

ICC 1210-202X edition Public Input Agenda based on July 31, 2023 input received on first draft edition of the ICC 1210 Standard

For August 30, 2023 and subsequent Meetings – Teleconference

Matrix for ICC 1210 proposals

Proposal #	Section Number	Date of	Committee	Notes			
		proposal	ACTION				
		considered					
Chapter 1 ADMINISTRATION PROVISIONS							
IS-OSMEP 01-01-23	101.2	8/30/23	AS				
IS-OSMEP 01-02-23	104.3	8/30/23	AS				
			-				
Chapter 2 DEFINITIONS							
IS-OSMEP 02-01-23	202	8/30/23	AM				
IS-OSMEP 02-02-23	202	8/30/23	D, AS	Split part 1 & 2			
IS-OSMEP 02-03-23	202		AS				
	Cha	apter 3 DESIGN		1			
IS-OSMEP 03-01-23	301.2	8/30/23	AS				
IS-OSMEP 03-02-23	301.2			WITHDRAWN based on previous action			
IS-OSMEP 03-03-23	302.4	8/30/23	AS				
IS-OSMEP 03-04-23	302.5	8/30/23	AS				
IS-OSMEP 03-05-23	302.7.1, 302.7.3	8/30/23	AS				
IS-OSMEP 03-06-23	302.8.1	8/30/23	AS				
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IS-OSMEP 03-09-23	303.4.6, 303.4.6.1	8/30/23	AS				
IS-OSMEP 03-10-23	303.4.7, 303.4.7.1	8/30/23	AS				
IS-OSMEP 03-11-23	303.4.9	8/30/23	AS				
IS-OSMEP 03-12-23	304.4.1	8/30/23	AS				
IS-OSMEP 03-13-23	306.3	8/30/23	AS				
Chapter 4 C	OFF-SITE INSTALLAT	TION OF THE M	EPSYSIEM	COMPONENTS			
IS-OSMEP 04-01-23	401.2	8/30/23	AS				
IS-OSMEP 04-02-23	402.2	8/30/23	AS				
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IS-OSMEP 04-04-23	402.4	8/30/23	AS				
IS-OSMEP 04-05-23	404.2	8/30/23	AS				
Chapter 5 OFF-SITE TESTING AND INSPECTION							
IS-OSMEP 05-01-23	503.1	8/30/23	AS				
IS-OSMEP 05-02-23	503.2.1, 503.2.2	8/30/23	AS				
IS-OSMEP 05-03-23	504.1.2			AM motion is pending			

2023 ICC 1210 - Standard Comment and Proposals

Proposal #	Section Number	Date of meeting proposal considered	Committee Action	Notes				
Chapter 6 OFF-SITE STORAGE								
IS-OSMEP 06-01-23	603.2							
IS-OSMEP 06-02-23	604.1							
Chapter 7 TRANSPORTATION AND STORAGE								
IS-OSMEP 07-01-23	702.3							
IS-OSMEP 07-02-23	702.5.1							
IS-OSMEP 07-03-23	702.5.2							
IS-OSMEP 07-04-23	702.5.3							
IS-OSMEP 07-05-23	702.5.4							
IS-OSMEP 07-06-23	702.5.5							
IS-OSMEP 07-07-23	702.5, 702.5.6							
Chapter 8 ON-SITE INSTALLATION								
IS-OSMEP 08-01-23	802, 802.2							
IS-OSMEP 08-02-23	802.1							
IS-OSMEP 08-03-23	804.1 (1,4,7,9)							
IS-OSMEP 08-04-23	805.2, 805.2.1							
IS-OSMEP 08-05-23	805.3.3							
IS-OSMEP 08-06-23	805.4.1							
IS-OSMEP 08-07-23	805.4.3							
Chapter 9 REFERENCED STANDARDS								
			<u> </u>					
Multi-cnapter proposais								

Revisions to the text are in legislative format – strikeout of what is to be removed, and underlined for new. Revised text in the proposals in red is to highlight the changes that were modified by the committee.

