTM D4869, Type IV" have been added based on the approved S2-21.
- 9) In section (R902.4 old) (R903.7 new), "installed in accordance with the manufacturer's installation instructions and their listing." have been added. Aligns with the wording in IBC Section 1505.910) In section (R902.4 old) (R903.7 new), "modules" have been deleted. This clarifies what has the fire classification. PV modules do not have any fire classification. Only the rooftop mounted PV panel systems do. If modules were left in, it would be very confusing and inaccurate.

This proposal is submitted by the ICC Building Code Action Committee (BCAC).

BCAC was established by the ICC Board of Directors in July 2011 to pursue opportunities to improve and enhance assigned International Codes or portions thereof. In 2020 and 2021 the BCAC has held several virtual meetings open to any interested party. In addition, there were numerous virtual Working Group meetings for the current code development cycle, which included members of the committee as well as interested parties. Related documents and reports are posted on the BCAC website at <https://www.iccsafe.org/products-and-services/i-codes/code-development/cs/building-code-action-committee-bcac/>.

Cost Impact: The code change proposal will not increase or decrease the cost of construction

This proposal is intended to provide editorial clarification to the fire classification requirements for roof coverings. No technical changes are intended.

RB253-22

Public Hearing Results

Committee Action:

Disapproved

Committee Reason: The committee decided that there is some confusion regarding roof assembly vs. roof covering. Therefore, the committee advised the proponent to look into incorporating some of the modifications proposed, including Hirschler 4 and 5 (Vote: 7-3).

RB253-22

Individual Consideration Agenda

Public Comment 1:

IRC: R903.1

Proponents: Mike Nugent, representing Building Code Action Committee (bcac@iccsafe.org) requests As Modified by Public Comment

Further modify as follows:

2021 International Residential Code

R903.1 General. Fire classification of roof assemblies shall be in accordance with Section R903. Class A, B or C roof assemblies ~~and roof coverings~~ shall be installed in *jurisdictions* designated by law as requiring their use or where the edge of the roof is less than 3 feet (914 mm) from a *lot line*. Class A, B and C roof assemblies ~~and roof coverings~~ required to be listed by this section, shall be tested in accordance with ASTM E108 or UL 790. In addition, fire-retardant-treated wood roof coverings shall be tested in accordance with ASTM D2898.

Commenter's Reason: As noted in the original reason statement for this proposal, the intent of RB253-22 is “to provide consistency and clarification with Section R902 Fire Classification.”

The clarifications needed are:

1. Relocating requirements for compliance with Sections R904 and R905 to the General requirements of the Chapter
2. Replacing “roofing” with the defined term “roof assemblies”
3. Identifying the Fire Classification is assigned to the roof assembly, as defined by code.
4. Identifying what Class A, B and C roofing is required by this section to be listed.
5. Requiring additional testing for fire-retardant-treated wood roof coverings that is missing from the IRC (but included in the IBC)
6. Clarifying the requirements for BIPV and rooftop-mounted PV panel systems to align properly with UL 7103 and UL 2703, respectively.

Although this proposal is comprehensive to clarify Section R902 Fire Classification for the code users, at the CAH, there were only two areas of discussion and confusion – what actually is assigned a fire classification (i.e. roof assemblies, roof coverings, or both) and what actually is intended to be listed. The BCAC addresses those two issues as below:

First issue: What actually is assigned a fire classification (i.e. roof assemblies, roof coverings, or both)?

This PC addresses this issue by removing the term “roof coverings” from the proposed Section R903.1 (Section R902.1 previously).

RB253-22 provides clarification for fire classification by utilizing the same wording used in Section 1505 of the International Building Code. What actually is assigned the fire classification of Class A, B, or C is the roof assembly, as tested in accordance with ASTM E108 or UL 790. The testing is performed on a roof assembly, as defined by the code.

Second issue: What actually is intended to be listed?

This issue is already addressed in the original proposal. Both the IBC and the IRC uses the same terminology (“required by this section to be listed”). In the IBC, there are three separate additional sections for Class A, B, and C, each of which clearly states that listing is required for each fire classification.

In addition, the four exceptions that appear in the existing Section R902.1 text are the same exceptions to IBC Section 1505.2 under Class A roof assemblies and are not required to be listed or tested to ASTM E108 or UL 790. Those exceptions have been correctly moved to the new Section R903.2 for Class A roof assemblies by this proposal.

The phrase “required by this section to be listed” infers that the intent of this section is to require the fire classification of roof assemblies to be listed, where fire classification is required, except for the four types of assemblies in the exceptions.

Cost Impact: The net effect of the public comment and code change proposal will not increase or decrease the cost of construction. There is no change to the original proposal intent. This PC addresses the issues brought up during CAH without affecting the construction cost.

Staff note: RB251-22, RB252-22 and RB253-22 address Section R902.1 (RB253-22 rennumbers the section to be R903.1) in differing or conflicting ways. The voting membership is encouraged to make their intentions clear.

Public Comment# 3222

Public Comment 2:

IRC: R901.2, R903.1, R903.2, R903.3, R903.4

Proponents: Marcelo Hirschler, representing GBH International (mmh@gbhint.com) requests As Modified by Public Comment

Modify as follows:

2021 International Residential Code

R901.2 Roof assemblies covering. Roofs shall be covered with materials as set forth in Sections ~~R904~~ and with roof coverings as set forth in

Section R905.

R903.1 General. Fire classification of roof assemblies shall be in accordance with Section R903. Class A, B or C roof assemblies ~~and roof coverings~~ shall be installed in *jurisdictions* designated by law as requiring their use or where the edge of the roof is less than 3 feet (914 mm) from a *lot line*. ~~Where Class A, B and C roof assemblies and roof coverings are required, to be listed by this section they shall be tested in accordance with ASTM E108 or UL 790. Where required by a jurisdiction, the roof assembly shall be listed and identified as to Class by an approved testing agency.~~ In addition, fire-retardant-treated wood roof coverings shall be tested in accordance with ASTM D2898.

R903.2 Class A roof assemblies. Class A roof assemblies are those that are effective against severe fire test exposure. Class A roof assemblies and roof coverings shall be ~~listed and~~ identified as Class A by an approved testing agency. Class A roof assemblies shall be permitted for use in buildings or structures of all types of construction.

Exceptions:

1. Class A roof assemblies include those with coverings of brick, masonry or an exposed concrete roof deck.
2. Class A roof assemblies also include ferrous or copper shingles or sheets, metal sheets and shingles, clay or concrete roof tile or slate installed on noncombustible decks or ferrous, copper or metal sheets installed without a roof deck on noncombustible framing.
3. Class A roof assemblies include minimum 16 ounce per square foot (0.0416 kg/m²) copper sheets installed over combustible decks.
4. Class A roof assemblies include slate installed over ASTM D226, Type II underlayment over combustible decks or ASTM D4869, Type IV.

R903.3 Class B roof assemblies. Class B roof assemblies are those that are effective against moderate fire-test exposure. Class B roof assemblies and roof coverings shall be ~~listed and~~ identified as Class B by an approved testing agency.

R903.4 Class C roof assemblies. Class C roof assemblies are those that are effective against light fire-test exposure. Class C roof assemblies and roof coverings shall be ~~listed and~~ identified as Class C by an approved testing agency.

Commenter's Reason: This public comment modifies a good proposal principally by eliminating the requirement that roof assemblies be listed in the IRC (even though they are required to be listed in the IBC) and making the language in (new) section R903.1 consistent with the language in (old) section R902.1. Roof assemblies are not required to be listed in the 2021 IRC. It is uncommon for materials to be required to be listed in the IRC because that would typically increase cost of the materials (as admitted in testimony during the committee hearings). The two other changes included in this public comment are clarifications, as follows.

1. Fire classifications must be done on roof assemblies and not on roof coverings
2. All materials on roofs need to meet the requirements for materials in section R904 as well as the requirements for roof coverings in section R905.

Cost Impact: The net effect of the public comment and code change proposal will not increase or decrease the cost of construction. The proposal itself would increase the cost of construction by adding the cost of listing roof assemblies. By eliminating that requirement, the proposal with this public comment is simply cleanup.

Staff note: RB251-22, RB252-22 and RB253-22 address Section R902.1 (RB253-22 rennumbers the section to be R903.1) in differing or conflicting ways. The voting membership is encouraged to make their intentions clear.

RB297-22

IRC: APPENDIX AJ, SECTION AJ101.1, AJ102.1, AJ102.2 (New), AJ104.1, AJ107.4 (New), AJ108.4, AJ109.4, AJ110.5 (New)

Proposed Change as Submitted

Proponents: Julie Furr, representing FEMA-ATC Seismic Code Support Committee (jfurr@rimkus.com); Kelly Cobeen, representing Federal Emergency Management Agency/Applied Technology Council - Seismic Code Support Committee (kcobeen@wje.com); Michael Mahoney, representing FEMA (mike.mahoney@fema.dhs.gov)

2021 International Residential Code

Revise as follows:

APPENDIX AJ EXISTING BUILDINGS ~~AND STRUCTURES~~

SECTION AJ101 PURPOSE AND INTENT

Revise as follows:

AJ101.1 General. The purpose of these provisions is to encourage the continued use or reuse of legally existing buildings ~~and structures~~. These provisions are intended to permit work in existing buildings that is consistent with the purpose of this code. Compliance with these provisions shall be deemed to meet the requirements of this code. Structural elements and systems shall comply with Section R102.7.1 and Chapter 3 through Chapter 10 of the *International Residential Code*.

SECTION AJ102 COMPLIANCE

Revise as follows:

AJ102.1 General. Regardless of the category of work being performed, the work shall not cause the ~~building structure~~ to become unsafe or adversely affect the performance of the building; shall not cause an existing mechanical or plumbing system to become unsafe, hazardous, insanitary or overloaded; and unless expressly permitted by these provisions, shall not make the building any less compliant with this code or to any previously *approved* alternative arrangements than it was before the work was undertaken.

