

# BCAC ADM Item 7 - 3.5.1

## 2024 IFC/IBC Code Change Proposal 3.5.1 Modifications

### Revise IFC Section 104.2.4 to read as follows:

[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 in accordance with Section 104.~~94.2.4.1~~ or 104.~~94.2.4.2~~.

[A] **104.2.4.1 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 d~~Details of ~~the~~ action granting modifications shall be ~~recorded and entered in writing and kept~~ in the files of the code compliance agency.

[A] **104.2.4.2 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 that modify this code as necessary to protect life and property. Such policies, procedures or rules 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.

### Revise IBC Section 104.2.4 to read as follows:

[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 in accordance with Sections 104.2.4.1, 104.2.4.2 or 104.2.4.3.

[A] 104.2.4.1 Individual cases. 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 and~~ 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 writing and kept~~ in the files of the department of building safety.

[A] 104.2.4.2 Natural disasters. In preparation for, during and after a natural disaster event, as determined by the building official, the building official shall have the authority to issue written policies, procedures or rules that modify this code as necessary to protect life and property. Such policies, procedures or rules shall be made available to the public and shall include start and end dates, which can be extended at the building official's discretion.

[A] **104.2.4.13 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.

**REASON:**

Emergencies have happened which demonstrate the need for granting the authority to allow, by policy, conditions that would otherwise constitute code violations. Buildings may be used for purposes other than what they were designed for. A school gymnasium being used for temporary housing for displaced victims of a flood. Over 200,000 people were relocated during the Kincade Fire in California in 2019. Buildings are utilized to handle the needs resulting from the emergency incident. For example, temporary housing is established, outdoor canopies are set up, portable toilets are utilized, electric power and heating is provided. These needs of the people need to be provided for, but many times strict compliance with the code is not possible. These revisions could allow temporary emergency shelters that may not fully meet code requirements for a congregate residential use.

These sections were added into the IFC in the 2022 code cycle. But it is not just fire code regulations that are affected when these emergencies occur. Therefore, this proposal adds these correlating provisions into the IBC so the fire code official and building official can work together to solve these problems that arise in emergency situations.

By adding text to the code that specifically addresses this concern, the building official will be guided to develop written documentation that should globally address special allowances that will be permitted during a disaster event.

# BCAC ADM Item 7 - 3.5.2

## 2024 I-CODES Code Change Proposal 3.5.2 Alternative Method of Compliance

### 2024 International Building Code

#### SECTION 104 DUTIES AND POWERS OF BUILDING OFFICIAL

[A] **104.2.3 Alternative ~~materials, design and methods of construction and equipment~~ method of compliance.** The provisions of this code are not intended to prevent the installation or use of any material, system, design or equipment 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.

**Exception:** Performance-based alternative ~~materials, designs or methods of construction and equipment~~ complying method of compliance in accordance with the ICC Performance Code. This exception shall not apply to alternative structural materials or to alternative structural designs.

[A] **104.2.3.1 Approval authority.** An alternative ~~material, design or~~ method of construction compliance 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.** Where required, a request to use an alternative ~~material, design or~~ method of construction compliance shall be submitted in writing to the building official for approval. Where the alternative ~~material, design or~~ method of construction compliance 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 compliance 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 compliance 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] **104.2.3.5 Tests.** Tests conducted to demonstrate equivalency in support of an alternative ~~material, design or~~ method of construction application compliance 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] **104.2.3.5.1 Fire Tests.** Tests conducted to demonstrate equivalent fire safety in support of an alternative ~~material, design or~~ method of construction application compliance 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.

[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 and use of the evaluation report shall require approval by the building official for the installation. The ~~alternative material, design or~~ method of construction and product compliance evaluated shall be within the scope of the building official's recognition of the approved agency. Criteria used for the evaluation shall be identified within the report and where required, provided to the building official.

[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 compliance, prepared by a peer reviewer that is approved by the building official.

[A] **104.7.3 Code alternatives and modifications.** Applications for alternative ~~materials, design and~~ methods of construction and equipment compliance 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.

## 2024 International Existing Building Code

[A] **104.2.3 Alternative ~~materials, design and~~ methods of construction, and equipment compliance.** 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.

**Exception:** Performance-based alternative ~~materials, designs or~~ methods of construction and equipment compliance complying with the ICC Performance Code. This exception shall not apply to alternative structural materials or to alternative structural designs.

[A] **104.2.3.1 Approval authority.** An alternative ~~material, design or~~ method of ~~construction compliance~~ 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.** Where required, a request to use an alternative ~~material, design or~~ method of ~~construction compliance~~ shall be submitted in writing to the code official for approval. Where the alternative ~~material, design or~~ method of ~~construction compliance~~ 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 compliance~~ 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 compliance~~ 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] **104.2.3.5 Tests.** Tests conducted to demonstrate equivalency in support of an alternative ~~material, design or~~ method of ~~construction application compliance~~ 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] **104.2.3.5.1 Fire Tests.** Tests conducted to demonstrate equivalent fire safety in support of an alternative ~~material, design or~~ method of ~~construction application compliance~~ 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.

[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 and use of the evaluation report shall require approval by the code official for the installation. The alternative ~~material, design or~~ method of ~~construction and product compliance~~ evaluated shall be within the scope of the code official's recognition of the approved agency. Criteria used for the evaluation shall be identified within the report and where required, provided to the code official.

[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 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 compliance, prepared by a peer reviewer that is approved by the code official.

[A] **104.7.3 Code alternatives and modifications.** Application for alternative ~~materials, design and~~ methods of construction and equipment compliance 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.

## 2024 International Fire Code

[A] **104.2.3 Alternative ~~materials, design and~~ methods of construction and equipment compliance.** 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.

**Exception:** Performance-based alternative ~~materials, designs or~~ methods of construction and equipment compliance complying with the ICC Performance Code.

[A] **104.2.3.1 Approval authority.** An alternative ~~material, design or~~ method of construction compliance shall be approved where the fire 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.** Where required, a request to use an alternative ~~material, design or~~ method of construction compliance shall be submitted in writing to the fire code official for approval. Where the alternative ~~material, design or~~ method of construction compliance 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 compliance 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 compliance 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] **104.2.3.5 Tests.** Tests conducted to demonstrate equivalency in support of an alternative ~~material, design or~~ method of construction application compliance 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] **104.2.3.5.1 Fire Tests.** Tests conducted to demonstrate equivalent fire safety in support of an alternative ~~material, design or~~ method of ~~construction application compliance~~ 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.

[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 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 compliance~~ evaluated shall be within the scope of the fire code official's recognition of the approved agency. Criteria used for the evaluation shall be identified within the report and where required, provided to the fire code official.

[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 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 compliance~~, prepared by a peer reviewer that is approved by the fire code official.

[A] **104.7.4 Code alternatives and modifications.** Application for alternative ~~materials, design and~~ methods of ~~construction and equipment compliance~~ 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.

## 2024 International Fuel Gas Code

[A] **104.2.3 Alternative ~~materials, design and~~ methods of ~~construction and equipment compliance~~.** 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.

**Exception:** Performance-based alternative ~~materials, designs or~~ methods of ~~construction and equipment compliance~~ complying with the ICC Performance Code.

[A] **104.2.3.1 Approval authority.** An alternative ~~material, design or~~ method of ~~construction compliance~~ 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.** Where required, a request to use an alternative ~~material, design or~~ method of ~~construction compliance~~ shall be submitted in writing to the code official for approval. Where the alternative ~~material, design or~~ method of ~~construction compliance~~ 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 compliance~~ 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 compliance~~ 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] **104.2.3.5 Tests.** Tests conducted to demonstrate equivalency in support of an alternative ~~material, design or~~ method of ~~construction application compliance~~ 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] **104.2.3.5.1 Fire tests.** Tests conducted to demonstrate equivalent fire safety in support of an alternative ~~material, design or~~ method of ~~construction application compliance~~ 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.

[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 and use of the evaluation report shall require approval by the code official for the installation. The alternative ~~material, design or~~ method of ~~construction and product compliance~~ evaluated shall be within the scope of the code official's recognition of the approved agency. Criteria used for the evaluation shall be identified within the report and where required, provided to the code official.

[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~~ compliance, prepared by a peer reviewer that is approved by the code official.

[A] **104.7.3 Code alternatives and modifications.** Application for alternative ~~materials, design and~~ methods of ~~construction and equipment~~ compliance 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.

## 2024 International Green Construction Code

**104.2.5 Innovative approaches and alternative ~~materials, design, and~~ methods of ~~construction and equipment~~ compliance.** 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~~ compliance 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.** Where required, a request to use an alternative ~~material, design, innovative approach or~~ method of ~~construction~~ compliance shall be submitted in writing to the authority having jurisdiction for approval. Where the alternative ~~material, design, innovative approach or~~ method of ~~construction~~ compliance 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~~ compliance 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~~ compliance 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

**104.2.5.5 Tests.** Tests conducted to demonstrate equivalency in support of an alternative ~~material, design or method of construction application compliance~~ 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 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 compliance~~ evaluated shall be within the scope of the code official's recognition of the approved agency. Criteria used for the evaluation shall be identified within the report and where required, provided to the code official.

**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 compliance~~, prepared by a peer reviewer that is approved by the authority having jurisdiction.

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

## 2024 International Mechanical Code

[A] **104.2.3 Alternative ~~materials, design and methods of construction and equipment compliance~~.** 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.

**Exception:** Performance-based alternative ~~materials, designs or methods of construction and equipment compliance~~ complying with the ICC Performance Code.

[A] **104.2.3.1 Approval authority.** An alternative ~~material, design or method of construction compliance~~ 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.** Where required, a request to use an alternative ~~material, design or~~ method of ~~construction compliance~~ shall be submitted in writing to the code official for approval. Where the alternative ~~material, design or~~ method of ~~construction compliance~~ 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 compliance~~ 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 compliance~~ 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] **104.2.3.5 Tests.** Tests conducted to demonstrate equivalency in support of an alternative ~~material, design or~~ method of ~~construction application compliance~~ 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] **104.2.3.5.1 Fire tests.** Tests conducted to demonstrate equivalent fire safety in support of an alternative ~~material, design or~~ method of ~~construction application compliance~~ 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.

[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 and use of the evaluation report shall require approval by the code official for the installation. The alternative ~~material, design or~~ method of ~~construction and product compliance~~ evaluated shall be within the scope of the code official's recognition of the approved agency. Criteria used for the evaluation shall be identified within the report and where required, provided to the code official.

[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 compliance~~, prepared by a peer reviewer that is approved by the code official.

[A] **104.7.3 Code alternatives and modifications.** Application for alternative ~~materials, design and~~ methods of ~~construction and equipment compliance~~ 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.

## 2024 International Plumbing Code

[A] **104.2.3 Alternative ~~materials, design and~~ methods of ~~construction and equipment~~compliance.** 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.

**Exception:** Performance-based alternative ~~materials, designs or~~ methods of ~~construction and equipment compliance~~ complying with the ICC Performance Code.