Staff notes located in this document after a proponents reason are provided to indicate proposals that may require coordination; technical information; or terminology that is not good code language (e.g. "may" or "guarantee", the use of "when" where the use is not a function of time). Staff notes are provided to assist the committee or proponent for possible modification. It is not intended to provide an opinion.

Chapter 1 ADMINISTRATION PROVISIONS

IS-OSMEP 01-01-23 ICC 1210 Section 101.2

Proponent: Bill Gould, MiTek

Revise as follows:

101.2 Scope. The scope of this standard is to provide minimum requirements to safeguard the public health, safety, general welfare and address societal and industry challenges for the energy efficiency and water conservation of off-site construction projects and the planning, designing, fabricating, transporting, and assembling, of commercial and residential building mechanical, electrical and plumbing (MEP) system elements. This includes the componentization and modularization of elements of MEP systems, the incorporation of MEP systems in componentized, panelized or modularized building elements, and the achievement of energy efficiency and water conservation requirements in off-site construction. This standard will shall not apply to HUD manufactured housing under the Federal Manufactured Home Construction and Safety Standards (24 CFR part 3280)(HUD).

Reason: More specific.

Staff note: (24 CFR part 3280)(HUD) is editorial.

Committee Action: Approved as submitted

IS-OSMEP 01-02-23 ICC 1210 Section 104.3

Proponent: Chris Jensen, UL

Revise as follows:

104.3 On-site inspections and testing. On-site inspections of off-site MEP system components shall verify installation is compliant with approved manufacturer's installation instructions and connections performed on site are compliant with approved construction documents. When on-site inspections and testing are conducted by the AHJ, inspection procedures prescribed by the AHJ shall be followed. When on-site inspections and testing are conducted by other than the AHJ, scope of such inspections shall be consistent with Section 102.4 *Responsible Parties*.

On-site connections which require inspections shall include:

1. Inter-connections between off-site components installed at site.

2. Connections between off-site MEP system components and adjoining site-built MEP system components, including the building structure.

3. Other connections involving off-site built MEP system components which require inspections by the AHJ.

4. Connections or installation of "shipped loose off-site items" installed at site.

5. Connections between off-site MEP system components and on-site utilities.

Reason: The connection between off-site MEP system components and the on-site utilities should be inspected for compliance with national and local codes.

Staff note:

Committee Action: Approved as submitted

Chapter 2 DEFINITIONS

IS-OSMEP 02-01-23 ICC 1210 Section 202

Proponent: Bill Gould, MiTek

Revise as follows:

APPLICABLE CODES AND STANDARDS. The versions of the building code and standards that have been adopted by the state or jurisdiction in which an industrialized (<u>off-site modular</u>) house or building is to be installed.

Reason: More consistent verbiage.

Staff note:

Committee Action: Approved as modified

Committee Reason: States may use both terms so both are referenced.

IS-OSMEP 02-02-23 ICC 1210 Section 202

Proponent: Bill Gould, MiTek

Revise as follows:

Add new definition:

<u>Part 1</u>

"Original Equipment Manufacturer (OEM). A company whose goods are used as components in the products of another company, which then sells the finished item to users."

Also add:

<u>Part 2</u>

"(<u>MP</u>)" after manufacturing plant, "(<u>MPP</u>)" after manufacturing plant primary and then "(<u>MPS</u>)" after manufacturing plant subsidiary so that these abbreviations can be used throughout standard.

Reason: Self explanatory.

Staff note: Question was split by committee agreement. Part 1 motion to disapprove, Part 2 motion to approve as submitted

Committee Action: Part 1: Disapproved, Part 2: Approved as submitted

Committee Reason: OEM term may confuse when referring to equipment manufacturer in the text of the standard.

IS-OSMEP 02-03-23 ICC 1210 Section 202

Proponent: Bill Gould, MiTek

Revise as follows:

Add new definition:

Construction Contractor. Organization responsible for all on-site construction.

Reason: Self explanatory.

Staff note:

Committee Action: Approved as submitted

Chapter 3 DESIGN

IS-OSMEP 03-01-23 ICC 1210 Section 301.2

Proponent: Bill Gould, MiTek

Revise as follows:

301.2 Alternative materials, design and methods of construction and equipment. The provisions of this standard are not intended to prevent the use of alternate materials and methods permitted by Section 104.11 of the IBC and Section R104.11 of the IRC or as permitted by the adopted codes of the AHJ.