Add new text as follows:

AJ102.2 Structural. Structural elements and systems that are altered, repaired, or replaced shall comply with Section R102.7.1 and the structural provisions of Chapter 3 through Chapter 10 of the *International Residential Code*. The work performed shall not cause the structure to become less compliant with the *International Residential Code* than it was before the work was undertaken.

SECTION AJ104 EVALUATION OF AN EXISTING BUILDING

Revise as follows:

AJ104.1 General. The *building official* shall have the authority to require an existing building to be investigated and evaluated by a *registered design professional* in the case of proposed reconstruction of any portion of a building. The evaluation shall determine the existence of any potential nonconformities to these provisions and Section R102.7.1 and structural provisions of the *International Residential Code*, and shall provide a basis for determining the impact of the proposed changes on the performance of the building. The evaluation shall use the following sources of information, as applicable:

1. Available documentation of the existing building.
 - 1.1. Field surveys.
 - 1.2. Tests (nondestructive and destructive).
 - 1.3. Laboratory analysis.

Exception: Detached one- or two-family dwellings that are not irregular buildings under Section R301.2.2.6 and are not undergoing an extensive reconstruction shall not be required to be evaluated.

SECTION AJ107 REPAIRS

Add new text as follows:

AJ107.4 Structural. Repaired structural elements and systems shall comply with Section R102.7.1 and the structural provisions of Chapter 3 through Chapter 10 of the *International Residential Code*.

SECTION AJ108 RENOVATIONS

Revise as follows:

AJ108.4 Structural. Structural elements and systems modified by the renovation shall comply with Section R102.7.1 and the structural provisions of Chapter 3 through Chapter 10 of the *International Residential Code*. Unreinforced masonry buildings located in Seismic Design Category D₂ or E shall have parapet bracing and wall anchors installed at the roofline whenever a *reroofing permit* is issued. Such parapet bracing and wall anchors shall be of an *approved design*.

SECTION AJ109 ALTERATIONS

Revise as follows:

AJ109.4 Structural. Altered structural elements and systems shall comply with Section R102.7.1 and the structural provisions of Chapter 3 through Chapter 10 of the *International Residential Code*. ~~The minimum design loads for the structure shall be the loads applicable at the time the building was constructed, provided that a dangerous condition is not created. Structural elements that are uncovered during the course of the alteration and that are found to be unsound or dangerous shall be made to comply with the applicable requirements of this code.~~

SECTION AJ110 RECONSTRUCTION

Add new text as follows:

AJ110.5 Structural. Reconstructed structural elements and systems shall comply with Section R102.7.1 and the structural provisions of Chapter 3 through Chapter 10 of the *International Residential Code* for new construction.

Reason: This proposal aligns the structural provisions of Appendix AJ with the main body of the IRC. Appendix AJ has not been updated to correlate with changes in the IRC and IEBC provisions that have occurred during recent code cycles. However, Section AJ101.1 states: *“Compliance with these provisions shall be deemed to meet the requirements of this code.”* Given both the limitations of the structural requirements outlined in Appendix AJ and the disconnect between the appendix and main body of the codes (IRC and IEBC), allowing this Appendix to be considered “deemed to comply” is dangerous with regard to the structure.

Cost Impact: The code change proposal will not increase or decrease the cost of construction. This proposal will not increase the cost of construction within the IRC, since the main body of the IRC is the default resource used given the present limitations of Appendix AJ.

RB297-22

Public Hearing Results

Committee Action:

As Modified

Committee Modification:

AJ101.1 General. The purpose of these provisions is to encourage the continued use or reuse of legally existing buildings. These provisions are intended to permit work in existing buildings that is consistent with the purpose of this code. Compliance with these provisions shall be deemed to meet the requirements of this code. Structural elements and systems shall comply with Section R102.7.1 and the provisions of this Appendix. ~~Chapter 3 through Chapter 10 of the *International Residential Code*.~~

AJ102.2 Structural. Structural elements and systems that are altered, repaired, or replaced shall comply with Section R102.7.1 and the structural provisions of this Appendix. ~~Chapter 3 through Chapter 10 of the *International Residential Code*.~~ The work performed shall not cause the structure

to become less compliant with the International Residential Code than it was before the work was undertaken.

AJ102.4 Structural. The minimum design loads for the structure shall be the loads applicable at the time the building was constructed. The minimum design loads for new structural components shall comply with the International Residential Code. Structural elements that are uncovered during the course of the alteration and that are found to be unsafe shall be repaired in accordance with Section R102.7.1.

AJ104.1 General. The *building official* shall have the authority to require an existing building to be investigated and evaluated by a *registered design professional* in the case of proposed reconstruction of any portion of a building. The evaluation shall determine the existence of any potential nonconformities to these provisions and Section R102.7.1 and structural provisions of this Appendix, the ~~International Residential Code~~, and shall provide a basis for determining the impact of the proposed changes on the performance of the building. The evaluation shall use the following sources of information, as applicable:

1. Available documentation of the existing building.
 - 1.1. Field surveys.
 - 1.2. Tests (nondestructive and destructive).
 - 1.3. Laboratory analysis.

Exception: Detached one- or two-family dwellings that are not irregular buildings under Section R301.2.2.6 and are not undergoing an extensive reconstruction shall not be required to be evaluated.

AJ107.4 Structural. Repaired structural elements and systems shall comply with Section R102.7.1 and the structural provisions of this Appendix, Chapter 3 through Chapter 10 of the ~~International Residential Code~~.

AJ108.4 Structural. Structural elements and systems modified by the renovation shall comply with Section R102.7.1 and the structural provisions of this Appendix, Chapter 3 through Chapter 10 of the ~~International Residential Code~~. Unreinforced masonry buildings located in Seismic Design Category D₂ or E shall have parapet bracing and wall anchors installed at the roofline whenever a *reroofing permit* is issued. Such parapet bracing and wall anchors shall be of an *approved* design.

AJ109.4 Structural. Altered structural elements and systems shall comply with Section R102.7.1 and the structural provisions of this Appendix, Chapter 3 through Chapter 10 of the ~~International Residential Code~~.

AJ110.5 Structural. Reconstructed structural elements and systems shall comply with Section R102.7.1 and the structural provisions of this Appendix, Chapter 3 through Chapter 10 of the ~~International Residential Code~~ for new construction.

Committee Reason: This proposal for the appendix for Existing Buildings is approved as modified. The modification provides an opportunity to use loads required at the time of construction on existing elements and new loads on new elements. The proposal is consistent with action previously taken and it fixes Section AJ108.4. There may need to be some correlation with Section AJ108.4 and previous actions. There were concern that removing the words "and structures" from the title removes some of the scoping from this provision. (Vote: 9-1)

RB297-22

Individual Consideration Agenda

Public Comment 1:

IRC: APPENDIX AJ, SECTION AJ101, AJ101.1, SECTION AJ102, AJ102.1, AJ102.2, AJ102.4, AJ108.4, AJ109.4

Proponents: Julie Furr, representing FEMA ATC Seismic Code Support Committee (jfurr@rimkus.com); Michael Mahoney, representing FEMA (mike.mahoney@fema.dhs.gov); Kelly Cobeen, representing Federal Emergency Management Agency/Applied Technology Council - Seismic Code Support Committee (kcobeen@wje.com) requests As Modified by Public Comment

Further modify as follows:

2021 International Residential Code

APPENDIX AJ EXISTING BUILDINGS AND STRUCTURES

SECTION AJ101

PURPOSE AND INTENT

AJ101.1 General. The purpose of these provisions is to encourage the continued use or reuse of legally existing buildings and structures. These provisions are intended to permit work in existing buildings that is consistent with the purpose of this code. ~~Compliance with these provisions shall be deemed to meet the requirements of this code.~~ Structural elements and systems shall comply with Section R102.7.1 and the provisions of this Appendix.

SECTION AJ102 COMPLIANCE

AJ102.1 General. Regardless of the category of work being performed, the work shall not cause the building or structure to become unsafe or adversely affect the performance of the building; shall not cause an existing mechanical or plumbing system to become unsafe, hazardous, insanitary or overloaded; and unless expressly permitted by these provisions, shall not make the building any less compliant with this code or to any previously *approved* alternative arrangements than it was before the work was undertaken.

AJ102.2 Structural. Structural elements and systems that are altered, repaired, or replaced shall comply with Section R102.7.1 and the structural provisions of this Appendix. The work performed shall not cause the structure to become less compliant with the International Residential Code than it was before the work was undertaken.

~~**AJ102.4**~~ **AJ102.2.1 Structural-Design loads.** The minimum design loads for the structure shall be the loads applicable at the time the building was constructed. The minimum design loads for new structural components shall comply with the International Residential Code. Structural elements that are uncovered during the course of the *alteration* and that are found to be unsafe shall be repaired in accordance with R102.7.1.

~~**AJ108.4 Structural.**~~ ~~Structural elements and systems modified by the renovation shall comply with Section R102.7.1 and the structural provisions of this Appendix.~~ Unreinforced masonry buildings located in Seismic Design Category D₂ or E shall have parapet bracing and wall anchors installed at the roofline whenever a *reroofing permit* is issued. Such parapet bracing and wall anchors shall be of an *approved* design.

~~**AJ109.4 Structural.**~~ ~~Altered structural elements and systems shall comply with Section R102.7.1 and the structural provisions of this Appendix.~~

Commenter's Reason: This public comment restores the references to "structure" that were removed from Appendix AJ with the original proposal and overlooked with the approved floor modifications.

AJ102.4 was added by the floor modification, however, the original intent was for this section to be a subset of AJ102.2. There should not be two sections with the same title.

AJ108.4 is deleted as a correlation with RB206-22 that was approved as modified and deals more unreinforced masonry parapets – with is currently the only structural item dealt with in this section on Renovations.

AJ109.4 is deleted as a correlation with RB162-22 that was approved as modified and deals more extensively with requirements for structural alterations to existing buildings.