[A] **104.2.3.1 Approval authority.** An alternative ~~material, design or~~ method of ~~construction compliance~~ 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.** Where required, a request to use an alternative ~~material, design or~~ method of ~~construction compliance~~ shall be submitted in writing to the code official for approval. Where the alternative ~~material, design or~~ method of ~~construction compliance~~ 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 compliance~~ 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 compliance~~ 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] **104.2.3.5 Tests.** Tests conducted to demonstrate equivalency in support of an alternative ~~material, design or~~ method of ~~construction application compliance~~ 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] **104.2.3.5.1 Fire tests.** Tests conducted to demonstrate equivalent fire safety in support of an alternative ~~material, design or~~ method of ~~construction application~~ compliance 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.

[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 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 of the approved agency. Criteria used for the evaluation shall be identified within the report and where required, provided to the code official.

[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~~ compliance, prepared by a peer reviewer that is approved by the code official.

[A] **104.7.3 Code alternatives and modifications.** Application for alternative ~~materials, design and~~ methods of ~~construction and equipment~~ compliance 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.

## 2024 International Property Maintenance Code

[A] **105.2.2 Alternative ~~materials, design and~~ methods of ~~construction and equipment~~ compliance.** 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] **105.2.2.1 Approval authority.** An alternative ~~material, design or~~ method of ~~construction~~ compliance 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.** Where required, a request to use an alternative ~~material, design or~~ method of ~~construction compliance~~ shall be submitted in writing to the code official for approval. Where the alternative ~~material, design or~~ method of ~~construction compliance~~ 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 compliance~~ 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 compliance~~ 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] **105.2.2.5 Tests.** Tests conducted to demonstrate equivalency in support of an alternative ~~material, design or~~ method of ~~construction application compliance~~ 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] **105.2.2.5.1 Fire Tests.** Tests conducted to demonstrate equivalent fire safety in support of an alternative ~~material, design or~~ method of ~~construction application compliance~~ 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.

[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 and use of the evaluation report shall require approval by the code official for the installation. The alternative ~~material, design or~~ method of ~~construction and product compliance~~ evaluated shall be within the scope of the code official's recognition of the approved agency. Criteria used for the evaluation shall be identified within the report and where required, provided to the code official.

[A] **105.2.2.6.2 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 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 compliance~~, prepared by a peer reviewer that is approved by the code official.

[A] **105.6.3 Code alternatives and modifications.** Application for alternative ~~materials, design and~~ methods of ~~construction and equipment compliance~~ 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.

## 2024 International Private Sewage Disposal Code

[A] **104.2.3 Alternative ~~materials, design and~~ methods of ~~construction and equipment~~compliance.** 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.

**Exception:** Performance-based alternative ~~materials, designs or~~ methods of ~~construction and equipment compliance~~ complying with the ICC Performance Code. This exception shall not apply to alternative structural materials or to alternative structural designs.

[A] **104.2.3.1 Approval authority.** An alternative ~~material, design or~~ method of ~~construction compliance~~ 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.** Where required, a request to use an alternative ~~material, design or~~ method of ~~construction compliance~~ shall be submitted in writing to the code official for approval. Where the alternative ~~material, design or~~ method of ~~construction compliance~~ 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 compliance~~ 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 compliance~~ 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] **104.2.3.5 Tests.** Tests conducted to demonstrate equivalency in support of an alternative ~~material, design or~~ method of ~~construction application compliance~~ 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 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~~ compliance evaluated shall be within the scope of the code official's recognition of the approved agency. Criteria used for the evaluation shall be identified within the report and where required, provided to the code official.

[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~~ compliance, prepared by a peer reviewer that is approved by the code official.

[A] **104.7.3 Code alternatives and modifications.** Application for alternative ~~materials, design and~~ methods of ~~construction and equipment~~ compliance 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.

## 2024 International Residential Code

**R104.2.2 Alternative ~~materials, design and~~ methods of ~~construction and equipment~~ compliance.** 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.

**R104.2.2.1 Approval authority.** An alternative ~~material, design or~~ method of ~~construction~~ compliance shall be approved where the building official finds that the proposed alternative is satisfactory and complies with Sections 104.2.2 through 104.2.2.7, as applicable.

**R104.2.2.2 Application and disposition.** Where required a request to use an alternative ~~material, design or~~ method of ~~construction~~ compliance shall be submitted in writing to the building official for approval. Where the alternative ~~material, design or~~ method of ~~construction~~ compliance is not approved, the building official shall respond in writing, stating the reasons the alternative was not approved.



**R104.2.2.3 Compliance with code intent.** An alternative ~~material, design or~~ method of ~~construction compliance~~ shall comply with the intent of the provisions of this code.

**R104.2.2.4 Equivalency criteria.** An alternative ~~material, design or~~ method of ~~construction compliance~~ 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.

**R104.2.2.5 Tests.** Tests conducted to demonstrate equivalency in support of an alternative ~~material, design or~~ method of ~~construction application compliance~~ 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 building official.

**R104.2.2.6 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 R104.2.2.6.1 and R104.2.3.6.2.

**R104.2.2.6.1 Evaluation reports.** Evaluation reports shall be issued by an approved agency and use of the evaluation report shall require approval by the building official for the installation. The alternative ~~material, design or~~ method of ~~construction and product compliance~~ evaluated shall be within the scope of the building official's recognition of the approved agency. Criteria used for the evaluation shall be identified within the report and where required, provided to the building official.

**R104.2.2.6.2 Other reports.** Reports not complying with Section R104.2.2.6.1 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 building official. The building official is authorized to require design submittals to be prepared by, and bear the stamp of, a registered design professional.

**R104.7.3 Code alternatives and modifications.** Application for alternative ~~materials, design and~~ methods of ~~construction and equipment compliance~~ in accordance with Section R104.2.2; modifications in accordance with Section R104.2.3; and documentation of the final decision of the building official for either shall be in writing and shall be retained in the official records.

## 2024 International Swimming Pool and Spa Code

[A] 104.2.3 Alternative ~~materials, design and~~ methods of ~~construction and equipment compliance~~. 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 compliance~~ 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.** Where required, a request to use an alternative ~~material, design or~~ method of ~~construction compliance~~ shall be submitted in writing to the code official for approval. Where the alternative ~~material, design or~~ method of ~~construction compliance~~ 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 compliance~~ 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 compliance~~ 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] **104.2.3.5 Tests.** Tests conducted to demonstrate equivalency in support of an alternative ~~material, design or~~ method of ~~construction application compliance~~ 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 and use of the evaluation report shall require approval by the code official for the installation. The alternative ~~material, design or~~ method of ~~construction and product compliance~~ evaluated shall be within the scope of the code official's recognition of the approved agency. Criteria used for the evaluation shall be identified within the report and where required, provided to the code official.

[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 compliance, prepared by a peer reviewer that is approved by the code official.

[A] **104.7.3 Code alternatives and modifications.** Application for alternative ~~materials, design and~~ methods of construction and equipment compliance 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.

## 2024 International Wildfire and Urban Interface Code

[A] **104.2.2 Alternative ~~materials, design and~~ methods of compliance.** 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 of compliance 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 compliance shall be submitted in writing to the code official for approval. Where the alternative ~~material, design or~~ method of construction compliance 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 compliance 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 compliance 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] **104.2.2.5 Tests.** Tests conducted to demonstrate equivalency in support of an alternative ~~material, design or~~ method of construction application compliance 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. Where the alternative ~~material, design or~~ method of compliance is not approved, the code official shall respond in writing, stating the reasons why the alternative was not approved.

[A] **104.2.2.5.1 Fire Tests.** Tests conducted to demonstrate equivalent fire safety in support of an alternative ~~material, design or~~ method of construction application compliance 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.

[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 compliance 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 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] **104.7.3 Code alternatives and modifications.** Application for alternative ~~materials, design and~~ methods of construction and equipment compliance 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.

**REASON:**

Throughout the various I-Codes, the concept of alternative methods and materials is allowed and guidance is provided. However, the terminology is different in several of the codes. This proposal is intended to clean up action taken in ADM13-22 and ADM14-22 which revised these sections and provide for a single term across all of the codes. The term proposed is “alternative method of compliance.”

The concept of alternative methods is not altered, and the term compliance provides for anything referenced in the codes. Some of the codes used the title “alternative materials or methods of construction”, other used “alternative materials, design and methods of construction and equipment.” Even throughout a single code the terms are not consistent.

The terms used to address this process had become a list of items. The problem with lists is that something is invariably left out. The word “compliance” includes materials, construction methods, equipment,

appliances, fixtures, installation methods, design, storage and methods of operation. In other words, any proposed alternative which is not in strict conformance with the code requirements.

This proposal is almost editorial in that it replaces a term with a revised term. The new term is all encompassing because it includes anything regulated in any of the codes.

# BCAC ADM Item 7 - 3.5.3

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### Revisions:

- September 2, 2023    Removed reference to peer review from IRC
- September 7, 2023    Section 104.2.4 Modifications

## 2024 International Building Code

[A] **104.2.4 Modifications.** ~~Where there are practical difficulties involved in carrying out the provisions of this code, the~~ The building official shall have the authority to ~~grant~~ approve modifications for individual cases ~~provided that where it can be demonstrated to the building official it is not practical to specifically comply with this code or utilize an alternative method of compliance in accordance with Section 104.2.3.~~

[A] **104.2.4.1 Approval authority.** As a condition of approval, the building official shall ~~first~~ find that one or more special individual reasons make ~~the strict letter of this code it~~ impractical to specifically comply with this code or provide equivalency through an alternative method of compliance in accordance with Section 104.2.3.

[A] **~~104.2.4.1-104.2.4.1.1~~ 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] **104.2.4.2 Application and disposition.** A request to use a modification shall be submitted in writing to the building official for approval. Where the modification is not approved, the building official shall respond in writing, stating the reasons the modification was not approved.

[A] **104.2.4.3 Compliance with the code intent.** Modifications shall comply ~~modification is in compliance~~ with the intent and purpose of this code, and ~~that such modification does shall~~ not lessen any of the following:

1. health,
2. accessibility,
3. life safety ~~and~~
4. fire safety ~~or~~
5. structural ~~requirements~~ safety.

[A] **104.2.4.4 Tests.** Tests conducted in support of a modification 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] **104.2.4.5 Reports.** Supporting documentation, where necessary to assist in the approval of a modification shall comply with Sections 104.2.4.5.1 and 104.2.4.5.2.

[A] 104.2.4.5.1 Evaluation reports. Evaluation reports shall be issued by an approved agency and use of the evaluation report shall require approval by the building official. Evaluation of the modification shall be within the scope of the accreditation of the approved agency. Criteria used for the evaluation shall be identified within the report.

[A] 104.2.4.5.2 Other reports. Reports not complying with Section 104.2.4.5.1 shall describe criteria, including but not limited to any referenced testing or analysis, used to determine compliance with code intent. 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] 104.2.4.6 Peer review. The building official is authorized to require submittal of a peer review report in conjunction with a modification request, prepared by a peer reviewer that is approved by the building official.

[A] 104.2.4.7 Records. ~~The details~~ Records of the written request for and action granting modifications shall be ~~recorded and entered in the files of the department of building safety~~ retained in accordance with Section 104.7.4.

[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 and 104.2.4.4.