Reason: This standard references both the IBC and IRC. The language in 104.11 is the same in both codes, but recommend adding it to be clear.

Staff note:

Committee Action: Approved as submitted

IS-OSMEP 03-02-23 ICC 1210 Section 301.2

Proponent: Chris Jensen, UL

Revise as follows:

301.2 Alternative materials, design and methods of construction and equipment. The provisions of this standard are not intended to prevent the use of alternate materials and methods permitted by Section 104.11 of the IBC or as permitted by the adopted codes of the AHJ.

Reason: ADM13-22 and ADM14-22 completely renumbered Section 104, so Section 104.11 no longer exists. This should just reference Section 104.

Staff note: WITHDRAWN based on previous comment committee action.

Committee Action:

IS-OSMEP 03-03-23 ICC 1210 Section 302.4

Proponent: Chris Jensen, UL

Revise as follows:

302.4 Design. Mechanical system design shall comply with the applicable provisions of the IMC, IFGC, IRC, IECC.

Reason: This section is redundant and potentially in conflict with Section 302.2. Section 302.2 requires that the mechanical system be designed and installed in accordance with the applicable mechanical and fuel gas codes adopted by the jurisdiction. Section 302.4 specifically requires designs to the IMC, IRC and IFGC what if a jurisdiction adopts NFPA 54 or the UMC? Section 302.2 as currently written covers any adopted mechanical or fuel gas code. Recommend deleting 302.4 and just using 302.2.

Staff note:

Committee Action: Approved as submitted

IS-OSMEP 03-04-23 ICC 1210 Section 302.5

Proponent: Chris Jensen, UL

Revise as follows:

302.5 Equipment Location. Equipment <u>and appliances</u> shall be installed in accordance with the OEM's <u>equipment manufacturer's</u> instructions.

302.5.1 Equipment <u>and appliances</u> installed in unconditioned locations shall be listed <u>and labeled</u> for such applications.

302.5.2 Equipment location shall comply with Section 303 of the IMC.

Reason: This section should apply to appliances as well as equipment. Additionally OEM should be replaced with equipment manufacturer's instructions for clarity. Lastly the equipment and appliance should also be labeled not just listed for the application.

Staff note:

Committee Action: Approved as submitted

IS-OSMEP 03-05-23 ICC 1210 Sections 302.7.1 & 302.7.3

Proponent: Chris Jensen, UL

Revise as follows:

302.7 Fire and Smoke Damper Installation.

302.7.1 Access. Access shall be provided for all fire and smoke barrier devices shall have access in accordance with the IBC and IMC.

302.7.2 Identification. Smoke and fire dampers shall be permanently identified upon installation at the factory.

302.7.3 Inspection. Smoke and fire dampers shall be inspected at the factory upon installation for compliance with applicable codes, standards and the OEM's damper manufacturer's instructions.

Reason: Revision in Section 302.7.1 for clarity. Revision in Section 302.7.3 removes the term OEM and replaces it with damper manufacturer's instructions for clarity.

Staff note:

Committee Action: Approved as submitted

IS-OSMEP 03-06-23 ICC 1210 Section 302.8.1

Proponent: Chris Jensen, UL

Revise as follows:

302.8.1 Identification. Where commissioning of systems occurs, mechanical system connections for final on-site connection shall be identified with a permanently affixed label <u>marking</u> which indicates purpose and intended function of the pipe or duct. Labels <u>Markings</u> shall have letters with a minimum size of ½ inch tall.

Reason: Label or labeled is defined in 1210 as "Equipment, materials or products to which has been affixed a label, seal, symbol or other identifying mark of a nationally recognized testing laboratory, approved agency or other organization concerned with product evaluation that maintains periodic inspection of the production of the above-labeled items and whose labeling indicates either that the equipment, material or product meets identified standards or has been tested and found suitable for a specified purpose." Replacing the term label and labels with markings will clarify that these are not labels from an NRTL.