In developing this public comment, we have collaborated with WABO and other interested parties. This public comment will work in conjunction with WABO's code change proposals and public comments. The link below is to a document showing how Appendix AJ is intended to look, if all of the related Appendix AJ proposals and public comments are approved. Where proposals and public comments operate on the same section, this combined document identifies which text is intended to control.

- https://www.cdpassess.com/public-comment/3132/27763/files/download/3682/FEMA_IRC%20APP%20J%20compiled%2007-21-22.docx
 - This shows what Appendix AJ would look like if these proposals were approved with floor modifications and public comments: RB7, RB162, RB163, RB206, and RB297

Cost Impact: The net effect of the public comment and code change proposal will not increase or decrease the cost of construction. Because the main body of the code is the default resource used given the present limitations of Appendix AJ, this proposal with floor modifications and public comments will not increase the cost of construction within the IRC. This is a long overdue cleanup that begins to align the Appendix provisions with the requirements of the main body of the code as they are frequently interpreted and used in the field.

Staff Analysis: Public comments to RB7, RB162, RB163, RB206 and RB297 addresses requirements for Appendix J in a different or contradicting manner. Approved proposal to Appendix J but without a public comment are RB99, RB296, RB298 and RB299. The membership is urged to make their intention clear with their actions on these public comments.

S70-22

IBC: TABLE 1604.5

Proposed Change as Submitted

Proponents: Homer Maiel, PE,CBO, representing ICC Tri-Chapter (Peninsula, East Bay, Monterey Bay) (hmaiel@gmail.com)

2021 International Building Code

Revise as follows:

TABLE 1604.5 RISK CATEGORY OF BUILDINGS AND OTHER STRUCTURES

Portions of table not shown remain unchanged.

RISK CATEGORY	NATURE OF OCCUPANCY
I	<p>Buildings and other structures that represent a low hazard to human life in the event of failure, including but not limited to: Agricultural facilities.</p> <p>Certain temporary facilities.</p> <p>Minor storage facilities.</p>
II	<p>Buildings and other structures except those listed in Risk Categories I, III and IV.</p>
III	<p>Buildings and other structures that represent a substantial hazard to human life in the event of failure, including but not limited to: Buildings and other structures whose primary occupancy is public assembly with an occupant load greater than 300.</p> <p>Buildings and other structures containing one or more public assembly spaces, each having an occupant load greater than 300 and a cumulative occupant load of the public assembly spaces of greater than 2,500.</p> <p>Buildings and other structures containing Group E or Group I-4 occupancies or combination thereof, with an occupant load greater than 250.</p> <p>Buildings and other structures containing educational occupancies for students above the 12th grade with an occupant load greater than 500.</p> <p>Group I-2, Condition 1 occupancies with 50 or more care recipients.</p> <p>Group I-2, Condition 2 occupancies not having emergency surgery or emergency treatment facilities.</p> <p>Group I-3 occupancies.</p> <p>Any other occupancy with an occupant load greater than 5,000.^a</p> <p>Power-generating stations, water treatment facilities for potable water, wastewater treatment facilities and other public utility facilities not included in Risk Category IV.</p> <p>Buildings and other structures not included in Risk Category IV containing quantities of toxic or explosive materials that: Exceed maximum allowable quantities per control area as given in Table 307.1(1) or 307.1(2) or per outdoor control area in accordance with the <i>International Fire Code</i>; and Are sufficient to pose a threat to the public if released.^b</p>
IV	<p>Buildings and other structures designated as essential facilities, including but not limited to: Group I-2, Condition 2 occupancies having emergency surgery or emergency treatment facilities.</p> <p>Ambulatory care facilities having emergency surgery or emergency treatment facilities.</p> <p>Fire, rescue, ambulance and police stations and emergency vehicle garages</p> <p>Designated earthquake, hurricane or other emergency shelters.</p> <p>Designated emergency preparedness, communications and operations centers and other facilities required for emergency response.</p> <p>Power-generating stations and other public utility facilities required as emergency backup facilities for <i>Risk Category IV</i> structures.</p> <p>Buildings and other structures containing quantities of highly toxic materials that: Exceed maximum allowable quantities per control area as given in Table 307.1(2) or per outdoor control area in accordance with the <i>International Fire Code</i>; and Are sufficient to pose a threat to the public if released.^b</p>

Aviation control towers, air traffic control centers and emergency aircraft hangars.

Buildings and other structures having critical national defense functions.

Water storage facilities and pump structures required to maintain water pressure for fire suppression.

Storm shelters in accordance with Section 423.1

- a. For purposes of occupant load calculation, occupancies required by Table 1004.5 to use gross floor area calculations shall be permitted to use net floor areas to determine the total occupant load.
- b. Where approved by the building official, the classification of buildings and other structures as Risk Category III or IV based on their quantities of toxic, highly toxic or explosive materials is permitted to be reduced to Risk Category II, provided that it can be demonstrated by a hazard assessment in accordance with Section 1.5.3 of ASCE 7 that a release of the toxic, highly toxic or explosive materials is not sufficient to pose a threat to the public.

Reason: This is simply cross referring a table to a section and a section to a table. In Section 423.1 there is mention of storm shelters to comply with Table 1604.5 as a Risk Cat. IV. However, table does not mention Section 423.1.

Cost Impact: The code change proposal will not increase or decrease the cost of construction
This is simply an editorial clarification; make a section and a table to reference each other.

S70-22

Public Hearing Results

Committee Action:

Disapproved

Committee Reason: Disapproved as the proposed Risk Category IV reference to section 423.1 for storm shelters could cause confusion. (Vote: 14-0)

S70-22

Individual Consideration Agenda

Public Comment 1:

IBC: TABLE 1604.5

Proponents: Homer Maiel, PE, CBO, representing ICC Tri-Chapter (hmaiel@gmail.com) requests As Modified by Public Comment

Modify as follows:

2021 International Building Code

TABLE 1604.5 RISK CATEGORY OF BUILDINGS AND OTHER STRUCTURES

RISK CATEGORY	NATURE OF OCCUPANCY
I	<p>Buildings and other structures that represent a low hazard to human life in the event of failure, including but not limited to: Agricultural facilities.</p> <p>Certain temporary facilities.</p> <p>Minor storage facilities.</p>
II	<p>Buildings and other structures except those listed in Risk Categories I, III and IV.</p>
III	<p>Buildings and other structures that represent a substantial hazard to human life in the event of failure, including but not limited to: Buildings and other structures whose primary occupancy is public assembly with an occupant load greater than 300.</p> <p>Buildings and other structures containing one or more public assembly spaces, each having an occupant load greater than 300 and a cumulative occupant load of the public assembly spaces of greater than 2,500.</p> <p>Buildings and other structures containing Group E or Group I-4 occupancies or combination thereof, with an occupant load greater than 250.</p> <p>Buildings and other structures containing educational occupancies for students above the 12th grade with an occupant load greater than 500.</p> <p>Group I-2, Condition 1 occupancies with 50 or more care recipients.</p> <p>Group I-2, Condition 2 occupancies not having emergency surgery or emergency treatment facilities.</p> <p>Group I-3 occupancies.</p> <p>Any other occupancy with an occupant load greater than 5,000.^a</p> <p>Power-generating stations, water treatment facilities for potable water, wastewater treatment facilities and other public utility facilities not included in Risk Category IV.</p> <p>Buildings and other structures not included in Risk Category IV containing quantities of toxic or explosive materials that: Exceed maximum allowable quantities per control area as given in Table 307.1(1) or 307.1(2) or per outdoor control area in accordance with the <i>International Fire Code</i>; and Are sufficient to pose a threat to the public if released.^b</p>
IV	<p>Buildings and other structures designated as essential facilities, including but not limited to: Group I-2, Condition 2 occupancies having emergency surgery or emergency treatment facilities.</p> <p>Ambulatory care facilities having emergency surgery or emergency treatment facilities.</p> <p>Fire, rescue, ambulance and police stations and emergency vehicle garages</p> <p>Designated earthquake, hurricane or other emergency shelters.</p> <p>Designated emergency preparedness, communications and operations centers and other facilities required for emergency response.</p> <p>Power-generating stations and other public utility facilities required as emergency backup facilities for <i>Risk Category IV</i> structures.</p> <p>Buildings and other structures containing quantities of highly toxic materials that: Exceed maximum allowable quantities per control area as given in Table 307.1(2) or per outdoor control area in accordance with the <i>International Fire Code</i>; and Are sufficient to pose a threat to the public if released.^b</p> <p>Aviation control towers, air traffic control centers and emergency aircraft hangars</p>

Aviation control towers, air traffic control centers and emergency aircraft hangars.

Buildings and other structures having critical national defense functions.

Water storage facilities and pump structures required to maintain water pressure for fire suppression.

Emergency Storm shelters in accordance with Section 423.1

- a. For purposes of occupant load calculation, occupancies required by Table 1004.5 to use gross floor area calculations shall be permitted to use net floor areas to determine the total occupant load.
- b. Where approved by the building official, the classification of buildings and other structures as Risk Category III or IV based on their quantities of toxic, highly toxic or explosive materials is permitted to be reduced to Risk Category II, provided that it can be demonstrated by a hazard assessment in accordance with Section 1.5.3 of ASCE 7 that a release of the toxic, highly toxic or explosive materials is not sufficient to pose a threat to the public.

Commenter's Reason: The public comment modification addresses the concern that the committee and the speakers had.

Cost Impact: The net effect of the public comment and code change proposal will not increase or decrease the cost of construction. This is simply an editorial clarification; make a section and a table to reference each other.