## 2024 International Existing Building Code

[A] **104.2.4 Modifications.** ~~Where there are practical difficulties involved in carrying out the provisions of this code, the~~ The code official shall have the authority to ~~grant~~ approve modifications for individual cases ~~provided that where it can be demonstrated to the code official it is not practical to specifically comply with this code or utilize an alternative method of compliance in accordance with Section 104.2.3.~~

[A] **104.2.4.1 Approval authority.** ~~As a condition of approval,~~ the code official shall ~~first~~ find that one or more special individual reasons make ~~the strict letter of this code it~~ impractical to specifically comply with this code or provide equivalency through an alternative method of compliance in accordance with Section 104.2.3, ~~that the~~

[A] **104.2.4.1 104.2.4.1.1 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] **104.2.4.2 Application and disposition.** A request to use a modification shall be submitted in writing to the code official for approval. Where the modification is not approved, the code official shall respond in writing, stating the reasons the modification was not approved.

[A] **104.2.4.3 Compliance with the code intent.** Modifications shall comply modification is in compliance with the intent and purpose of this code, and ~~that such modification does~~ shall not lessen any of the following:

1. health,
2. accessibility,
3. life safety and
4. fire safety or
5. structural requirements safety.

[A] **104.2.4.4 Tests.** Tests conducted in support of a modification 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] **104.2.4.5 Reports.** Supporting documentation, where necessary to assist in the approval of a modification shall comply with Sections 104.2.4.5.1 and 104.2.4.5.2.

[A] **104.2.4.5.1 Evaluation reports.** Evaluation reports shall be issued by an approved agency and use of the evaluation report shall require approval by the code official. Evaluation of the modification shall be

within the scope of the accreditation of the approved agency. Criteria used for the evaluation shall be identified within the report.

[A] 104.2.4.5.2 Other reports. Reports not complying with Section 104.2.4.5.1 shall describe criteria, including but not limited to any referenced testing or analysis, used to determine compliance with code intent. 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] 104.2.4.6 Peer review. The code official is authorized to require submittal of a peer review report in conjunction with a modification request, prepared by a peer reviewer that is approved by the code official.

[A] 104.2.4.7 Records. ~~The details~~ Records of the written request for and action granting modifications shall be ~~recorded and entered in the files of the department of building safety~~ retained in accordance with Section 104.7.4.

[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 ~~and~~ 104.2.4.4.

## 2024 International Fire Code

[A] **104.2.4 Modifications.** ~~Where there are practical difficulties involved in carrying out the provisions of this code, the~~ The fire code official shall have the authority to ~~grant~~ approve modifications in accordance with Section 104.94.2.4.1 or 104.94.2.4.2 ~~where it can be demonstrated to the fire code official that it is not practical to specifically comply with this code or utilize an alternative method of compliance in accordance with Section 104.2.3.~~

[A] **104.2.4.1 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 code compliance agency. As a condition of approval, the fire code official shall find that one or more special individual reasons make it impractical to specifically comply with this code or provide equivalency through an alternative method of compliance in accordance with Section 104.2.3.~~

[A] **104.2.4.2 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 that modify this code as necessary to protect life and property. Such policies, procedures or rules 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.

[A] **104.2.4.3 Application and disposition.** A request to use a modification shall be submitted in writing to the fire code official for approval. Where the modification is not approved, the fire code official shall respond in writing, stating the reasons the modification was not approved.

[A] **104.2.4.4 Compliance with the code intent.** ~~Modifications shall comply~~ modification is in compliance with the intent and purpose of this code, and ~~that such modification does~~ shall not lessen any of the following:

1. health;
2. accessibility
3. life safety ~~and~~
4. fire safety ~~or~~
5. structural safety.

[A] **104.2.4.5 Tests.** Tests conducted in support of a modification 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] **104.2.4.6 Reports.** Supporting documentation, where necessary to assist in the approval of a modification shall comply with Sections 104.2.4.6.1 and 104.2.4.6.2.

[A] **104.2.4.6.1 Evaluation reports.** Evaluation reports shall be issued by an approved agency and use of the evaluation report shall require approval by the fire code official. Evaluation of the modification shall be within the scope of the accreditation of the approved agency. Criteria used for the evaluation shall be identified within the report.

[A] **104.2.4.6.2 Other reports.** Reports not complying with Section 104.2.4.6.1 shall describe criteria, including but not limited to any referenced testing or analysis, used to determine compliance with code

intent. The report shall be prepared by a qualified engineer, specialist, laboratory or 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] 104.2.4.7 Peer review. The fire code official is authorized to require submittal of a peer review report in conjunction with a modification request, prepared by a peer reviewer that is approved by the fire code official.

[A] 104.2.4.8 Records. Records of the written request for and action granting modifications shall be retained in accordance with Section 104.7.5.

[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 and 104.2.4.5.

## 2024 International Fuel Gas Code

[A] **104.2.4 Modifications.** ~~Where there are practical difficulties involved in carrying out the provisions of this code, the~~ The code official shall have the authority to grant approve modifications for individual cases ~~provided that where it can be demonstrated to the code official it is not practical to specifically comply with this code or utilize an alternative method of compliance in accordance with Section 104.2.3.~~

[A] **104.2.4.1 Approval authority.** ~~As a condition of approval,~~ the code official shall ~~first~~ find that one or more special individual reasons make ~~the strict letter of this code it~~ impractical to specifically comply with this code or provide equivalency through an alternative method of compliance in accordance with Section 104.2.3, ~~that the~~

[A] ~~104.2.4.1~~ **104.2.4.1.1 Flood hazard areas.** The code official shall not grant modifications to any provision required in flood hazard areas as established by Section 1612.3 in the International Building Code 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 in the International Building Code 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] **104.2.4.2 Application and disposition.** A request to use a modification shall be submitted in writing to the code official for approval. Where the modification is not approved, the code official shall respond in writing, stating the reasons the modification was not approved.

[A] **104.2.4.3 Compliance with the code intent.** ~~Modifications shall comply~~ modification is in compliance with the intent and purpose of this code, and ~~that such modification does shall~~ not lessen any of the following:

1. health;
2. accessibility;
3. life safety ~~and~~
4. fire safety ~~or~~
5. structural requirements safety.

[A] **104.2.4.4 Tests.** Tests conducted in support of a modification 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] **104.2.4.5 Reports.** Supporting documentation, where necessary to assist in the approval of a modification shall comply with Sections 104.2.4.5.1 and 104.2.4.5.2.

[A] 104.2.4.5.1 Evaluation reports. Evaluation reports shall be issued by an approved agency and use of the evaluation report shall require approval by the code official. Evaluation of the modification shall be within the scope of the accreditation of the approved agency. Criteria used for the evaluation shall be identified within the report.

[A] 104.2.4.5.2 Other reports. Reports not complying with Section 104.2.4.5.1 shall describe criteria, including but not limited to any referenced testing or analysis, used to determine compliance with code intent. 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] 104.2.4.6 Peer review. The code official is authorized to require submittal of a peer review report in conjunction with a modification request, prepared by a peer reviewer that is approved by the code official.

[A] 104.2.4.7 Records. ~~The details-Records~~ of the written request for and action granting modifications shall be ~~recorded and entered in the files of the department of building safety~~ retained in accordance with Section 104.7.4.

[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 and 104.2.4.4.

## 2024 International Green Construction Code

**104.2.6 Modifications.** ~~Where there are practical difficulties involved in carrying out the provisions of this code, the~~ The authority having jurisdiction shall have the authority to grant approve modifications for individual cases, provided where it can be demonstrated to the code official that it is not practical to specifically comply with this code or utilize an alternative method of compliance in accordance with Section 104.2.5.

**104.2.6.1 Approval authority.** As a condition of approval, the authority having jurisdiction shall first find that one or more special individual reasons make the strict letter of this code it impractical to specifically comply with this code or provide equivalency through an alternative method of compliance in accordance with Section 104.2.3.

**104.2.6.2 Application and disposition.** A request to use a modification shall be submitted in writing to the authority having jurisdiction for approval. Where the modification is not approved, the authority having jurisdiction shall respond in writing, stating the reasons the modification was not approved.

**104.2.6.3 Compliance with the code intent.** ~~that the modification is in compliance~~ Modifications shall comply with the intent and purpose of this code, and that such modification does shall not lessen the minimum requirements of this code.

**104.2.6.4 Tests.** Tests conducted in support of a modification 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.

**104.2.6.5 Reports.** Supporting documentation, where necessary to assist in the approval of a modification shall comply with Sections 104.2.4.6.1 and 104.2.4.6.2.

**104.2.6.5.1 Evaluation reports.** Evaluation reports shall be issued by an approved agency and use of the evaluation report shall require approval by the authority having jurisdiction. Evaluation of the modification shall be within the scope of the accreditation of the approved agency. Criteria used for the evaluation shall be identified within the report.

**104.2.6.5.2 Other reports.** Reports not complying with Section 104.2.6.5.1 shall describe criteria, including but not limited to any referenced testing or analysis, used to determine compliance with code intent. 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.

**104.2.6.6 Peer review.** The authority having jurisdiction is authorized to require submittal of a peer review report in conjunction with a modification request, prepared by a peer reviewer that is approved by the authority having jurisdiction.

**104.2.6.7 Records.** ~~The details~~ Records of the written request for and action granting modifications shall be recorded and entered in the files of the department retained in accordance with Section 104.8.4.

**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 and 104.2.6.4.

## 2024 International Mechanical Code

[A] **104.2.4 Modifications.** ~~Where there are practical difficulties involved in carrying out the provisions of this code, the~~ The code official shall have the authority to ~~grant~~ approve modifications for individual cases ~~provided that where it can be demonstrated to the code official it is not practical to specifically comply with this code or utilize an alternative method of compliance in accordance with Section 104.2.3.~~

[A] **104.2.4.1 Approval authority.** ~~As a condition of approval,~~ the code official shall ~~first~~ find that one or more special individual reasons make ~~the strict letter of this code it~~ impractical to specifically comply with this code or provide equivalency through an alternative method of compliance in accordance with Section 104.2.3, ~~that the~~

[A] **104.2.4.1.1 Flood hazard areas.** The code official shall not grant modifications to any provision required in flood hazard areas as established by Section 1612.3 in the International Building Code 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 in the International Building Code 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] **104.2.4.2 Application and disposition.** A request to use a modification shall be submitted in writing to the code official for approval. Where the modification is not approved, the code official shall respond in writing, stating the reasons the modification was not approved.

[A] **104.2.4.3 Compliance with the code intent.** ~~Modifications shall comply~~ modification is in compliance with the intent and purpose of this code, and ~~that such modification does shall~~ not lessen any of the following:

1. health;
2. accessibility;
3. life safety ~~and~~
4. fire safety ~~or~~
5. structural requirements ~~safety.~~

[A] **104.2.4.4 Tests.** Tests conducted in support of a modification 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] **104.2.4.5 Reports.** Supporting documentation, where necessary to assist in the approval of a modification shall comply with Sections 104.2.4.5.1 and 104.2.4.5.2.



[A] 104.2.4.5.1 Evaluation reports. Evaluation reports shall be issued by an approved agency and use of the evaluation report shall require approval by the code official. Evaluation of the modification shall be within the scope of the accreditation of the approved agency. Criteria used for the evaluation shall be identified within the report.

[A] 104.2.4.5.2 Other reports. Reports not complying with Section 104.2.4.5.1 shall describe criteria, including but not limited to any referenced testing or analysis, used to determine compliance with code intent. 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] 104.2.4.6 Peer review. The code official is authorized to require submittal of a peer review report in conjunction with a modification request, prepared by a peer reviewer that is approved by the code official.