Staff note:

Committee Action: Approved as submitted

IS-OSMEP 03-07-23 ICC 1210 Section 303.4.2

Proponent: Bill Gould, MiTek

Revise as follows:

303.4.2 Manufactured Homes. Electrical systems for manufactured homes shall be designed in accordance with all appliable Federal, State, and local requirements and Article 550 of NFPA 70.

Reason: It is not needed. Manufactured homes are excluded in Section 101.2 of the standard. Renumber the balance of section or replace text with "(reserved)".

Staff note:

Committee Action: Approved as submitted

IS-OSMEP 03-08-23 ICC 1210 Section 303.4.3

Proponent: Chris Jensen, UL

Revise as follows:

303.4.3 Emergency Systems. Emergency systems shall be designed in accordance with <u>the appliable</u> requirements in the IFC, IBC, Article 700 of NFPA 70 and the applicable provisions of NFPA 110 Standard for Emergency and Standby Power Systems and NFPA 111 Standard on Stored Electrical Energy Emergency and Standby Power Systems.

Reason This revision includes references to the IFC and IBC which have specific requirements for emergency systems.

Staff note:

Committee Action: Approved as submitted

IS-OSMEP 03-09-23 ICC 1210 Sections 303.4.6 & 303.4.6.1

Proponent: Chris Jensen, UL

Revise as follows:

303.4.6 Energy Storage Systems. Energy storage systems shall be designed in accordance with the appliable provisions of NFPA 70 and the IFC or IRC.

303.4.6.1 Listing. Energy storage systems shall be listed and labeled in accordance with UL 9540 Energy Storage Systems and Equipment.

Reason This revision will clarify that energy storage systems must be designed in accordance with the IFC or IRC. Both the IRC and IFC have the requirements that reference NFPA 70. Additionally the listing requirements in the IFC and IRC adequately reference UL 9540 so it is not necessary to reference the listing standard here.

Staff note:

Committee Action: Approved as submitted

IS-OSMEP 03-10-23 ICC 1210 Sections 303.4.7 & 303.4.7.1

Proponent: Chris Jensen, UL

Revise as follows:

303.4.7 Solar Photovoltaic Systems. Solar photovoltaic systems shall be designed in accordance with the applicable provisions of NFPA 70, and the IFC, IBC or IRC.

303.4.7.1 Listing. Solar photovoltaic systems shall be listed and labeled in accordance with the following standards:

1. Photovoltaic modules. UL 1703 Flat-Plate Photovoltaic Modules or Panels, or with both UL 61730-1 Photovoltaic (PV) Module Safety Qualification - Part 1: Requirements For Construction, and 61730-2 Photovoltaic (PV) Module Safety Qualification - Part 2: Requirements For Testing.

2. Building Integrated Photovoltaic Systems. UL 7103 Outline for Investigation for Building-Integrated Photovoltaic Roof Coverings or with both UL 61730-1 Photovoltaic (PV) Module Safety Qualification -Part 1: Requirements For Construction, and 61730-2 Photovoltaic (PV) Module Safety Qualification - Part 2: Requirements For Testing.

3. Photovoltaic Panel Mounting Systems. UL 2703 Mounting Systems, Mounting Devices, Clamping/Retention Devices, and Ground Lugs for Use with Flat Plate Photovoltaic Modules and Panels.

Reason This public comment will clarify that there are requirements for PV systems in the International Building Code in addition to the IRC, IFC and NEC. Additionally, this public comment will revise the reference standards for PV systems. Deleting Item 3 since there are provisions in the NEC that permit non-listed PV Mounting systems.

Staff note:

Committee Action: Approved as submitted

IS-OSMEP 03-11-23 ICC 1210 Section 303.4.9

Proponent: Chris Jensen, UL

Revise as follows:

303.4.9 Health care Facilities. Modular buildings, modular components and modules intended for use in <u>h</u>ealth care facilities shall be designed in accordance with Article 517 of NFPA 70 and NFPA 99 Health Care Facilities Code.

Reason This public comment will clarify that modular buildings, modular components and modules must be designed in accordance with Article 517 and NFPA 99.