S99-22

IBC: SECTION 106, [A] 106.1, [A] 106.2, [A] 106.3, 1607.8.5

Proposed Change as Submitted

Proponents: Mike Nugent, representing Building Code Action Committee (bcac@iccsafe.org)

2021 International Building Code

Delete without substitution:

SECTION 106 FLOOR AND ROOF DESIGN LOADS

~~**[A] 106.1 Live loads posted.** In commercial or industrial buildings, for each floor or portion thereof designed for *live loads* exceeding 50 psf (2.40 kN/m²), such design *live loads* shall be conspicuously posted by the owner or the owner's authorized agent in that part of each story in which they apply, using durable signs. It shall be unlawful to remove or deface such notices.~~

~~**[A] 106.2 Issuance of certificate of occupancy.** A certificate of occupancy required by Section 111 shall not be issued until the floor load signs, required by Section 106.1, have been installed.~~

~~**[A] 106.3 Restrictions on loading.** It shall be unlawful to place, or cause or permit to be placed, on any floor or roof of a building, structure or portion thereof, a *load* greater than is permitted by this code.~~

Revise as follows:

1607.8.5 Posting. The maximum weight of vehicles allowed into or on a garage or other structure shall be posted on a durable sign in a readily visible location at the vehicle entrance of the building or other approved location by the owner or the owner's authorized agent in accordance with Section 106.1.

Reason: This proposal addresses the concerns expressed during testimony on a similar change last cycle. S52-19 attempted to move this signage requirement back to Chapter 16. This section was moved to the administrative provisions from structural by S48-07/08. The structural committee felt that this sign did not belong with the loading provisions in Chapter 16. There was testimony stating that the signage for live loads exceeding 50 pounds was an erroneous requirement. Signage requirements do not belong in the administrative provisions and none are found in any of the Administrative requirements in any of the other codes. Therefore, this proposal to delete the sign that was considered ineffective out of Chapter 1, and add a clarification of the requirements for the vehicle loading in Section 107.7.5 where it currently exists.

This proposal is submitted by the ICC Building Code Action Committee (BCAC).

BCAC was established by the ICC Board of Directors in July 2011 to pursue opportunities to improve and enhance assigned International Codes or portions thereof. In 2020 and 2021 the BCAC has held several virtual meetings open to any interested party. In addition, there were numerous virtual Working Group meetings for the current code development cycle, which included members of the committee as well as interested parties. Related documents and reports are posted on the BCAC website at <https://www.iccsafe.org/products-and-services/i-codes/code-development/cs/building-code-action-committee-bcac/>.

Cost Impact: The code change proposal will decrease the cost of construction. Eliminates signage in some areas.

S99-22

Public Hearing Results

Committee Action:

Disapproved

Committee Reason: Disapproved as the committee emphasized that the code should stay as is as the current provision for posting of live loads is appropriate. The committee expressed the proposal had merit in concept as the 50 psf trigger could be considered too low. (Vote: 9-4)

S99-22

Individual Consideration Agenda

Public Comment 1:

IBC: SECTION 106, [A] 106.1, [A] 106.2, [A] 106.3, 1607.8.5

Proponents: Mike Nugent, representing Building Code Action Committee (bcac@iccsafe.org) requests As Modified by Public Comment

Replace as follows:

2021 International Building Code

SECTION 106 FLOOR AND ROOF DESIGN LOADS

~~[A] 106.1-1607.3.1 Live loads posted.~~ In commercial or industrial buildings—manufacturing, storage warehouses and stores, for each floor or portion thereof designed for *live loads* exceeding the live loads in Table 1607.1 ~~50 psf (2.40 kN/m²)~~, such design *live loads* shall be conspicuously posted by the *owner* or the owner's authorized agent in that part of each *story* in which they apply, using durable signs. It shall be unlawful to remove or deface such notices.

~~[A] 106.2 Issuance of certificate of occupancy.~~ A certificate of occupancy required by Section 111 shall not be issued until the floor load signs, required by Section 106.1, have been installed.

~~[A] 106.3 Restrictions on loading.~~ It shall be unlawful to place, or cause or permit to be placed, on any floor or roof of a building, structure or portion thereof, a *load* greater than is permitted by this code.

~~1607.8.5 Posting.~~ The maximum weight of vehicles allowed into or on a garage or other structure shall be posted on a durable sign in a readily visible location at the vehicle entrance of the building or other approved location by the owner or the owner's authorized agent in accordance with Section 106.1.

Commenter's Reason: The text as currently written is unreasonable and unenforceable.

Section 106 - Chapter 1 is an administrative chapter. Signage requirements are not an administrative item. These signage requirement should be located with the loading requirements to be consistent with the code - examples include - signage for gas detection alarms (916.9) under gas detection systems (916); occupant load posting (1004.9) with occupant loads (1004); area of refuge and two-way communication requirements (1009.9) with accessible means of egress (1009); stairway identification signage (1023.9) in exit stairways (1023); exit signs (1013) are located with exit requirements in Chapter 10; toilet room signage (2902.4) in minimum plumbing facilities (2902); elevator signage (3002.3) with the elevator provisions (3002), and heavy vehicle loading signage (1607.8.5) are are located in Heavy vehicle loads (1607.8).

Section 106.1 - Table 1607.1 does not have 'commercial' or 'industrial' buildings listed, so it is not clear where the signage is required. The weight requirement of "exceeding 50 lbs" would literally require this signage in all spaces for listed in Table 1607.1 for Item 21 , Manufacturing(125/250 lbs); Item 33, Storage warehouses(125/250 lbs); and Item 34, Stores (75, 100, 125 lbs).

The proposed wording is specific for occupancies or uses listed in Table 1607.1 and is only required where the design load is higher than the minimum. This section is relocated to the requirements for uniform live loads in the code.

Section 106.2 - Signage requirements should not be tied to receiving a certificate of occupancy.

Section 106.3 - This is unenforceable. Making sure the loading in a spaces is not exceeded is an operational issue, not a building code issue.

Section 1607.8.5 - The proposed language removes the reference to Section 106 and provides more specific information for the required signage.

Cost Impact: The net effect of the public comment and code change proposal will not increase or decrease the cost of construction This technically is a reduction in the signage requirements, but it is our understanding that this is not currently being enforced. This is not a change to the technical requirements.

S134-22

IBC: SECTION 1616 (New), 1616.1 (New)

Proposed Change as Submitted

Proponents: Mike Nugent, representing Building Code Action Committee (bcac@iccsafe.org)

2021 International Building Code

Add new text as follows:

SECTION 1616 FIRE LOADS

1616.1 General. Where the structural fire protection of structural elements is designed considering system-level behavior or realistic fire exposures, the design shall be in accordance with ASCE 7. Where the structural fire protection is designed per this section, all other provisions of Chapter 7 shall apply.

Reason: American Society of Civil Engineers/Structural Engineering Institute (ASCE/SEI) has developed industry consensus on performance-based structural fire design within the ASCE/SEI 7 standard [1] as demonstrated in their freely-available ASCE/SEI Design Guide (Performance-Based Structural Fire Design: Exemplar Designs of Four Regionally Diverse Buildings using ASCE 7-16, Appendix E) [2]. For the first time in U.S. practice, this standard establishes the process that enables designers to upgrade structures (e.g., structural connections) to be intrinsically safer to fire effects (e.g., restrained thermal expansion/contraction and large deflections) in order to better protect building occupants and firefighters from structural collapse due to uncontrolled fire events. Also, ASCE/SEI 7 Appendix E works within the greater ASCE/SEI 7 context which is important to ensure that fire effects are analyzed in a similar fashion as other structural loads (e.g., wind and seismic). Notably, ASCE/SEI 7 Appendix E Section E.3 requires for a structural fire design to comply with the requirements of ASCE/SEI 7 Section 1.3.1.3, which details peer review requirements among other structural engineering aspects. Lastly, the standard is structured to formally integrate building officials into the design process in a similar manner as performance-based structural engineering is conducted for other design hazards (e.g., blast, seismic, and wind). In summary, this code change proposal adds the appropriate reference to the ASCE/SEI 7 standard for performance-based structural fire design. Importantly, ASCE/SEI 7 Appendix E Appendix E provides material-neutral and critical overarching requirements. This proposal is submitted by the ICC Building Code Action Committee (BCAC).

BCAC was established by the ICC Board of Directors in July 2011 to pursue opportunities to improve and enhance assigned International Codes or portions thereof. In 2020 and 2021 the BCAC has held several virtual meetings open to any interested party. In addition, there were numerous virtual Working Group meetings for the current code development cycle, which included members of the committee as well as interested parties. Related documents and reports are posted on the BCAC website at <https://www.iccsafe.org/products-and-services/i-codes/code-development/cs/building-code-action-committee-bcac/>.

<https://www.cdpassess.com/proposal/8203/24809/files/download/2858/>
<https://www.cdpassess.com/proposal/8203/24809/files/download/2840/>
<https://www.cdpassess.com/proposal/8203/24809/files/download/2839/>

Bibliography: [1] ASCE/SEI 7: Minimum Design Loads and Associated Criteria for Buildings and Other Structures, Appendix E: Performance-Based Design Procedures for Fire Effects on Structures, American Society of Civil Engineers: Structural Engineering Institute, 2016
[2] ASCE/SEI Performance-Based Structural Fire Design: Exemplar Designs of Four Regionally Diverse Buildings using ASCE 7-16, Appendix E, American Society of Civil Engineers: Structural Engineering Institute and Charles Pankow Foundation, 2020 <
<https://ascelibrary.org/doi/book/10.1061/9780784482698> >.

The following attachment (free/open source) per Reference [1] and [2]: <https://eshare.element.com/url/3udcsdqruhpdngk>

Also, the following link where the Design Guide can be freely viewed or downloaded (simply click "PDF"): [Performance-Based Structural Fire Design | Books \(ascelibrary.org\)](https://ascelibrary.org/doi/book/10.1061/9780784482698)

Cost Impact: The code change proposal will not increase or decrease the cost of construction
The proposed code change would have no direct impact on construction costs since alternative methods are already being conducted in practice and the performance-based structural fire design procedures in ASCE/SEI 7 represent current industry best practices.