[A] 104.2.4.7 Records. ~~The details-Records~~ of the written request for and action granting modifications shall be ~~recorded and entered in the files of the department of building safety~~ retained in accordance with Section 104.7.4.

[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 and 104.2.4.4.

## 2024 International Plumbing Code

[A] **104.2.4 Modifications.** ~~Where there are practical difficulties involved in carrying out the provisions of this code, the~~ The code official shall have the authority to grant approve modifications for individual cases ~~provided that where it can be demonstrated to the code official that it is not practical to specifically comply with this code or utilize an alternative method of compliance in accordance with Section 104.2.3.~~

[A] **104.2.4.1 Approval authority.** ~~As a condition of approval, the code official shall first find that one or more special individual reasons make the strict letter of this code it impractical to specifically comply with this code or provide equivalency through an alternative method of compliance in accordance with Section 104.2.3, that the~~

[A] **104.2.4.1.1 Flood hazard areas.** The code official shall not grant modifications to any provision required in flood hazard areas as established by Section 1612.3 in the International Building Code 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 in the International Building Code 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] **104.2.4.2 Application and disposition.** A request to use a modification shall be submitted in writing to the code official for approval. Where the modification is not approved, the code official shall respond in writing, stating the reasons the modification was not approved.

[A] **104.2.4.3 Compliance with the code intent.** ~~Modifications shall comply modification is in compliance~~ with the intent and purpose of this code, and ~~that such modification does shall~~ not lessen any of the following:

1. health;
2. accessibility;
3. life safety and
4. fire safety or
5. structural requirements safety.

[A] **104.2.4.4 Tests.** ~~Tests conducted in support of a modification 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] **104.2.4.5 Reports.** Supporting documentation, where necessary to assist in the approval of a modification shall comply with Sections 104.2.4.5.1 and 104.2.4.5.2.

[A] 104.2.4.5.1 Evaluation reports. Evaluation reports shall be issued by an approved agency and use of the evaluation report shall require approval by the code official. Evaluation of the modification shall be within the scope of the accreditation of the approved agency. Criteria used for the evaluation shall be identified within the report.

[A] 104.2.4.5.2 Other reports. Reports not complying with Section 104.2.4.5.1 shall describe criteria, including but not limited to any referenced testing or analysis, used to determine compliance with code intent. 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] 104.2.4.6 Peer review. The code official is authorized to require submittal of a peer review report in conjunction with a modification request, prepared by a peer reviewer that is approved by the code official.

[A] 104.2.4.7 Records. ~~The details-Records~~ of the written request for and action granting modifications shall be ~~recorded and entered in the files of the department of building safety~~ retained in accordance with Section 104.7.4.

[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 ~~and~~ 104.2.4.4.

## 2024 International Private Sewage Disposal Code

[A] **104.2.4 Modifications.** ~~Where there are practical difficulties involved in carrying out the provisions of this code, the~~ The code official shall have the authority to grant approve modifications for individual cases ~~provided that where it can be demonstrated to the code official that it is not practical to specifically comply with this code or utilize an alternative method of compliance in accordance with Section 104.2.3.~~

[A] **104.2.4.1 Approval authority.** ~~As a condition of approval, the code official shall first find that one or more special individual reasons make the strict letter of this code it impractical to specifically comply with this code or provide equivalency through an alternative method of compliance in accordance with Section 104.2.3, that the~~

[A] **104.2.4.1.1 Flood hazard areas.** The code official shall not grant modifications to any provision required in flood hazard areas as established by Section 1612.3 in the International Building Code 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 in the International Building Code 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] **104.2.4.2 Application and disposition.** A request to use a modification shall be submitted in writing to the code official for approval. Where the modification is not approved, the code official shall respond in writing, stating the reasons the modification was not approved.

[A] **104.2.4.3 Compliance with the code intent.** ~~Modifications shall comply modification is in compliance~~ with the intent and purpose of this code, and ~~that such modification does shall~~ not lessen any of the following:

1. health;
2. accessibility;
3. life safety and
4. fire safety or
5. structural requirements safety.

[A] **104.2.4.4 Tests.** ~~Tests conducted in support of a modification 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] **104.2.4.5 Reports.** Supporting documentation, where necessary to assist in the approval of a modification shall comply with Sections 104.2.4.5.1 and 104.2.4.5.2.

[A] 104.2.4.5.1 Evaluation reports. Evaluation reports shall be issued by an approved agency and use of the evaluation report shall require approval by the code official. Evaluation of the modification shall be within the scope of the accreditation of the approved agency. Criteria used for the evaluation shall be identified within the report.

[A] 104.2.4.5.2 Other reports. Reports not complying with Section 104.2.4.5.1 shall describe criteria, including but not limited to any referenced testing or analysis, used to determine compliance with code intent. 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] 104.2.4.6 Peer review. The code official is authorized to require submittal of a peer review report in conjunction with a modification request, prepared by a peer reviewer that is approved by the code official.

[A] 104.2.4.7 Records. ~~The details-Records~~ of the written request for and action granting modifications shall be ~~recorded and entered in the files of the department of building safety~~ retained in accordance with Section 104.7.4.

[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 and 104.2.4.4.

## 2024 International Property Maintenance Code

**[A] 105.2.3 Modifications.** ~~Where there are practical difficulties involved in carrying out the provisions of this code, the~~ The code official shall have the authority to grant approve modifications for individual cases provided that where it can be demonstrated to the code official that it is not practical to specifically comply with this code or utilize an alternative method of compliance in accordance with Section 105.2.2.

**[A] 105.2.3.1 Approval authority.** ~~As a condition of approval, the code official shall first find that one or more special individual reasons make the strict letter of this code it impractical to specifically comply with this code or provide equivalency through an alternative method of compliance in accordance with Section 104.2.2., that the~~

**[A] 105.2.3.2 Application and disposition.** A request to use a modification shall be submitted in writing to the code official for approval. Where the modification is not approved, the code official shall respond in writing, stating the reasons the modification was not approved.

**[A] 105.2.3.3 Compliance with the code intent.** ~~Modifications shall comply modification is in compliance with the intent and purpose of this code, and that such modification does shall not lessen any of the following:~~

1. health,
2. accessibility,
3. life safety and
4. fire safety or
5. structural safety.

**[A] 105.2.3.4 Tests.** Tests conducted in support of a modification 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] 105.2.3.5 Reports.** Supporting documentation, where necessary to assist in the approval of a modification shall comply with Sections 105.2.3.5.1 and 105.2.3.5.2.

**[A] 105.2.3.5.1 Evaluation reports.** Evaluation reports shall be issued by an approved agency and use of the evaluation report shall require approval by the code official. Evaluation of the modification shall be within the scope of the accreditation of the approved agency. Criteria used for the evaluation shall be identified within the report.

**[A] 105.2.3.5.2 Other reports.** Reports not complying with Section 105.2.3.5.1 shall describe criteria, including but not limited to any referenced testing or analysis, used to determine compliance with code intent. 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] 105.2.3.6 Peer review.** The code official is authorized to require submittal of a peer review report in conjunction with a modification request, prepared by a peer reviewer that is approved by the code official.

**[A] 105.2.3.7 Records.** ~~The details~~ Records of the written request for and action granting modifications shall be recorded and entered in the department files retained in accordance with Section 105.6.4.

[A] **105.6.4 Tests.** The code official shall keep a record of tests conducted to comply with Sections 105.2.1.4, ~~and~~ 105.2.2.5 and 105.2.3.4.

## 2024 International Residential Code

**R104.2.3 Modifications.** ~~Where there are practical difficulties involved in carrying out the provisions of this code, the~~ The building official shall have the authority to ~~grant~~ approve modifications for individual cases ~~provided that where it can be demonstrated to the building official that it is not practical to specifically comply with this code or utilize an alternative method of compliance in accordance with Section R104.2.2.~~

**R104.2.3.1 Approval authority.** As a condition of approval, the building official shall ~~first~~ find that one or more special individual reasons ~~makes the strict letter of this code it~~ impractical to specifically comply with this code or provide equivalency through an alternative method of compliance in accordance with Section R104.2.2.

**R104.2.3.1.1 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.

**R104.2.3.2 Application and disposition.** A request to use a modification shall be submitted in writing to the building official for approval. Where the modification is not approved, the building official shall respond in writing, stating the reasons the modification was not approved.

**R104.2.3.3 Compliance with the code intent.** ~~that the modification is in compliance~~ Modifications shall comply with the intent and purpose of this code, and ~~that the modification does shall~~ not lessen any of the following:

1. health,
2. life safety and
3. fire safety or
4. structural requirements safety.

**R104.2.3.4 Tests.** Tests conducted in support of a modification 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.

**R104.2.3.5 Reports.** Supporting documentation, where necessary to assist in the approval of a modification shall comply with Sections R104.2.3.5.1 and R104.2.3.5.2.

**R104.2.3.5.1 Evaluation reports.** Evaluation reports shall be issued by an approved agency and use of the evaluation report shall require approval by the building official. Evaluation of the modification shall be within the scope of the accreditation of the approved agency. Criteria used for the evaluation shall be identified within the report.



**R104.2.3.5.2 Other reports.** Reports not complying with Section R104.2.3.5.1 shall describe criteria, including but not limited to any referenced testing or analysis, used to determine compliance with code intent. 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.

**R104.2.3.6 Records.** ~~The details-Records~~ of the written request for and action granting modifications shall be ~~recorded and entered in the files of the department of building safety~~ retained in accordance with Section R104.7.4.

**R104.7.4 Tests.** The building official shall keep a record of tests conducted to comply with Sections R104.2.2.5 and R104.2.3.4.

## 2024 International Swimming Pool and Spa Code

[A] **104.2.4 Modifications.** ~~Where there are practical difficulties involved in carrying out the provisions of this code, the~~ The code official shall have the authority to grant approve modifications for individual cases ~~provided that where it can be demonstrated to the code official that it is not practical to specifically comply with this code or utilize an alternative method of compliance in accordance with Section 104.2.3.~~

[A] **104.2.4.1 Approval authority.** ~~As a condition of approval, the code official shall first find that one or more special individual reasons make the strict letter of this code it impractical to specifically comply with this code or provide equivalency through an alternative method of compliance in accordance with Section 104.2.3, that the~~

[A] **104.2.4.1.1 Flood hazard areas.** The code official shall not grant modifications to any provision required in flood hazard areas as established by Section 1612.3 in the International Building Code 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 in the International Building Code 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] **104.2.4.2 Application and disposition.** A request to use a modification shall be submitted in writing to the code official for approval. Where the modification is not approved, the code official shall respond in writing, stating the reasons the modification was not approved.

[A] **104.2.4.3 Compliance with the code intent.** ~~Modifications shall comply modification is in compliance~~ with the intent and purpose of this code, and ~~that such modification does shall~~ not lessen any of the following:

1. health;
2. accessibility;
3. life safety and
4. fire safety or
5. structural requirements safety.

[A] **104.2.4.4 Tests.** ~~Tests conducted in support of a modification 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] **104.2.4.5 Reports.** Supporting documentation, where necessary to assist in the approval of a modification shall comply with Sections 104.2.4.5.1 and 104.2.4.5.2.

[A] 104.2.4.5.1 Evaluation reports. Evaluation reports shall be issued by an approved agency and use of the evaluation report shall require approval by the code official. Evaluation of the modification shall be within the scope of the accreditation of the approved agency. Criteria used for the evaluation shall be identified within the report.