Staff note:

Committee Action: Approved as submitted

IS-OSMEP 03-12-23 ICC 1210 Section 304.4.1

Proponent: Chris Jensen, UL

Revise as follows:

304.4.1 Identification. Where commissioning of systems occurs, plumbing system connections for final on-site connection shall be identified with a permanently affixed <u>label-marking</u> which indicates purpose and intended function of the pipe or duct. <u>Labels Markings</u> shall have letters with a minimum size of $\frac{1}{2}$ inch tall.

Reason Label or labeled is defined in 1210 as "Equipment, materials or products to which has been affixed a label, seal, symbol or other identifying mark of a nationally recognized testing laboratory, approved agency or other organization concerned with product evaluation that maintains periodic inspection of the production of the above-labeled items and whose labeling indicates either that the equipment, material or product meets identified standards or has been tested and found suitable for a specified purpose." Replacing the term label and labels with markings will clarify that these are not labels from an NRTL.

Staff note:

Committee Action: Approved as submitted

IS-OSMEP 03-13-23 ICC 1210 Section 306.3

Proponent: Bill Gould, MiTek

Revise as follows:

306.3 Exterior walls. Exterior walls shall comply with requirements for system continuity. <u>performance</u> requirements in IBC Chapter 14 for weather protection, structural load resistance, fire resistance, water resistance and flood resistance, where applicable, and IECC Section C402 or IRC Chapter 6 and Sections R703 and N1102 (R402) for building thermal envelope.

306.3.1 Control layers. Where applicable, air, vapor and weather barrier systems <u>and flashing</u> shall be designed and installed to provide continuity of the <u>continuous</u> barrier<u>s</u>.

306.3.2 Continuity of <u>Exterior insulation</u>. Exterior insulation systems shall be designed and installed to <u>be continuous</u> provide continuity of the insulation.

Reason: "Continuity" is used in the code to describe fire walls, fire resistive assemblies, handrails and electrical circuits. It is assumed that what is meant by "system continuity" for exterior walls pertains to "continuous" barriers for air, vapor and weather resistance and "continuous" insulation within the exterior walls. Proposed revisions include references to applicable IBC, IECC and IRC sections.

Staff note 1: Proponent will need to propose the referenced standards else this item will not be actionable by the committee due to lack of submitted verbiage.

Staff note 2: Proponent submitted additional revision verbiage and reason statement in response to staff note 1.

Committee Action: Approved as submitted

Chapter 4 OFF-SITE INSTALLATION OF THE MEP SYSTEM COMPONENTS

IS-OSMEP 04-01-23

ICC 1210 Section 401.2

Proponent: Chris Jensen, UL

Revise as follows:

401.2 Concealed System Components. MEP components that <u>shall be</u> <u>are</u> concealed prior to delivery to the on-site location, shall be tested in accordance with the manufacturer's installation instructions or inspections and testing including <u>the applicable</u> sections of NFPA 70, the IECC, IMC, IFGC, IRC and IPC to detect leaks and defects.

Reason: This section should include references to the IFGC since the IMC does not include requirements for fuel gas piping, appliances and equipment. Additionally modular construction that falls under the scope of the IRC should comply with the MEP requirements in the IRC.

Staff note:

Committee Action: Approved as submitted

IS-OSMEP 04-02-23 ICC 1210 Section 402.2

Proponent: Chris Jensen, UL

Revise as follows:

402.2 Off-site General. Mechanical and fuel gas systems and components shall be designed and installed in accordance with ICC 1200 section 303 and ICC 1205 section 306.

Reason: Chapter 4 of ICC 1210 covers installation requirements. Section 402.2 covers design and is already covered in Chapter 3. Section 402.3 covers the installation of mechanical and fuel gas components and systems.

Staff note:

Committee Action: Approved as submitted

IS-OSMEP 04-03-23 ICC 1210 Section 402.3

Proponent: Chris Jensen, UL

Revise as follows:

402.3 Mechanical and Fuel Gas Systems and Components. Mechanical and fuel gas systems and components shall be installed in accordance with the <u>applicable provisions of the IRC</u>, IMC and IFGC.

Reason: Chapter 4 of ICC 1210 covers installation requirements. Section 402.2 covers design and is already covered in Chapter 3. Section 402.3 covers the installation of mechanical and fuel gas components and systems.