Public Hearing Results

Committee Action:

Disapproved

Committee Reason: Disapproved as performance based design is already allowed in the code. The proposal needs to be reworded to add clarity. The title of the proposed Section 1616, 'fire loads', is the not the common term used. (Vote: 14-0)

S134-22

Individual Consideration Agenda

Public Comment 1:

IBC: SECTION 1617 (New), 1617.1 (New)

Proponents: Mike Nugent, representing Building Code Action Committee (bcac@icc-safe.org) requests As Modified by Public Comment

Replace as follows:

2021 International Building Code

SECTION 1617 **FIRE-INDUCED EFFECTS**

1617.1 General. Primary structural frame and secondary structural members designed for fire-induced effects in accordance with ASCE/SEI 7 Section 1.3.1.3 are permitted as an alternative method to meet the fire-resistance requirements of those structural members.

Commenter's Reason: The main goal of this proposal and the PC is to permit the design of structures to a level of reliability for fire-induced effects which is consistent with other hazards such as wind and seismic.

This public comment is meant to address Group B committee code action hearing by:

- 1) The title has been revised to prevent a conflict with terminology used in NFPA 557.
- 2) The following undefined terms have been removed and replaced with proper terminology: "structural elements," "structural fire protection," "system-level behavior," and "realistic fire exposures." Notably, reference to "primary structural frame" and "secondary structural members" upholds the intent of IBC 707.5.1, and bearing walls are intentionally excluded from the scope of this proposal.
- 3) A reference to fundamental structural engineering requirements contained in ASCE/SEI 7 Section 1.3.1.3 has been added to permit methods other than that contained in ASCE/SEI 7 Appendix E, which also addresses comments pertaining to circular referencing.
- 4) It was suggested that this proposal belongs in the International Performance Code. However, this proposal aims to extend structural design provisions to fire-induced effects which belongs in IBC Chapter 16. This is consistent with other IBC provisions that are not prescriptive (e.g., structural design provisions, rational smoke control design provisions, firewall design provisions, and others). Notably, the IBC currently permits performance-based structural design in accordance with ASCE/SEI 7 for tsunamis (ASCE/SEI 7 Sections 6.8.3.5.2.1 and 6.12.3), snow (ASCE/SEI 7 Section 7.14), seismic (ASCE/SEI 7 Section 12.2.1), wind (ASCE/SEI 7 Section 26.1.3) and tornado (ASCE/SEI 7 Section 32.1.3) directly via the applicable references in IBC Chapter 16 to ASCE/SEI 7 for the given load.

Cost Impact: The net effect of the public comment and code change proposal will not increase or decrease the cost of construction. The proposed code change would have no direct impact on construction costs. Structural design procedures in ASCE/SEI 7 represent current industry best practices, whether it pertains to wind, seismic, tsunami, or in this case, fire-induced effects.

Public Comment# 3097

S164-22

IBC: 1809.7, TABLE 1809.7, 1809.8, 1809.9

Proposed Change as Submitted

Proponents: Mike Nugent, representing Building Code Action Committee (bcac@iccsafe.org)

2021 International Building Code

Revise as follows:

1809.7 Prescriptive footings for light-frame construction. Where a specific design is not provided, concrete or masonry-unit footings supporting walls of *light-frame construction* shall be permitted to be designed in accordance with Table 1809.7. The *light-frame construction* supported by these footings shall comply with all of the following:

1. The light frame construction shall be designed in accordance with Section 2211.1.2, 2308, or 2309.
2. The light frame construction shall not exceed the limitations specified in Section 2308.2.
3. Floor and roof framing tributary width shall not exceed 16 feet (4877 mm), with an additional maximum roof overhang of 2 feet (610 mm).
4. The soil shall not be expansive and shall have a minimum allowable vertical bearing pressure of 1,500 psf (71.8 kN/m²).

TABLE 1809.7 PRESCRIPTIVE FOOTINGS SUPPORTING WALLS OF LIGHT-FRAME CONSTRUCTION^{a, b, c, d, e, f}

NUMBER OF FLOORS AND ROOFS SUPPORTED BY THE FOOTING ^f	WIDTH OF FOOTING (inches)	THICKNESS OF FOOTING (inches)
1	12	6
2	15	6
3	18 23	8 ^g

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm.

- a. Depth of footings shall be in accordance with Section 1809.4.
- b. The ground under the floor shall be permitted to be excavated to the elevation of the top of the footing.
- c. Interior stud-bearing walls shall be permitted to be supported by isolated footings. The footing width and length shall be twice the width shown in this table, and footings shall be spaced not more than 6 feet on center.
- d. See Section 1905 for additional requirements for concrete footings of structures assigned to Seismic Design Category C, D, E or F.
- e. For thickness of foundation walls, see Section 1807.1.6.
- f. ~~Footings shall be permitted to support a roof in addition to the stipulated number of floors. Footings supporting roof only shall be as required for supporting one floor. Footing projections shall not exceed the thickness of the footing.~~
- g. ~~Plain concrete footings for Group R-3 occupancies shall be permitted to be 6 inches thick.~~

1809.8 Plain concrete footings. The edge thickness of plain concrete footings supporting walls ~~of other than light-frame construction~~ shall be not less than 8 inches (203 mm) where placed on soil or rock.

Exception-Exceptions:

1. For plain concrete footings supporting Group R-3 occupancies, the edge thickness is permitted to be 6 inches (152 mm), provided that the footing does not extend beyond a distance greater than the thickness of the footing on either side of the supported wall.
2. The edge thickness of plain concrete footings shall be permitted to be designed in accordance with Section 1809.7.

1809.9 Masonry-unit footings. The design, materials and construction of masonry-unit footings shall comply with Sections 1809.9.1 and 1809.9.2, and the provisions of Chapter 21.

Exception: Where a specific design is not provided, masonry-unit footings shall be permitted to be designed in accordance with Section 1809.7 supporting walls of light-frame construction shall be permitted to be designed in accordance with Table 1809.7.

Reason: *Light-frame construction* is only defined by the repetitive nature of its structural elements and has no tie to loading. This footing table is intended to only be applied to lightly loaded prescriptive construction, but the wording of the section currently allows any type of *light-frame construction*.

There are many buildings with very heavy foundation loads that meet the definition of *light-frame construction* and are not appropriate to place on the prescriptive foundations in Table 1809.7. This is also true with highly loaded shear walls. This proposal clarifies that the intent of these prescriptive provisions is tied with conventional-similar light-frame construction of Section 2308.

The limitations placed on these footings are taken from the limitations of *conventional light-frame construction* but also includes the tributary widths that are used in the IRC prescriptive footing tables. These limitations are necessary as AWC's WFCM and AISI's S230 allow higher snow load, wind load, and seismic design categories than are present in *conventional light-frame construction*. Additionally, no identified tributary width currently exists for the use of this table.

This table's ability to be used with a roof in addition to the number of floors being supported is removed as when calculating the foundations - it was found not to conform to code limits for soil bearing. The similar table that existed in the 2012 IRC and its previous versions limited the number of stories of the building – not the number of floors supported. This change reduces the table from being able to support a 4-story building to a 3-story building, which aligns with the 2012 IRC foundation table as well as the conventional light-frame construction limitations. The only additional change needed to make the table work was for the width that supports a three-story building and the change aligns with the 2012 IRC footing table.

Section 1808.6 would still be applicable to expansive soils, so this table should not apply to those soils. However, other questionable soil will require a geotechnical investigation where the allowable vertical foundation bearing pressure could be determined to be at least 1,500psf to use this table.

The changes to 1809.8 and 1809.9 are necessary to invoke the same limitations as the base section where masonry and plain concrete footings are used.

The restriction of the footing projection thickness is taken from IRC limitations of the same thing.

This proposal is submitted by the ICC Building Code Action Committee (BCAC).

BCAC was established by the ICC Board of Directors in July 2011 to pursue opportunities to improve and enhance assigned International Codes or portions thereof. In 2020 and 2021 the BCAC has held several virtual meetings open to any interested party. In addition, there were numerous virtual Working Group meetings for the current code development cycle, which included members of the committee as well as interested parties. Related documents and reports are posted on the BCAC website at <https://www.iccsafe.org/products-and-services/i-codes/code-development/cs/building-code-action-committee-bcac/>.

Cost Impact: The code change proposal will increase the cost of construction

This proposal clarifies that the intent of the table is only to be applied to **lightly loaded** prescriptive construction, not for any type of *light-frame construction as stated in the 2021 IBC*. *Light-frame construction* is defined by the repetitive nature of its structural elements and has no tie to loading.

Clarifying the table limitations will ensure the table is not used for larger, more heavily-loaded light-frame structures that would overload the tabulated footing sizes, or in high-wind and high-seismic conditions where footings supporting the lateral force-resisting system need to be designed for such forces.

This code change proposal will increase the cost of construction by requiring non-prescriptive design of footings supporting structures that do not meet the clarified limitations.

S164-22

Public Hearing Results

Committee Action:

Disapproved

Committee Reason: Disapproved as the proposal as worded is confusing and needs rewording for clarity. (Vote: 10-4)

S164-22

Individual Consideration Agenda

Public Comment 1:

IBC: 1809.7, TABLE 1809.7, 1809.8, 1809.9

Proponents: Mike Nugent, representing Building Code Action Committee (bcac@iccsafe.org) requests As Modified by Public Comment

Modify as follows:

2021 International Building Code

1809.7 Prescriptive footings for light-frame construction. Where a specific design is not provided, concrete or masonry-unit footings supporting walls of *light-frame construction* shall be permitted to be designed in accordance with Table 1809.7. The *light-frame construction* supported by these footings shall comply with all of the following:

1. The light frame construction shall be ~~designed~~ in accordance with Section 2211.1.2, 2308, or 2309.
2. ~~The light frame construction shall not exceed the limitations specified in Section 2308.2.~~
2. Maximum floor-to-floor height shall not exceed 11 feet, 7 inches (3531 mm).
3. Average dead load shall not exceed 15 psf (718 N/m²) for combined roof and ceiling, exterior walls, floors, and partitions.
4. Live loads shall not exceed 40 psf (1916 N/m²) for floors.