[A] 104.2.4.5.2 Other reports. Reports not complying with Section 104.2.4.5.1 shall describe criteria, including but not limited to any referenced testing or analysis, used to determine compliance with code intent. 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] 104.2.4.6 Peer review. The code official is authorized to require submittal of a peer review report in conjunction with a modification request, prepared by a peer reviewer that is approved by the code official.

[A] 104.2.4.7 Records. ~~The details-Records~~ of the written request for and action granting modifications shall be ~~recorded and entered in the files of the department of building safety~~ retained in accordance with Section 104.7.4.

[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 and 104.2.4.4.

## 2024 International Wildland-Urban Interface Code

**[A] 104.2.3 Modifications.** ~~Where there are practical difficulties involved in carrying out the provisions of this code, the~~ The code official shall have the authority to grant approve modifications for individual cases provided that where it can be demonstrated to the code official that it is not practical to specifically comply with this code or utilize an alternative method of compliance in accordance with Section 104.2.2.

**[A] 104.2.3.1 Approval authority.** As a condition of approval, the code official shall first find that one or more special individual reasons make the strict letter of this code it impractical to specifically comply with this code or provide equivalency through an alternative method of compliance in accordance with Section 104.2.2, that the

**[A] 104.2.3.2 Application and disposition.** A request to use a modification shall be submitted in writing to the code official for approval. Where the modification is not approved, the code official shall respond in writing, stating the reasons the modification was not approved.

**[A] 104.2.3.3 Compliance with the code intent.** Modifications shall comply modification is in compliance with the intent and purpose of this code, and that such modification does shall not lessen any of the following:

1. health,
2. accessibility
3. life safety and
4. fire safety
5. structural requirements safety.

**[A] 104.2.3.4 Tests.** Tests conducted in support of a modification 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] 104.2.3.5 Reports.** Supporting documentation, where necessary to assist in the approval of a modification shall comply with Sections 104.2.4.5.1 and 104.2.4.5.2.

**[A] 104.2.3.5.1 Evaluation reports.** Evaluation reports shall be issued by an approved agency and use of the evaluation report shall require approval by the code official. Evaluation of the modification shall be within the scope of the accreditation of the approved agency. Criteria used for the evaluation shall be identified within the report.

**[A] 104.2.3.5.2 Other reports.** Reports not complying with Section 104.2.4.5.1 shall describe criteria, including but not limited to any referenced testing or analysis, used to determine compliance with code intent. 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] 104.2.3.6 Peer review.** The code official is authorized to require submittal of a peer review report in conjunction with a modification request, prepared by a peer reviewer that is approved by the code official.

**[A] 104.2.3.7 Records.** The details Records of the written request for and action granting modifications shall be recorded and entered into the files of the code enforcement agency retained in accordance with Section 104.7.4.

[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 and 104.2.3.4.

## **REASON:**

This proposal adds evaluation and approval parameters for modifications, making them similar to those currently in the code for alternative methods. The primary difference between an alternative method and a modification is that a modification changes a code requirement in unique cases where equivalency cannot be achieved, as opposed to an alternative method, which establishes equivalency with a code requirement.

Accordingly, the provisions for approval of a modification should at least be equivalent those for approval of an alternative method. However, code text currently suggests that the hurdle to obtain approval of a modification is less stringent. To address this, the modification requirements have been clarified to state that the code official must determine 1) direct compliance with the code is not achievable, and 2) potential alternative methods of compliance have been explored but cannot produce equivalency to the code.

Further, this proposal achieves consistency with changes to the alternative method provisions made under ADM13-22 and ADM 14-22, minus the requirement for code equivalency. Relevant provisions from the requirements for alternative methods have been added to the requirements for modifications. The one exception to this equivalency occurs in the IRC. In the IRC, the code official does not have the authority to require technical reports or a peer review for alternative methods, but if a technical report or peer review is submitted the code official can approve the agency or agent preparing the documentation. The same occurs for modifications in the IRC—the code official does not have the authority to require peer review or a technical report, but if it is submitted, the preparer must meet with the code official's approval.

This proposal will provide consistency across all the codes where modifications are allowed, with the exception of excluding accessibility, given that the IRC does not regulate accessibility.

The FCAC noted that the provisions for modifications involving flood hazard areas are currently inconsistent among the codes and have grammatic errors. Based on a commitment by FEMA to separately address these issues in a FEMA proposal, FCAC did not make any content revisions to these sections.

# BCAC Egress Item 14 NFPA 13D system

Date 8-23-2023

**1006.2.1 Egress based on occupant load and common path of egress travel distance.** Two exits or exit access doorways from any space shall be provided where the design occupant load or the common path of egress travel distance exceeds the values listed in Table 1006.2.1. The cumulative occupant load from adjacent rooms, areas or spaces shall be determined in accordance with Section 1004.2.

**Exceptions:**

1. The number of exits from foyers, lobbies, vestibules or similar spaces need not be based on cumulative occupant loads for areas discharging through such spaces, but the capacity of the exits from such spaces shall be based on applicable cumulative occupant loads.
2. Care suites in Group I-2 occupancies complying with Section 407.4.
3. Unoccupied mechanical rooms and penthouses are not required to comply with the common path of egress travel distance measurement.

**TABLE 803.13  
INTERIOR WALL AND CEILING FINISH REQUIREMENTS BY OCCUPANCY<sup>k</sup>**

GROUP	SPRINKLERED <sup>l</sup> – S, S13R, S13D			NONSPRINKLERED- NS		
	Interior exit stairways and ramps and exit passageways <sup>a, b</sup>	Corridors and enclosure for exit access stairways and ramps	Rooms and enclosed spaces <sup>c</sup>	Interior exit stairways and ramps and exit passageways <sup>a, b</sup>	Corridors and enclosure for exit access stairways and ramps	Rooms and enclosed spaces <sup>c</sup>
A-1 & A-2	B	B	C	A	A <sup>d</sup>	B <sup>e</sup>
A-3 <sup>f</sup> , A-4, A-5	B	B	C	A	A <sup>d</sup>	C
B, E, M, R-1	B	C <sup>m</sup>	C	A	B	C
R-4	B	C	C	A	B	B
F	C	C	C	B	C	C
H	B	B	C <sup>g</sup>	A	A	B
I-1	B	C	C	A	B	B
I-2	B	B	B <sup>h, i</sup>	A	A	B
I-3	A	A <sup>j</sup>	C	A	A	B
I-4	B	B	B <sup>h, i</sup>	A	A	B
R-2	C	C	C	B	B	C
R-3	C	C	C	C	C	C
S	C	C	C	B	B	C
U	No restrictions			No restrictions		

For SI: 1 inch = 25.4 mm, 1 square foot = 0.0929 m<sup>2</sup>.

NS = Buildings not equipped throughout with an automatic sprinkler system; S = Buildings equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1; S13R = Buildings equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.2; S13D = Buildings equipped throughout with an automatic sprinkler system installed in accordance with Sections 903.2.8 and 903.3.1.3.

- a. Class C interior finish materials shall be permitted for wainscotting or paneling of not more than 1,000 square feet of applied surface area in the grade lobby where applied directly to a noncombustible base or over furring strips applied to a noncombustible base and fireblocked as required by Section 803.15.1.
- b. In other than Group I-3 occupancies in buildings less than three stories above grade plane, Class B interior finish for nonsprinklered buildings and Class C interior finish for sprinklered buildings shall be permitted in interior exit stairways and ramps.
- c. Requirements for rooms and enclosed spaces shall be based on spaces enclosed by partitions. Where a fire-resistance rating is required for structural elements, the enclosing partitions shall extend from the floor to the ceiling. Partitions that do not comply with this shall be considered to be enclosing spaces and the rooms or spaces on both sides shall be considered to be one room or space. In determining the applicable requirements for rooms and enclosed spaces, the specific occupancy thereof shall be the governing factor regardless of the group classification of the building or structure.
- d. Lobby areas in Group A-1, A-2 and A-3 occupancies shall be not less than Class B materials.
- e. Class C interior finish materials shall be permitted in places of assembly with an occupant load of 300 persons or less.
- f. For places of religious worship, wood used for ornamental purposes, trusses, paneling or chancel furnishing shall be permitted.
- g. Class B material is required where the building exceeds two stories.
- h. Class C interior finish materials shall be permitted in administrative spaces.
- i. Class C interior finish materials shall be permitted in rooms with a capacity of four persons or less.
- j. Class B materials shall be permitted as wainscotting extending not more than 48 inches above the finished floor in corridors and exit access stairways and ramps.
- k. Finish materials as provided for in other sections of this code.
- ~~l. Applies when protected by an automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2.~~
- m. Corridors in ambulatory care facilities shall be provided with Class A or B materials.

**TABLE 1006.2.1  
SPACES WITH ONE EXIT OR EXIT ACCESS DOORWAY**

OCCUPANCY	MAXIMUM OCCUPANT LOAD OF SPACE	MAXIMUM COMMON PATH OF EGRESS TRAVEL DISTANCE (feet)				
		Without Automatic Sprinkler System (feet)		With Sprinkler System (feet)		
		Occupant Load		<u>S</u>	<u>S13R</u>	<u>S13D</u>
		OL ≤ 30	OL > 30			
A <sup>c</sup> , E, M	49	75	75	75 <sup>a</sup>	<u>NP</u>	<u>NP</u>
B	49	100	75	100 <sup>a</sup>	<u>NP</u>	<u>NP</u>
F	49	75	75	100 <sup>a</sup>	<u>NP</u>	<u>NP</u>
H-1, H-2, H-3	3	NP	NP	25 <sup>b</sup>	<u>NP</u>	<u>NP</u>
H-4, H-5	10	NP	NP	75 <sup>b</sup>	<u>NP</u>	<u>NP</u>
I-1, I-2 <sup>d</sup> , I-4	10	NP	NP	75 <sup>a</sup>	<u>NP</u>	<u>NP</u>
I-3	10	NP	NP	100 <sup>a</sup>	<u>NP</u>	<u>NP</u>
R-1	10	NP	NP	75 <sup>a</sup>	<u>NP</u>	<u>NP</u>
R-2	20	NP	NP	125 <sup>a</sup>	<u>125</u>	<u>125</u>
R-3 <sup>e</sup>	20	NP	NP	125 <sup>a-e</sup>	<u>125</u>	<u>125</u>
R-4 <sup>e</sup>	20	NP	NP	125 <sup>a-e</sup>	<u>125</u>	<u>75</u>
S <sup>f</sup>	29	100	75	100 <sup>a</sup>	<u>NP</u>	<u>NP</u>
U	49	100	75	75 <sup>a</sup>	<u>NP</u>	<u>NP</u>

For SI: 1 foot = 304.8 mm.

NP = Not Permitted.