5. Ground snow loads shall not exceed 50 psf (2395 N/m²).
6. Basic design *wind speed* shall not exceed 130 miles per hour (57 m/s).
7. The *Seismic Design Category* is A or B.
8. The *risk category* is I or II.
9. Floor and roof framing tributary width shall not exceed 16 feet (4877 mm), with an additional maximum roof overhang of 2 feet (610 mm).
4. ~~The soil shall not be expansive and shall have a minimum allowable vertical bearing pressure of 1,500 psf (71.8 kN/m²).~~

TABLE 1809.7 PRESCRIPTIVE FOOTINGS SUPPORTING WALLS OF LIGHT-FRAME CONSTRUCTION^{a, b, c, d, e, f}

NUMBER OF FLOORS AND ROOFS SUPPORTED BY THE FOOTING	WIDTH OF FOOTING (inches)	THICKNESS OF FOOTING (inches)
1- story^d	12	6
2-story^d	15	6
3-story^d	23	8

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm.

- a. Depth of footings shall be in accordance with Section 1809.4.
- b. The ground under the floor shall be permitted to be excavated to the elevation of the top of the footing.
- c. Interior stud-bearing walls shall be permitted to be supported by isolated footings. The footing width and length shall be twice the width shown in this table, and footings shall be spaced not more than 6 feet on center.
- d. See Section 1905 for additional requirements for concrete footings of structures assigned to Seismic Design Category C, D, E or F.
- e. For thickness of foundation walls, see Section 1807.1.6.
- f. Footing projections shall not exceed the thickness of the footing.
- g. Mezzanines and equipment platforms that are supported by these footings shall be considered an additional story only when determining these minimum footing sizes.

1809.8 Plain concrete footings. The edge thickness of plain concrete footings supporting walls shall be not less than 8 inches (203 mm) where placed on soil or rock.

Exceptions:

1. For plain concrete footings supporting Group R-3 occupancies, the edge thickness is permitted to be 6 inches (152 mm), provided that the footing does not extend beyond a distance greater than the thickness of the footing on either side of the supported wall.
2. The edge thickness of plain concrete footings shall be permitted to be designed in accordance with Section 1809.7.

1809.9 Masonry-unit footings. The design, materials and construction of masonry-unit footings shall comply with Sections 1809.9.1 and 1809.9.2, and the provisions of Chapter 21.

Exception: Where a specific design is not provided, masonry-unit footings shall be permitted to be designed in accordance with Section 1809.7 .

Commenter's Reason: The reasons expressed in the original proposal are still the same and the intent is not changing, but this public comment is attempting to clarify the provisions based on feedback received at the Committee Action Hearings by:

- 1) There was confusion about the reference to section 2308.2 as this table also applies to the footings supporting cold-formed steel light-frame construction walls. This PC restates the limitation to avoid any confusion for the code users.
- 2) There was a concern that the word "design" in the first item could be misunderstood as an engineer needed to be involved. That is not the case. This PC deletes the word "design" from the first item as there.
- 3) There was concern expressed by the committee that the wording of the number of floors and roofs supported by the footing would impact platform framed buildings inappropriately. To address this concern the wording describing the numbers of stories of the building has been changed to align with the wording seen in the 2012 IRC Table R403.1.
- 4) A footnote g is added to the stories column to clarify that although not a story, mezzanines and equipment platforms that load these footings should be considered as stories in order to capture the load that they will impart to these footings.
- 5) Additionally, there was concern that the provisions stating that the soil shall not be expansive and shall have a minimum bearing capacity would require a geotechnical investigation. This is not the intent and the deletion of this limitation keeps the minimums present elsewhere in the code, so this limitation does not need to be restated here.
- 6) Finally, There was confusion during the previous hearings that the values of tributary width were not based on anything. This is not the case, the tributary width seen in this proposal is the same value used to develop the IRC footing tables. The footing sizes in the IRC are based on 18 feet of tributary roof width and 16 feet of tributary floor width as directly stated in the commentary to those tables.

Cost Impact: The net effect of the public comment and code change proposal will increase the cost of construction. This public comment makes no technical changes to code change proposal S164-22, but simply places the limitations within this section and it addresses confusing language brought up by the structural committee.

This proposal clarifies that the intent of the table is only to be applied to **lightly loaded** prescriptive construction, not for any type of *light-frame construction as stated in the 2021 IBC*. *Light-frame construction* is defined by the repetitive nature of its structural elements and has no tie to loading. *The cost of construction will be impacted as below:*

1) *No increase in cost: In most cases where the intent of the table has already been followed, there will not be an increase in construction cost.*

2) *Could cause an increase in cost: Where the code requirements may have been misused for larger, more heavily-loaded light-frame structures that would overload the tabulated footing sizes, or in high-wind and high-seismic conditions where footings supporting the lateral force-resisting system need to be designed for such forces.*

Clarifying the table limitations will cause some of the previously misused conditions to be outside the scope of the prescriptive design of the table.

S173-22

IBC: 1901.2, SECTION 1907, 1907.1 (New), 1907.2 (New), 1907.1

Proposed Change as Submitted

Proponents: Mike Nugent, representing Building Code Action Committee (bcac@iccsafe.org); Stephen Szoke, representing American Concrete Institute (steve.szoke@concrete.org)

2021 International Building Code

Revise as follows:

1901.2 Plain and reinforced concrete. Structural concrete shall be designed and constructed in accordance with the requirements of this chapter and ACI 318 as amended in Section 1905 of this code. ~~Except for the provisions of Sections 1904 and 1907, the design and construction of slabs on grade shall not be governed by this chapter unless they transmit vertical loads or lateral forces from other parts of the structure to the soil.~~

SECTION 1907

MINIMUM SLAB PROVISIONS – SLABS-ON-GROUND

Add new text as follows:

1907.1 General. Non-structural slabs-on-ground shall comply with Section 1904 and this Section. Structural slabs-on-ground shall comply with all applicable provisions of this Chapter. Slabs-on-ground shall be considered structural where designed to one of the following:

1. Transmit loads or resist lateral forces from other parts of the structure to the soil.
2. Transmit loads or resist lateral forces from other parts of the structure to foundations
3. Serve as tributary area for resisting uplift or overturning forces.

1907.2 Thickness. The thickness of concrete floor slabs supported directly on the ground shall be not less than 3½ inches (89 mm).

Revise as follows:

~~1907.1~~ **1907.3 General- Vapor retarder.** ~~The thickness of concrete floor slabs supported directly on the ground shall be not less than 3½ inches (89 mm).~~ A 6-mil (0.006 inch; 0.15 mm) polyethylene vapor retarder with joints lapped not less than 6 inches (152 mm) shall be placed between the base course or subgrade and the concrete floor slab, or other *approved* equivalent methods or materials shall be used to retard vapor transmission through the floor slab.

Exception: A vapor retarder is not required:

- For detached structures accessory to occupancies in Group R-3, such as garages, utility buildings or other unheated facilities.
- For unheated storage rooms having an area of less than 70 square feet (6.5 m²) and carports attached to occupancies in Group R-3.
- For buildings of other occupancies where migration of moisture through the slab from below will not be detrimental to the intended occupancy of the building.
- For driveways, walks, patios and other flatwork that will not be enclosed at a later date.
- Where *approved* based on local site conditions.

Reason: This proposal:

1. Renames Section 1907 to “Slabs-on-Ground” as this section is not applicable to interim floor slabs or other slabs not on ground.
2. Moves all slab-on-ground requirements into one section by eliminating text in section 1901.2
3. Clarifies scenarios where slabs-on-ground are structural, adding language that addresses slabs on ground used as part of a diaphragm systems, transferring loads to micro-piles, etc. and as dead weight to resist overturning or uplift forces.
4. The proposal divided the existing text of 1907.1 into two sections. 1907.2 for the thickness of concrete floor slabs and 1907.3 for Vapor retarder.

This proposal is submitted by the ICC Building Code Action Committee (BCAC).

BCAC was established by the ICC Board of Directors in July 2011 to pursue opportunities to improve and enhance assigned International Codes or portions thereof. In 2020 and 2021 the BCAC has held several virtual meetings open to any interested party. In addition, there were numerous virtual Working Group meetings for the current code development cycle, which included members of the committee as well as interested parties. Related

documents and reports are posted on the BCAC website at <https://www.iccsafe.org/products-and-services/i-codes/code-development/cs/building-code-action-committee-bcac/>.

Cost Impact: The code change proposal will not increase or decrease the cost of construction
This code change is a clarification of the requirements

S173-22

Public Hearing Results

Committee Action:

Disapproved

Committee Reason: Disapproved as this proposal could setup a potential disconnect with ACI 318. The idea of 'vertical loads' should not be deleted. The committee did appreciate the concept of consolidating all the provisions for slabs-on-ground. (Vote: 9-5)

S173-22

Individual Consideration Agenda

Public Comment 1:

IBC: 1901.2, SECTION 1907, 1907.1, 1907.2 (New), 1907.2, 1907.3

Proponents: Mike Nugent, representing Building Code Action Committee (bcac@iccsafe.org) requests As Modified by Public Comment

Modify as follows:

2021 International Building Code

1901.2 Plain and reinforced concrete. Structural concrete shall be designed and constructed in accordance with the requirements of this chapter and ACI 318 as amended in Section 1905 of this code.

SECTION 1907 SLABS-ON-GROUND

1907.1 ~~General Structural slabs-on-ground~~. ~~Non-structural slabs-on-ground shall comply with Section 1904 and this Section.~~ Structural concrete slabs-on-ground shall comply with all applicable provisions of this Chapter. Slabs-on-ground shall be considered structural concrete where required by ACI 318 or where designed to: ~~one of the following:~~

1. Transmit vertical loads or ~~resist~~ lateral forces from other parts of the structure to the soil-or
2. Transmit vertical loads or ~~resist~~ lateral forces from other parts of the structure to foundations
3. ~~Serve as tributary area for resisting uplift or overturning forces.~~

1907.2 Non-structural slabs on ground. ~~Non-structural slabs-on-ground shall only be required to comply with Sections 1904.2, 1907.3, and 1907.4. Portions of the non-structural slabs on ground used to resist uplift forces or overturning shall be designed in accordance with accepted engineering practice throughout the entire portion designated as dead load to resist uplift forces or overturning.~~

~~1907.2-1907.3~~ Thickness. The thickness of concrete floor slabs supported directly on the ground shall be not less than 3½ inches (89 mm).

~~1907.3-1907.4~~ Vapor retarder. A 6-mil (0.006 inch; 0.15 mm) polyethylene vapor retarder with joints lapped not less than 6 inches (152 mm) shall be placed between the base course or subgrade and the concrete floor slab, or other *approved* equivalent methods or materials shall be used to retard vapor transmission through the floor slab.

Exception: A vapor retarder is not required:

1. For detached structures accessory to occupancies in Group R-3, such as garages, utility buildings or other unheated facilities.
2. For unheated storage rooms having an area of less than 70 square feet (6.5 m²) and carports attached to occupancies in Group R-3.

3. For buildings of other occupancies where migration of moisture through the slab from below will not be detrimental to the intended occupancy of the building.
4. For driveways, walks, patios and other flatwork that will not be enclosed at a later date.
5. Where *approved* based on local site conditions.

Commenter's Reason: The committee expressed interest in having these concepts move forward in the code development process. The committee raised several concerns that are addressed in the public comment. In response to testimony the committee recommended four items be addressed:

1. The word "vertical" be inserted in front of "loads" in items 1 and 2.
2. Provides specific language referring to structural slabs as scoped by ACI 318.
3. Removes the word "resist" from item 1 and 2 to create a more logical sentence structure.
4. The committee thought the use of "tributary area" could create confusions and that the language in this public comment removes this item as a structural concrete designation and better describes portions of slabs used for deadweight to resist uplift or overturning where they are not structural concrete, but do need to be designed for whatever load effects need to be resisted that are induced from those applied uplift forces. These would frequently be bending and shear where the slab needs to cantilever beyond the face of the foundation below that is undergoing uplift.

Cost Impact: The net effect of the public comment and code change proposal will not increase or decrease the cost of construction. This code change, as modified in the PC, is a clarification of the requirements for slab on ground and will not impact the cost of construction.

S224-22

IBC: SECTION 2308.3 (New), 2308.3.1 (New), 2308.3.2 (New), 2308.3.2.1 (New), 2308.3.3 (New), 2308.3.4 (New), 2308.3.5 (New), 2308.4.2.4, 2308.5.9, 2308.5.10, 2308.7.4; IPC: 307.2, 307.3 (New), [BS] C101.1, [BS] C101.2, [BS] C101.3; IMC: [BS] 302.3, [BS] 302.3.1, [BS] 302.3.2, [BS] 302.3.3; IFGC: [BS] 302.3, [BS] 302.3.2, [BS] 302.3.3, [BS] 302.3.4

Proposed Change as Submitted

Proponents: Mike Nugent, representing Building Code Action Committee (bcac@iccsafe.org)

2021 International Building Code

Add new text as follows:

SECTION 2308.3 CUTTING, NOTCHING AND BORING

2308.3.1 Scope. The provisions of Section 2308.3 shall only apply to dimensional wood framing and shall not include engineered wood products, heavy timber, or pre-fabricated/manufactured wood assemblies.

2308.3.2 Floor joists, roof rafters, and ceiling joists. Notches on framing ends shall not exceed one-fourth the member depth. Notches in the top or bottom of the member shall not exceed one-sixth the depth and shall not be located in the middle third of the span. A notch not more than one-third of the depth is permitted in the top of a rafter or ceiling joist not further from the face of the support than the depth of the member. Holes bored in members shall not be within 2 inches (51 mm) of the top or bottom of the member and the diameter of any such hole shall not exceed one-third the depth of the member. Where the member is notched, the hole shall not be closer than 2 inches (51 mm) to the notch.

2308.3.2.1 Ceiling joists. Where ceiling joists also serve as floor joists, they shall be considered floor joists within this section.

2308.3.3 Wall studs. In exterior walls and bearing partitions, a wood stud shall not be cut or notched in excess of 25 percent of its depth. In nonbearing partitions that do not support loads other than the weight of the partition, a stud shall not be cut or notched in excess of 40 percent of its depth.

2308.3.4 Bored holes. The diameter of bored holes in wood studs shall not exceed 40 percent of the stud depth. The diameter of bored holes in wood studs shall not exceed 60 percent of the stud depth in nonbearing partitions. The diameter of bored holes in wood studs shall not exceed 60 percent of the stud depth in any wall where each stud is doubled, provided that not more than two such successive doubled studs are so bored. The edge of the bored hole shall not be closer than $\frac{5}{8}$ inch (15.9 mm) to the edge of the stud. Bored holes shall not be located at the same section of stud as a cut or notch.

2308.3.5 Limitations. In designated lateral-force resisting system assemblies designed in accordance with this code and greater than three-stories in height or in Seismic Design Categories C, D, E, and F, the cutting, notching and boring of wall studs shall be as prescribed by the registered design professional.

In structures designed in accordance with the International Residential Code, modification of wall studs shall comply with the International Residential Code.

Delete without substitution:

~~**2308.4.2.4 Notches and holes.** Notches on the ends of joists shall not exceed one-fourth the joist depth. Notches in the top or bottom of joists shall not exceed one-sixth the depth and shall not be located in the middle third of the span. Holes bored in joists shall not be within 2 inches (51 mm) of the top or bottom of the joist and the diameter of any such hole shall not exceed one-third the depth of the joist.~~

~~**2308.5.9 Cutting and notching.** In exterior walls and bearing partitions, a wood stud shall not be cut or notched in excess of 25 percent of its depth. In nonbearing partitions that do not support loads other than the weight of the partition, a stud shall not be cut or notched in excess of 40 percent of its depth.~~

~~**2308.5.10 Bored holes.** The diameter of bored holes in wood studs shall not exceed 40 percent of the stud depth. The diameter of bored holes in wood studs shall not exceed 60 percent of the stud depth in nonbearing partitions. The diameter of bored holes in wood studs shall not exceed 60 percent of the stud depth in any wall where each stud is doubled, provided that not more than two such successive doubled studs are so bored. The edge of the bored hole shall not be closer than $\frac{5}{8}$ inch (15.9 mm) to the edge of the stud. Bored holes shall not be located at the same section of stud as a cut or notch.~~

~~**2308.7.4 Notches and holes.** Notching at the ends of rafters or ceiling joists shall not exceed one-fourth the depth. Notches in the top or bottom of the rafter or ceiling joist shall not exceed one-sixth the depth and shall not be located in the middle one-third of the span, except that a notch not more than one-third of the depth is permitted in the top of the rafter or ceiling joist not further from the face of the support than the depth of the member. Holes bored in rafters or ceiling joists shall not be within 2 inches (51 mm) of the top and bottom and their diameter shall not exceed one-third the depth of the member.~~

2021 International Plumbing Code

Revise as follows:

307.2 Cutting, notching and boring of cold-formed steel framing, or bored holes. A cold-formed framing member shall not be cut, notched or bored in excess of limitations specified in the *International Building Code*.

Add new text as follows:

307.3 Cutting, notching and boring of wood framing. The cutting, notching and boring of structural wood framing members shall comply with Section 2308.3 of the *International Building Code*.

Delete without substitution:

~~[BS] C101.1 Joist notching.~~ Notches on the ends of joists shall not exceed one-fourth the joist depth. Holes bored in joists shall not be within 2 inches (51 mm) of the top or bottom of the joist, and the diameter of any such hole shall not exceed one-third the depth of the joist. Notches in the top or bottom of joists shall not exceed one-sixth the depth and shall not be located in the middle third of the span.

~~[BS] C101.2 Stud cutting and notching.~~ In exterior walls and bearing partitions, a wood stud shall not be cut or notched in excess of 25 percent of its depth. In nonbearing partitions that do not support loads other than the weight of the partition, a stud shall not be cut or notched in excess of 40 percent of its depth.

~~[BS] C101.3 Bored holes.~~ The diameter of bored holes in wood studs shall not exceed 40 percent of the stud depth. The diameter of bored holes in wood studs shall not exceed 60 percent of the stud depth in nonbearing partitions. The diameter of bored holes in wood studs shall not exceed 60 percent of the stud depth in any wall where each stud is doubled, provided that not more than two such successive doubled studs are so bored. The edge of the bored hole shall be not closer than $\frac{5}{8}$ inch (15.9 mm) to the edge of the stud. Bored holes shall not be located at the same section of stud as a cut or notch.

2021 International Mechanical Code

Revise as follows:

~~[BS] 302.3 Cutting, notching and boring in wood framing.~~ The cutting, notching and boring of wood framing members shall comply with Sections 2308.3 of the *International Building Code*, 302.3.1 through 302.3.4.

Delete without substitution:

~~[BS] 302.3.1 Joist notching.~~ Notches on the ends of joists shall not exceed one-fourth the joist depth. Holes bored in joists shall not be within 2 inches (51 mm) of the top or bottom of the joist, and the diameter of any such hole shall not exceed one-third the depth of the joist. Notches in the top or bottom of joists shall not exceed one-sixth the depth and shall not be located in the middle third of the span.

~~[BS] 302.3.2 Stud cutting and notching.~~ In exterior walls and bearing partitions, a wood stud shall not be cut or notched in excess of 25 percent of its depth. In nonbearing partitions that do not support loads other than the weight of the partition, a stud shall not be cut or notched in excess of 40 percent of its depth.