NS = Buildings not equipped throughout with an automatic sprinkler system; S = Buildings equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1; S13R = Buildings equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.2; S13D = Buildings equipped throughout with an automatic sprinkler system installed in accordance with Sections 903.2.8 and 903.3.1.3.

a. Buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 or 903.3.1.2. See Section 903 for occupancies where automatic sprinkler systems are permitted in accordance with Section 903.3.1.2.

b. Group H occupancies equipped throughout with an automatic sprinkler system in accordance with Section 903.2.5.

c. For a room or space used for assembly purposes having fixed seating, see Section 1030.8.

d. For the travel distance limitations in Group I-2, see Section 407.4.

e. The common path of egress travel distance shall only apply in a Group R-3 and Group R-4 occupancy located in a mixed occupancy building.

f. The length of common path of egress travel distance in a Group S-2 open parking garage shall be not more than 100 feet.

g. For the travel distance limitations in Groups R-3 and R-4 equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.3, see Section 1006.2.2.6.

1006.2.2.6 Groups R-3 and R-4. Where Group R-3 occupancies are permitted by Section 903.2.8 to be protected by an automatic sprinkler system installed in accordance with Section 903.3.1.3, the exit access travel distance for Group R-3 shall be not more than 125 feet (38 100 mm). Where Group R-4 occupancies are permitted by Section 903.2.8 to be protected by an automatic sprinkler system installed in accordance with Section 903.3.1.3, the exit access travel distance for Group R-4 shall be not more than 75 feet (22 860 mm).

**(E24-18 AS)**

**1006.3.4 Single exits.** A single *exit* or access to a single *exit* shall be permitted from any *story* or occupied 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 1006.3.4 (1) or 1006.3.4 (2).
2. Rooms, areas and spaces complying with Section 1006.2.1 with *exits* that discharge directly to the exterior at the *level of exit discharge*, are permitted to have one *exit* or access to a single *exit*.
3. Parking garages where vehicles are mechanically parked shall be permitted to have one *exit* or access to a single *exit*.



4. Group R-3 and R-4 occupancies shall be permitted to have one *exit* or access to a single *exit*.
5. Individual single-story or multistory *dwelling units* shall be permitted to have a single exit or access to a single *exit* from the *dwelling unit* provided that both of the following criteria are met:
- 5.1. The *dwelling unit* complies with Section 1006.2.1 as a space with one *means of egress*.
  - 5.2. Either the *exit* from the *dwelling unit* discharges directly to the exterior at the *level of exit discharge*, or the *exit access* outside the dwelling unit's entrance door provides access to not less than two approved independent *exits*.

**(E24-18 AS) TABLE 1006.3.4 (1)**

**STORIES WITH ONE EXIT OR ACCESS TO ONE EXIT FOR R-2 OCCUPANCIES**

STORY	OCCUPANCY	MAXIMUM NUMBER OF DWELLING UNITS	MAXIMUM EXIT ACCESS TRAVEL DISTANCE
Basement, first, second or third story above grade plane	R-2 <sup>a, b</sup>	4 dwelling units	125 feet
Fourth story above grade plane and higher	NP	NA	NA

For SI: 1 foot = 3048 mm.

NP = Not Permitted.

NA = Not Applicable.

a. Buildings classified as Group R-2 equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 or 903.3.1.2 and provided with emergency escape and rescue openings in accordance with Section 1031.

b. This table is used for R-2 occupancies consisting of dwelling units. For R-2 occupancies consisting of sleeping units, use Table 1006.3.4 (2).

**(E24-18 AS) TABLE 1006.3.4 (2)**

**STORIES WITH ONE EXIT OR ACCESS TO ONE EXIT FOR OTHER OCCUPANCIES**

STORY	OCCUPANCY	MAXIMUM OCCUPANT LOAD PER STORY	MAXIMUM EXIT ACCESS TRAVEL DISTANCE (feet)
First story above or below grade plane	A, B <sup>b</sup> , E F <sup>b</sup> , M, U	49	75
	H-2, H-3	3	25
	H-4, H-5, I, R-1, R-2 <sup>a, c</sup>	10	75
	S <sup>b, d</sup>	29	75
Second story above grade plane	B, F, M, S <sup>d</sup>	29	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. Buildings classified as Group R-2 equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 or 903.3.1.2 and provided with emergency escape and rescue openings in accordance with Section 1031.

b. Group B, F and S occupancies in buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 shall have a maximum exit access travel distance of 100 feet.

c. This table is used for R-2 occupancies consisting of sleeping units. For R-2 occupancies consisting of dwelling units, use Table 1006.3.4 (1).

d. The length of exit access travel distance in a Group S-2 open parking garage shall be not more than 100 feet.

**1017.2 Limitations.** *Exit access* travel distance shall not exceed the values given in Table 1017.2.

**(F75-21 AS; E86-21 D/ASPC1)**

**TABLE 1017.2  
EXIT ACCESS TRAVEL DISTANCE<sup>a</sup>**

OCCUPANCY	WITHOUT AUTOMATIC SPRINKLER SYSTEM (feet)	WITH AUTOMATIC SPRINKLER SYSTEM S. S13R(feet)	WITH AUTOMATIC SPRINKLER SYSTEM S13D(feet)

A, E, F-1, M, <del>R</del> , S-1	200 <sup>e</sup>	250 <sup>b</sup>	<u>NP</u>
<u>R-1</u>	<u>NP</u>	<u>250</u>	<u>NP</u>
<u>R-2, R-3<sup>f</sup>, R-4<sup>f</sup></u>	<u>NP</u>	<u>250</u>	<u>200</u>
I-1	<del>Not Permitted</del> <u>NP</u>	250 <sup>b</sup>	<u>NP</u>
B	200	300 <sup>e</sup>	<u>NP</u>
F-2, S-2, U	300	400 <sup>e</sup>	<u>NP</u>
H-1	<del>Not Permitted</del> <u>NP</u>	75 <sup>d</sup>	<u>NP</u>
H-2	<del>Not Permitted</del> <u>NP</u>	100 <sup>d</sup>	<u>NP</u>
H-3	<del>Not Permitted</del> <u>NP</u>	150 <sup>d</sup>	<u>NP</u>
H-4	<del>Not Permitted</del> <u>NP</u>	175 <sup>d</sup>	<u>NP</u>
H-5	<del>Not Permitted</del> <u>NP</u>	200 <sup>e</sup>	<u>NP</u>
I-2, I-3	<del>Not Permitted</del> <u>NP</u>	200 <sup>e</sup>	<u>NP</u>
I-4	150	200 <sup>e</sup>	<u>NP</u>

For SI: 1 foot = 304.8 mm. NP = Not Permitted.

~~NS = Buildings not equipped throughout with an automatic sprinkler system; S = Buildings equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1; S13R = Buildings equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.2; S13D = Buildings equipped throughout with an automatic sprinkler system installed in accordance with Sections 903.2.8 and 903.3.1.3.~~

a. See the following sections for modifications to *exit access* travel distance requirements:

- Section 402.8: For the distance limitation in malls.
- Section 407.4: For the distance limitation in Group I-2.
- Sections 408.6.1 and 408.8.1: For the distance limitations in Group I-3.
- Section 411.2: For the distance limitation in special amusement areas.
- Section 412.6: For the distance limitations in aircraft manufacturing facilities.
- Section 1006.2.2.2: For the distance limitation in refrigeration machinery rooms.
- Section 1006.2.2.3: For the distance limitation in refrigerated rooms and spaces.
- Section 1006.3.4: For buildings with one exit.
- Section 1017.2.2: For increased distance limitation in Groups F-1 and S-1.
- Section 1017.2.3: For increased distance limitation in Group H-5.
- Section 1030.7: For increased limitation in assembly seating.
- Section 3103.4: For temporary structures.
- Section 3104.9: For *pedestrian walkways*.

~~b. Buildings equipped throughout with an *automatic sprinkler system* in accordance with Section 903.3.1.1 or 903.3.1.2. See Section 903 for occupancies where *automatic sprinkler systems* are permitted in accordance with Section 903.3.1.2.~~

~~c. Buildings equipped throughout with an *automatic sprinkler system* in accordance with Section 903.3.1.1.~~

d. Group H occupancies equipped throughout with an *automatic sprinkler system* in accordance with Section 903.2.5.1.

~~e. Group R-3 and R-4 buildings equipped throughout with an *automatic sprinkler system* in accordance with Section 903.3.1.3. See Section 903.2.8 for occupancies where *automatic sprinkler systems* are permitted in accordance with Section 903.3.1.3.~~

f. The exit access travel distance shall only apply in a Group R-3 and R-4 occupancy located in a mixed occupancy building.

(F75-21 Part 1 AS)

**TABLE 1020.2  
CORRIDOR FIRE-RESISTANCE RATING**

OCCUPANCY	OCCUPANT LOAD SERVED BY CORRIDOR	REQUIRED FIRE-RESISTANCE RATING (hours)		
		Without <u>automatic</u> sprinkler system	With <u>automatic</u> sprinkler system	With <u>automatic sprinkler system S13D</u>
H-1, H-2, H-3	All	<del>Not Permitted</del> <u>NP</u>	1 <sup>c</sup>	<u>NP</u>

H-4, H-5	Greater than 30	<del>Not Permitted</del> <u>NP</u>	1 <sup>c</sup>	<u>NP</u>
A, B, E, F, M, S, U	Greater than 30	1	0	<u>NP</u>
R	Greater than 10	<del>Not Permitted</del> <u>NP</u>	0.5 <sup>e</sup> / <u>1</u> <sup>d</sup>	<u>1</u> <sup>c</sup>
I-2 <sup>a</sup>	All	<del>Not Permitted</del> <u>NP</u>	0	<u>NP</u>
I-1, I-3	All	<del>Not Permitted</del> <u>NP</u>	1 <sup>b, c</sup>	<u>NP</u>
I-4	All	1	0	<u>NP</u>

NP = Not Permitted.

NS = Buildings not equipped throughout with an automatic sprinkler system; S = Buildings equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1; S13R = Buildings equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.2; S13D = Buildings equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.3.

a. For requirements for occupancies in Group I-2, see Sections 407.2 and 407.3.

b. For a reduction in the fire-resistance rating for occupancies in Group I-3, see Section 408.8.

c. Buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 or 903.3.1.2 where allowed.

d. Group R-3 and R-4 buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.3. See Section 903.2.8 for occupancies where automatic sprinkler systems are permitted in accordance with Section 903.3.1.3.

e. The corridor fire resistance rating shall only apply to exit access corridors outside of the unit in a Group R-3 and R-4 occupancy located in a mixed occupancy building.

Reason: The intent of this proposal is to make the tables in Chapter 10 consistent with the revisions to Table 504.3, 504.4, 506.2 – using S13, S13R, S13D and NP for sprinkler requirement. This would clarify what happens when an NFPA 13D sprinkler system is used. This is not intent to change current allowances; just to clarify what requirements are applicable for an NFPA13D system.

Discussion during the BCAC calls has indicated that it is needed to identifying specific code sections so that everyone has the same understanding.

Group R-4 requirements do not always have to be stated as Section 310.5 states “Group R-4 occupancies shall meet the requirements for construction as defined for Group R-3, except as otherwise provided for in this code.” However, since a lot of people miss that, we are including R-4 in the proposed applicable footnotes.

Townhouses are defined as attached dwelling units that extend from foundation to grade and are open on at least two sides. If a townhouse is 3 stories or less, it can choose to comply with the IBC or IRC (Section 101.2). The IRC Section P2904 is similar to an NFPA 13D system. If the IBC is used, townhouses subdivide by firewalls into 1 or 2 units per building is a Group R-3 (Section 310.4) and townhouses subdivided by fire partitions (Section 420.2) are a Group R-2 (Section 310.3). This is important to clarify because all townhouses can use a 13D sprinkler system: Section 903.2.8 references 903.3, and 903.1.3.3 specifically stating that “Automatic sprinkler systems installed in ... and townhouses shall be permitted to be installed throughout in accordance with NFPA 13D.” To make this obvious in the tables, a reference to 903.2.8 and 903.1.3.3 are added in the footnote.