~~[BS] 302.3.3 Bored holes.~~ The diameter of bored holes in wood studs shall not exceed 40 percent of the stud depth. The diameter of bored holes in wood studs shall not exceed 60 percent of the stud depth in nonbearing partitions. The diameter of bored holes in wood studs shall not exceed 60 percent of the stud depth in any wall where each stud is doubled, provided that not more than two such successive doubled studs are so bored. The edge of the bored hole shall be not closer than $\frac{5}{8}$ inch (15.9 mm) to the edge of the stud. Bored holes shall be not located at the same section of stud as a cut or notch.

2021 International Fuel Gas Code

Revise as follows:

~~[BS] 302.3 Cutting, notching and boring in wood members.~~ The cutting, notching and boring of wood framing members shall comply with Sections 2308.3 of the *International Building Code*, 302.3.1 through 302.3.4.

Delete without substitution:

~~[BS] 302.3.2 Joist notching and boring.~~ Notching at the ends of joists shall not exceed one-fourth the joist depth. Holes bored in joists shall not be within 2 inches (51 mm) of the top and bottom of the joist and their diameters shall not exceed one-third the depth of the member. Notches in the top or bottom of the joist shall not exceed one-sixth the depth and shall not be located in the middle one-third of the span.

~~[BS] 302.3.3 Stud cutting and notching.~~ In exterior walls and bearing partitions, any wood stud is permitted to be cut or notched to a depth not exceeding 25 percent of its width. Cutting or notching of studs to a depth not greater than 40 percent of the width of the stud is permitted in nonload-bearing partitions supporting no loads other than the weight of the partition.

~~[BS] 302.3.4 Bored holes.~~ The diameter of bored holes in wood studs shall not exceed 40 percent of the stud depth. The diameter of bored holes in

~~wood studs shall not exceed 60 percent of the stud depth in nonbearing partitions. The diameter of bored holes in wood studs shall not exceed 60 percent of the stud depth in any wall where each stud is doubled, provided that not more than two such successive doubled studs are so bored. The edge of the bored hole shall be not closer than 5/16 inch (15.9 mm) to the edge of the stud. Bored holes shall not be located at the same section of stud as a cut or notch.~~

Reason: This proposal consolidates similar wood cutting, notching and boring criteria from the IFGC, IMC, IPC, and IBC into a single location in the IBC, and does not impose new requirements or restrict any practices currently allowed within the I-Codes. The proposed language draws from current language in the IPC, IMC, and IFGC and IBC provisions in the conventional light-framed section. The existing language was used to the greatest extent possible and relocated to minimize technical changes.

Within the IBC, existing wood framing notching, cutting and boring provisions have been relocated into a single new Section 2308.3. This reorganization into one location makes the IBC provisions easy to find and will provide clear and consistent criteria across all trades on how to field modify framing members and when modification of such members requires input from a design professional.

Structural framing members are frequently modified in the field by non-structural trades, to facilitate the installation of mechanical, electrical, plumbing, and other utilities. Especially in conventional light-framed wood construction, such modifications are rarely overseen by a design professional with knowledge of critical framing elements that should remain unmodified and the role they play within the structure.

It is unrealistic to expect field personnel to continually seek the guidance of a design professional for every framing member requiring modification. However, modifications of critical framing members have the potential to negatively impact the integrity of the structure and the utility systems that rely on that structure for support. The resulting structural deficiencies caused by field modifications to framing members may only be realized during significant high-wind, seismic, impact, or other loading events that, while within the normal structure design criteria, are outside every day operating conditions. At best, such deficiencies may be realized by local deformation of finish materials and at worst, by partial or full collapse of a structure.

Currently, the IFGC, IMC, IPC, and IBC all provide guidance on modification of structural framing elements within the path of utilities. Although the guidance provided by each code is similar, they are not identical in wording or scope and are handled differently within each document.

Differences include but are not limited to:

- IFGC, IMC: The cutting and notching criteria is within the main body of the code.
- IFGC, IMC: Includes direction for wood, steel, cold-formed steel, and non-structural cold-formed steel materials.
- IPC: Points to the IBC for cutting and notching criteria but provides Appendix C as an alternate. · IPC Appendix C
 - Includes some, but not all, cutting and notching criteria and limitations found within the IFGC and IMC.
 - Does not address steel and cold-formed materials.

This proposal is submitted by the ICC Building Code Action Committee (BCAC).

BCAC was established by the ICC Board of Directors in July 2011 to pursue opportunities to improve and enhance assigned International Codes or portions thereof. In 2020 and 2021 the BCAC has held several virtual meetings open to any interested party. In addition, there were numerous virtual Working Group meetings for the current code development cycle, which included members of the committee as well as interested parties. Related documents and reports are posted on the BCAC website at <https://www.iccsafe.org/products-and-services/i-codes/code-development/cs/building-code-action-committee-bcac/>.

Cost Impact: The code change proposal will not increase or decrease the cost of construction

The proposal consolidates existing and slightly varied provisions from multiple locations into one location within the wood chapter of the International Building Code.

Staff Analysis: CC# S196-22 and CC# S224-22 addresses requirements in a different or contradicting manner. The committee is urged to make their intentions clear with their actions on these proposals.

S224-22

Public Hearing Results

Committee Action:

Disapproved

Committee Reason: Disapproved as the proposal needs additional work as it affects multiple codes which address different multiple trades and it is appropriate to leave the requirements in each code as is currently done. (Vote: 11-3)

Staff Analysis: CC# S196-22 and CC# S224-22 addresses requirements in a different or contradicting manner. The committee is urged to make

Individual Consideration Agenda

Public Comment 1:

IBC: SECTION 2308.3, 2308.3.1, 2308.3.2, 2308.3.2.1, 2308.3.3, 2308.3.4, 2308.3.5; IPC: 307.3; IMC: [BS] 302.3; IFGC: [BS] 302.3

Proponents: Mike Nugent, representing Building Code Action Committee (bcac@iccsafe.org) requests As Modified by Public Comment

Modify as follows:

2021 International Building Code

~~SECTION 2308.3~~ ~~CUTTING, NOTCHING AND BORING~~

~~2304.14 2308.3.1 Cutting, Notching, and Boring of Sawn Lumber Scope.~~ The provisions of Section ~~2304.14 2308.3~~ shall only apply to dimensional wood framing and shall not include engineered wood products, heavy timber, or pre-fabricated/manufactured wood assemblies.

~~2304.14.1 2308.3.2 Floor joists, roof rafters, and ceiling joists.~~ Notches on framing ends shall not exceed one-fourth the member depth. Notches in the top or bottom of the member shall not exceed one-sixth the depth and shall not be located in the middle third of the span. A notch not more than one-third of the depth is permitted in the top of a rafter or ceiling joist not further from the face of the support than the depth of the member. Holes bored in members shall not be within 2 inches (51 mm) of the top or bottom of the member and the diameter of any such hole shall not exceed one-third the depth of the member. Where the member is notched or bored, the notch or hole shall not be closer than 2 inches (51 mm) to the another notch or bore.

~~2304.14.1.2 2308.3.2.1 Ceiling joists.~~ Where ceiling joists also serve as floor joists, they shall be considered floor joists within this section.

~~2304.14.2 2308.3.3 Wall studs.~~ In *exterior walls* and bearing partitions, a wood stud shall not be cut or notched in excess of 25 percent of its depth. In nonbearing partitions that do not support *loads* other than the weight of the partition, a stud shall not be cut or notched in excess of 40 percent of its depth.

~~2304.14.3 2308.3.4 Bored holes.~~ The diameter of bored holes in wood studs shall not exceed 40 percent of the stud depth. The diameter of bored holes in wood studs shall not exceed 60 percent of the stud depth in nonbearing partitions. The diameter of bored holes in wood studs shall not exceed 60 percent of the stud depth in any wall where each stud is doubled, provided that not more than two such successive doubled studs are so bored. The edge of the bored hole shall not be closer than $\frac{5}{8}$ inch (15.9 mm) to the edge of the stud. Bored holes shall not be located ~~at~~ within two inches of the same section of stud as a cut or notch.

~~2304.14.4 2308.3.5 Limitations.~~ In designated lateral-force resisting system assemblies designed in accordance with this code and greater than three-stories in height or in Seismic Design Categories C, D, E, and F, the cutting, notching and boring of wall studs shall be as prescribed by the registered design professional.

~~In structures designed in accordance with the International Residential Code, modification of wall studs shall comply with the International Residential Code.~~

2021 International Plumbing Code

307.3 Cutting, notching and boring of wood framing. The cutting, notching and boring of structural wood framing members shall comply with Section ~~2304.14 2308.3~~ of the *International Building Code*.

2021 International Mechanical Code

[BS] 302.3 Cutting, notching and boring in wood framing. The cutting, notching and boring of wood framing members shall comply with Section ~~2304.14 2308.3~~ of the *International Building Code*.

2021 International Fuel Gas Code

[BS] 302.3 Cutting, notching and boring in wood members. The cutting, notching and boring of wood framing members shall comply with Section ~~2304.14 2308.3~~ of the *International Building Code*.

Commenter's Reason: This public comment relocates the wood frame notching and cutting provisions from the proposed Section 2308.3 into a

new Section 2304.14. This relocation addresses the Committee concerns that Section 2308.3 was limited in scope only to conventional light frame construction and could not be used in other wood frame applications.

The Committee indicated the notching and cutting provisions for wood framing should remain in each of the utility codes and the language correlated to match. However the Committee approved S196-22, the companion proposal for cold-formed steel framing that took the same approach by pointing the utility codes to AISI S240 and AISI S220 documents for notching and cutting provisions.

It is inconsistent to point outside of the utility codes for cold-formed steel framing, yet require wood framing to remain within each utility code. Cutting and notching of wood framing is a structural consideration that should remain within Chapter 23 of the IBC in a single section that does not require the language to be correlated across multiple codes and disciplines.

Cost Impact: The net effect of the public comment and code change proposal will not increase or decrease the cost of construction. The proposal consolidates existing and slightly varied provisions from multiple locations into one location within the wood chapter of the International Building Code.