Specifics for this change –

- General – adds the S13, S13R, S13D and NS in the table titles and footnotes with the section references for sprinklers.
- TABLE 803.13 INTERIOR WALL AND CEILING FINISH REQUIREMENTS BY OCCUPANCY - Footnote 1 with the sprinkler reference is redundant and deleted.
- TABLE 1006.2.1 SPACES WITH ONE EXIT OR EXIT ACCESS DOORWAY – columns are added for each of the three sprinkler systems. Footnote a with the sprinkler reference is redundant and deleted. The requirements in Section 1006.2.2.6 are moved into the table, so footnote e and Section 1006.2.2.6 are redundant and deleted.

- TABLE 1017.2 EXIT ACCESS TRAVEL DISTANCE – add columns for NFPA13D and rows to separate out Group R requirements. Footnotes b, c and e are redundant and deleted. The new footnote is added to coordinate with the single exit allowance in Section 1006.3.4 Item 4. “NP” instead of “not permitted” is for consistency in table styles.
- TABLE 1020.2 CORRIDOR FIRE-RESISTANCE RATING – add column for NFPA13D. Footnote c and d are redundant and deleted. The new footnote is added to coordinate with the single exit allowance in Section 1006.3.4 Item 4. “NP” instead of “not permitted” is for consistency in table styles.

**Cost impact:** None. This is a clarification with no change in requirements.

**ADM2-22 AS**

**[A] TOWNHOUSE.** ~~A building that contains three or more attached townhouse units. A single family dwelling unit constructed in a group of three or more attached units in which each unit extends from the foundation to roof and with open space on at least two sides.~~

**ADM2-22 AS**

**[A] TOWNHOUSE UNIT.** A single-family dwelling unit in a townhouse that extends from foundation to roof and that has a yard or public way on not less than two sides.

**(G43-21) AM; (G45-21) AM**

**310.3 Residential Group R-2.** Residential Group R-2 occupancies containing *sleeping units* or more than two *dwelling units* where the occupants are primarily permanent in nature, including:

- Apartment houses
- Congregate living facilities (nontransient) with more than 16 occupants
- Boarding houses (nontransient)
- Convents
- Dormitories
- Emergency services living quarters
- Fraternities and sororities
- Monasteries
- Hotels (nontransient) with more than 10 occupants five guest rooms
- Live/work units
- Motels (nontransient) with more than 10 occupants five guest rooms
- Vacation timeshare properties

**(G 43-21) AM, (G46-21) AM, both; (G45-21) AM**

**310.4 Residential Group R-3.** Residential Group R-3 occupancies where the occupants are primarily permanent in nature and not classified as Group R-1, R-2, R-4 or I, including:

- Buildings that do not contain more than two *dwelling units*
- Care facilities that provide accommodations for five or fewer persons receiving care
- Congregate living facilities (nontransient) with 16 or fewer occupants
- Boarding houses (nontransient)
- Convents
- Dormitories
- Emergency services living quarters
- Fraternities and sororities
- Monasteries
- Congregate living facilities (transient) with 10 or fewer occupants
- Boarding houses (transient)
- Lodging houses (transient) with five or fewer guest rooms and 10 or fewer occupants
- Hotels (nontransient) with 10 five or fewer occupants guest rooms
- Motels (nontransient) with 10 five or fewer occupants guest rooms

**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 of this code or Section P2904 of the *International Residential Code*.

**(G 43-21) AM, (G46-21) AM, both; editorial to proposal**

**310.4.2 Lodging houses.** Owner-occupied *lodging houses* with five or fewer *guest rooms* and 10 or fewer total occupants shall be permitted to be constructed in accordance with this code or the *International Residential Code*, provided that facilities constructed using the *International Residential Code* shall be protected by that an automatic sprinkler system is installed in accordance with Section 903.3.1.3 or Section P2904 of the *International Residential Code*.

**310.5 Residential Group R-4.** Residential Group R-4 occupancy shall include buildings, structures or portions thereof for more than five but not more than 16 persons, excluding staff, who reside on a 24-hour basis in a supervised residential environment and receive *custodial care*. Buildings of Group R-4 shall be classified as one of the occupancy conditions specified in Section 310.5.1 or 310.5.2. This group shall include, but not be limited to, the following:

- Alcohol and drug centers
- Assisted living facilities
- Congregate care facilities
- Group homes
- Halfway houses
- Residential board and care facilities
- Social rehabilitation facilities

Group R-4 occupancies shall meet the requirements for construction as defined for Group R-3, except as otherwise provided for in this code.

**310.5.1 Condition 1.** This occupancy condition shall include buildings in which all persons receiving *custodial care*, without any assistance, are capable of responding to an emergency situation to complete building evacuation.

**310.5.2 Condition 2.** This occupancy condition shall include buildings in which there are any persons receiving *custodial care* who require limited verbal or physical assistance while responding to an emergency situation to complete building evacuation.

[F] 903.2.8 Group R. An automatic sprinkler system installed in accordance with Section 903.3 shall be provided throughout all buildings with a Group R fire area.

[F] 903.2.8.1 Group R-3. An automatic sprinkler system installed in accordance with Section 903.3.1.3 shall be permitted in Group R-3 occupancies.

[F] 903.2.8.2 Group R-4, Condition 1. An automatic sprinkler system installed in accordance with Section 903.3.1.3 shall be permitted in Group R-4, Condition 1 occupancies.

[F] 903.2.8.3 Care facilities. An automatic sprinkler system installed in accordance with Section 903.3.1.3 shall be permitted in care facilities with five or fewer individuals in a single-family dwelling.

### F72-21 AMPC3

[F] 903.3.1.2 NFPA 13R sprinkler systems. Automatic sprinkler systems in Group R occupancies shall be permitted to be installed throughout in accordance with NFPA 13R where the Group R occupancy meets all of the following conditions:

1. Four stories or fewer above grade plane.
2. For other than Group R-2 occupancies, the floor level of the highest story is 30 feet (9144 mm) or less above the lowest level of fire department vehicle access.
3. For Group R-2 occupancies, the roof assembly is less than 45 feet (13716 mm) above the lowest level of fire department vehicle access. The height of the roof assembly shall be determined by measuring the distance from the lowest required fire vehicle access road surface adjacent to the building to the eave of the highest pitched roof, the intersection of the highest roof to the exterior wall, or the top of the highest parapet, whichever yields the greatest distance.
3. The floor level of the lowest story is 30 feet (9144 mm) or less below the lowest level of fire department vehicle access.

The number of stories of Group R occupancies constructed in accordance with Sections 510.2 and 510.4 shall be measured from grade plane.

[F] 903.3.1.3 NFPA 13D sprinkler systems. Automatic sprinkler systems installed in one- and two-family dwellings; Group R-3; Group R-4, Condition 1; and townhouses shall be permitted to be installed throughout in accordance with NFPA 13D.

### (G20-21 Part 1 AM)

**1006.3.4 Single exits.** A single *exit* or access to a single *exit* shall be permitted from any story or 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 1006.3.4(1) or 1006.3.4(2).
2. Rooms, areas and spaces complying with Section 1006.2.1 with *exits* that discharge directly to the exterior at the *level of exit discharge*, are permitted to have one *exit* or access to a single *exit*.

3. Parking garages where vehicles are mechanically parked shall be permitted to have one *exit* or access to a single *exit*.
4. Group R-3 and R-4 occupancies shall be permitted to have one *exit* or access to a single *exit*.
5. Individual single-story or multistory *dwelling units* shall be permitted to have a single *exit* or access to a single *exit* from the *dwelling unit* provided that both of the following criteria are met:
  - 5.1. The *dwelling unit* complies with Section 1006.2.1 as a space with one *means of egress*.
  - 5.2. Either the exit from the *dwelling unit* discharges directly to the exterior at the *level of exit discharge*, or the *exit access* outside the *dwelling unit's* entrance door provides access to not less than two *approved independent exits*.

# BCAC Egress Item 17 Common Path of Travel

From John-Jozef Proczka

Date: 9-6-2023

Proposed change to the 2024 IBC

**[BE] COMMON PATH OF EGRESS TRAVEL.** That portion of *exit access* travel distance measured from the most remote point of each room, area or space to either an *exit* or that point where the occupants have separate and distinct *nonconverging paths of exit access travel access* to two *exits* or *exit access doorways*.

**1006.2.1 Egress based on occupant load ~~and~~ or common path of egress travel distance.** ~~Two *exits* or *exit access doorways* from any space shall be provided~~ Where the design *occupant load* or the *common path of egress travel* distance exceeds the values listed in Table 1006.2.1, a minimum of two *exits* or *exit access doorways* from the space shall be provided. The cumulative *occupant load* from adjacent rooms, areas or spaces shall be determined in accordance with Section 1004.2.

## Exceptions:

1. The number of *exits* from foyers, lobbies, vestibules or similar spaces need not be based on cumulative *occupants loads* for areas discharging through such spaces, but the capacity of the *exits* from such spaces shall be based on applicable cumulative *occupant loads*.
2. *Care suites* in Group I-2 occupancies complying with Section 407.4
3. Unoccupied mechanical rooms and *penthouses* are not required to comply with the common path of egress travel distance measurement.

## Reason:

There are multiple problems that this proposal fixes. To illustrate what these are, presented are different problematic interpretations of one scenario by a previous building official, a senior plan reviewer, and an architect.

The troublesome scenario revolves around an H-2 *HPM room*. This room has two exit access doorways that lead into the same corridor. This corridor leads to only one exit door. The allowed Exit Access Travel Distance is 100 feet. The allowed Common Path of Egress Travel is 25 feet. The travel in the room combined with the travel in the corridor is more than 25 feet, but less than 100 feet.

Pre-code change problematic Interpretations:

1. The current definition says that the common path of egress travel is measured from the point when the occupants have a choice of two distinct access to two exits. There is only one exit, so no common path of egress travel exists, so its maximum distance isn't violated.

2. The current definition says that the common path of egress travel doesn't exist in the room, as it has two exit access doorways. Therefore, the common path of egress travel doesn't start until the corridor.
3. The current definition uses room, area or space. As such, the choice of which to use is the least restrictive for code enforcement. As the room has two exit access doorways, the common path of egress travel only starts in the corridor.

To fix these problematic interpretations the following changes are proposed:

1. The definition is changed to allow it to stop being measured once an exit is reached. This makes sense as common path of egress travel is a portion of exit access travel distance, which stops at the nearest exit. This fixes the problem interpretation where one exit spaces don't have a common path of egress travel at all.
2. The definition is changed to include the nonconverging requirement to deal with the scenario where the same room is serviced by a single-exit corridor, or any set of paths that are all served by the same exit. The exit access doorways item is also removed from the definition, as it no longer becomes necessary with the inclusion of nonconverging paths, which is closer to the intent, as there is nothing special about the doorways themselves. The wording is maintained in 1006.2.1, as it needs to capture the occupant load of rooms as well as the common path item, which is dealt with the definition change.

The section title is changed to use an "or" as opposed to an "and", as either the occupant load or the common path or both can cause multiple paths to be needed.

The final change is simply a rearrangement of the sentence structure in 1006.2.1 to flow more naturally by first identifying the problem and then the solution to the problem.



# BCAC Egress 25 Part 2 Fire Safety Plan in IBC Chapter 1

Date 8/20/2023

From Kota Wharton

Add New:

107.2.3.1 Fire safety and evacuation plans. Where fire safety and evacuation plans are required by Section 1002.3 of this code, *construction documents* shall include written acceptance of such fire safety and evacuation plans by the *fire code official*.

Reason: Including this section is necessary to ensure fire safety and evacuation plans are approved by the fire code official and to provide a pointer to Section 1002.2.

[F] 1002.2 Fire safety and evacuation plans. Fire safety and evacuation plans shall be provided for all occupancies and buildings where required by the *International Fire Code*. Such fire safety and evacuation plans shall comply with the applicable provisions of Sections 401.2 and 404 of the *International Fire Code*.

In most cases, acceptance by the *fire code official* will be a deferred submittal.

Cost Impact: No impact on cost. This is an existing requirement.

# BCAC Egress Item 27 – Accessibility in IPMC

From Kota  
Revised 7-26-2023

2024 International Property Maintenance Code

Add new:

## SECTION 310 - ACCESSIBILITY

**310.1 General.** A building or facility that is constructed or altered to be accessible shall be maintained accessible during occupancy.

**310.1.1 Accessible route.** Access routes from site arrival points to accessible building entrances and throughout the facility shall be maintained free from obstructions and protruding objects that will prevent their use.

**310.1.2 Elements.** Accessible elements shall be maintained in an operable condition.

**310.1.3 Two-way communication systems.** Two-way communication systems in areas of refuge and elevator landings shall be inspected and tested on a yearly basis to verify that all components are operational.

**310.1.4 Signage.** Signage required by Section 1112 of the International Building Code shall be maintained in an approved manner.

**Reason statement:** This code change is intended to emphasize accessibility for code officials who may fail to differentiate between their non-responsibility to enforce Americans with Disability Act requirements and their responsibility to enforce the accessibility requirements of the IBC through the IPMC. **While primarily a training issue, the issue appears to be widespread enough to warrant pointers to be added.**

**Cost statement:** This change will neither increase or decrease the cost of construction.

This code change has no cost implications.

# BCAC Egress Item 36 single action unlatching

Date 8-22-2023

From Eirene Knott

**1010.2.1 Unlatching.** The unlatching of any door or leaf for egress shall require not more than one motion in a single linear or rotational direction to release all latching and all locking devices.

Exceptions:

1. Places of detention or restraint.
2. Where manually operated bolt locks are permitted by Section 1010.2.5.
3. Doors with automatic flush bolts as permitted by Section 1010.2.4, Item 4.
4. Doors from individual dwelling units and sleeping units of Group R occupancies as permitted by Section 1010.2.4, Item 5.
5. Doors serving individual toilet or bathing room or compartment.

**Reason Statement:** Many single user toilet or bathing rooms have an additional latching mechanism that is used for privacy. With the increased usage of gender-neutral toilet rooms, these locking mechanisms will be increasing in popularity. These indicators require an additional motion to open the door as they must be manually engaged by the user within the toilet/bathing room. Since these rooms are limited to the number of occupants, usually one or in the case of an assisted use toilet/bathing room, a care giver, or other family members, and privacy is a concern in many of these cases, the use of an additional motion to exit the toilet/dressing room should be permitted. Shown below are examples of what these devices look like and what operation must happen in order to disengage the privacy lock.



# BCAC OCC Item 12 – ICC 1200 and 1205 G ??-21

IBC: Section 429 (new)

Move to BCAC [0609-1305-2023](#);  
[7-11-2023 return to work group](#)

G102-21 D; PC D

<https://www.cdpassess.com/public-comment/2744/preview/22984/>

Videos:

<https://www.cdpassess.com/videos/3997/>

<https://www.cdpassess.com/videos/4689/>

## 2024 International Building Code

Add new definition as follows:

### SECTION 202

**OFF-SITE CONSTRUCTION.** A modular building, modular component, ~~or panelized system~~ ~~or in modular tiny house~~ which is designed and constructed in compliance with Section 429 of this code and is wholly or in substantial part fabricated or assembled in manufacturing plants for installation - or assembly and installation - on a separate building site and has been manufactured in such a manner that all parts or processes cannot be inspected at the installation site without disassembly, damage to, or destruction thereof.

**Modular building.** Industrialized housing and buildings

**Modular component.** A subassembly, subsystem or combination of elements, including panelized systems, building shells or bathroom pods, for use as a part of a modular building that is not structurally independent, but is a part of structural, plumbing, mechanical, electrical, fire protection or other systems affecting life safety.

**Panelized system.** Wall, roof or floor components that are constructed at a location other than the building site in a manner that prevents the construction from being inspected at the building site without disassembly, damage or destruction thereof.

**Commented [GE1]:** Delete - Tiny houses are not part of the ICC 1200 or 1205 definition of "off-site construction".

**Commented [GE2]:** Definition taken from ICC 1200.

**Commented [GE3]:** Definition taken from ICC 1200.

**Commented [GE4]:** Definition taken from ICC 1200.

Add new text as follows:

## SECTION 429 OFF-SITE CONSTRUCTION

**429.1 General.** This section ~~applies to off-site construction and shall govern the~~ provides ~~minimum~~ requirements for ~~the~~ planning, design, fabrication, transportation, assembly, inspection and regulatory compliance of building elements using off-site construction.

### Exceptions:

1. Panelized systems not containing plumbing, mechanical, electrical, or fire protection systems shall comply with the requirements of Section 1704.2.5 for fabricated items.
2. Structures incorporating intermodal shipping containers that are repurposed for use as buildings or structures, or as a part of buildings or structures, shall be designed and constructed in compliance with Section 3114.
3. Listed and labeled Modular components installed as fixtures or furnishings in completed buildings shall not be required to comply with this section.

**429.2 Construction.** In addition to other applicable requirements in this code, buildings or building elements using off-site construction shall be constructed in accordance with ICC 1200.

**429.3 Regulatory Compliance.** In addition to other applicable requirements in this code, off-site construction shall be inspected and regulated in accordance with ICC 1205.

**Exception:** Where there is an existing statewide Modular or Industrialized Buildings Program, the project shall comply with both state and local jurisdiction site components in manufacturing plants and at project sites.

Add new standards to Chapter 35:

**ICC/MBI 1200-2021: Standard for Off-Site Construction: Planning, Design, Fabrication and Assembly**

**ICC/MBI 1205-2021: Standard for Off-Site Construction: Inspection and Regulatory Compliance**

Reason:

BCAC addresses all the opponent's concerns from the last cycle in this proposal. In addition, there are some changes to the standards that also address those concerns.

This proposal includes exceptions for panelized systems that do not include concealed plumbing, mechanical, electrical, or fire protection systems and are currently covered by the special inspections for fabricated items in Chapter 17, intermodal shipping containers repurposed as buildings and designed using the recently added IBC Section 3115 provisions, and modular components installed in

**Commented [GE5]:** Revised to more closely align with the scope language of ICC 1200 Section 101.2 and ICC 1205 Section 101.2.

**Commented [GE6]:** Exception #1 is conceptually similar to the proposed PC #1 to G102-21 and intended to address trusses, wall framing panels, SIPs, mass timber, precast concrete and other elements that don't contain embedded electrical, mechanical or plumbing systems and currently are required to have special inspections unless the fabricator has QA/QC processes approved by the AHJ or an approved agency. Which essentially applies to fabricators certified under industry QA/QC programs, such as AISC-certified fabricators or PCI-certified precast plants.

Exception #2 reflects an exemption in ICC 1200 for intermodal shipping containers repurposed as buildings and fixes an error in ICC 1200 as the exception only refers to IBC Chapter 16, not the comprehensive new IBC Section 3115 on shipping containers.

Exception #3 is intended to exempt modular sleep pods, modular office pods, nursing pods and similar elements listed and labeled to UL standards from needing to comply with ICC 1200 and 1205.

**Commented [SH7]:** Send to [Christopher.jensen@ul.com](mailto:Christopher.jensen@ul.com)

**Commented [SH8R7]:** ok

**Commented [GE9]:** Language of exception copied from ICC 1200 Section 102.3.1.

[completed buildings such as prefabricated privacy booths and sleep capsules covered by the UL 962 Standard for Household and Commercial Furnishings. Testimony against G102-21 in the last IBC-General hearings focused on concerns regarding precast panels, mass timber and other panelized systems covered by Chapter 17 and regarding modular sleep pods and similar elements covered by UL standards; this updated proposal provides exceptions to address those concerns.](#)

Interest in off-site construction including modular and panelized systems and tiny houses is growing. Off-site construction has been identified as a solution for multiple societal and industry challenges including affordability, sustainability, job site safety, and the availability of skilled workers. However, many segments of the building industry including code officials, building owners, designers and contractors are often unfamiliar with these processes. While all off-site construction projects (with the exception of manufactured housing covered under the U.S. Department of Housing and Urban Development's Manufactured Home Construction and Safety Standards) must meet the requirements of the code in place at the final project site, the translation between code requirements and the off-site construction process is not always clear. To facilitate enhanced understanding of the off-site construction process, assure off-site projects maintain the requirements in code and are implemented in an efficient manner for both AHJs and manufacturers, the International Code Council (ICC) and the Modular Building Institute (MBI) initiated a joint project to write standards for the planning, design, fabrication, assembly, inspection and regulatory compliance of off-site and modular construction in February 2019.

A standard development committee was created by the ICC Board of Directors in July 2019, and the first meeting of that committee was in October of 2019. The scope of standard ICC 1200 is to provide minimum requirements to safeguard the public health, safety, general welfare and address societal and industry challenges in multiple facets of the off-site construction process including: planning, designing, fabricating, transporting and assembling commercial and residential building elements. The scope of standard ICC 1205 is to provide minimum requirements for the inspection and regulatory compliance of off-site construction.

Off-site (or modular) construction entails the planning, design, fabrication and assembly of building elements at a location other than the location where they were fabricated. Large components of a structure can be assembled in a factory-like setting and transported to the building site for final assembly. Subsequently, the finished construction is required to comply with the model building code adopted by the local authority having jurisdiction. These standards provide planning and preparation requirements such as: the role of the architect/modular manufacturer/construction manager/general contractor, location of plant vs construction site, engagement early on in the process, material procurement and lead times, and change orders. These standards also provide for requirements for a controlled manufacturing environment, supply chain integration, structural modular vs non-structural modular (e.g. bathroom pods), the fabrication process and on-site assembly such as: staging area for construction materials, foundation, placing modules, structural connections, utilities (PMG), weather considerations, finishing mate lines, inspection, approval and regulatory compliance of off-site residential and commercial construction components and their assembly and completion at the final building site such as: permitting; in-plant and on-site final inspections; third party inspections; the role of Industrialized Building Departments, state modular programs and the Authority Having Jurisdiction.

**Cost Impact:** The code change proposal will not increase or decrease the cost of construction. This proposal outlines off-site construction methods that may be unfamiliar to inexperienced industry participants and offers a model regulatory process to address state and local needs.