Staff note:

Committee Action: Approved as submitted

IS-OSMEP 04-04-23 ICC 1210 Section 402.4

Proponent: Chris Jensen, UL

Revise as follows:

Add new:

402.4 Listing and Installation of Mechanical and Fuel Gas Appliances and Equipment. Mechanical and fuel gas appliances and equipment shall be installed in accordance with their listing and labeling and the manufacturer's instructions.

Reason This Public Comment seeks to add a new section 402.4 to identify that mechanical and fuel gas appliances and equipment shall be installed in accordance with their listing and labeling and the manufacturer's instructions. This new section mirrors Section 403.4 for electrical equipment.

Staff note:

Committee Action: Approved as submitted

IS-OSMEP 04-05-23 ICC 1210 Section 404.2

Proponent: Chris Jensen, UL

Revise as follows:

404.2 Plumbing Systems and Components. Plumbing systems and components installed off-site shall meet the <u>applicable</u> requirements outlined in the IPC <u>or IRC</u>.

Reason This public comment will add the requirements for plumbing systems and equipment from the IRC where applicable.

Staff note:

Committee Action: Approved as submitted

Chapter 5 OFF-SITE TESTING AND INSPECTION

IS-OSMEP 05-01-23 ICC 1210 Section 503.1

Proponent: Chris Jensen, UL

Revise as follows:

503.1 Plumbing Testing. Plumbing testing shall be performed in accordance with the applicable sections of the IPC, Section 312 or IRC, Section P2503.

Reason: This public comment seeks to add a reference to the applicable testing and inspection requirements for plumbing systems found in the IRC.

Staff note:

Committee Action: Approved as submitted

IS-OSMEP 05-02-23 ICC 1210 Sections 503.2.1 & 503.2.2

Proponent: Chris Jensen, UL

Revise as follows:

503.2 Continuity and Operational Tests and Polarity Checks. The off-site and modular construction shall be subjected to continuity and operational tests and polarity checks in accordance with Section 550.17(B) of NFPA 70 and the manufacturer's instructions.

503.2.1 GFCI and AFCI. Ground-fault circuit-interrupter protection for personnel (GFCI) and Arc-fault circuit-interrupter protection (AFCI) shall be tested in accordance with the manufacturer's instructions.

503.2.2 GFPE. Where provided, ground-fault protection of equipment (GFPE) shall be performance tested in accordance with NFPA 70 Section 230.95(C).

Reason: This public comment would add 2 new subsections to address the testing of GFCI, AFCI and GFPE equipment when installed in modular construction.

Staff note:

Committee Action: Approved as submitted

IS-OSMEP 05-03-23 ICC 1210 Section 504.1.2

Proponent: Bill Gould, MiTek

Revise as follows:

505.1.2 Duct Testing. Ducts that are concealed prior to delivery to the on-site location, shall be tested in accordance with applicable standards including the testing sections in the IECC to detect leaks and defects and balanced on-site in accordance with the IMC Section 608.1 and IECC Section C408.2.2.

Reason: Balancing of ducts is done to ensure that all rooms in a building are receiving the appropriate amount of air and are heating and cooling at the same rate. Balancing is important as it can help reduce energy consumption used by the heating and air conditioning systems in the building. Proposed revisions include references to applicable IMC and IECC sections.

Staff note 1: Sections numbers were adjusted to reflect an editorial error.

Staff note 2: Proponent submitted additional revision verbiage and reason statement in response to staff request.

Staff note 3: Motion on the floor is AM to be adjudicated at Sept 13, 2023 meeting.

Staff note 4: Suggested language "Where systems and ducts are fully installed off-site, the systems should be balanced off-site in accordance with the" See Kimberly's editorial catch in section 5.

Committee Action:

Chapter 6 OFF-SITE STORAGE

IS-OSMEP 06-01-23 ICC 1210 Section 603.2

Proponent: Bill Gould, MiTek

Revise as follows:

603.2 Weather Protection. The manufacturer shall take precautions to protect stacked and stored modules from weather events.

Reason: Modules may be stored but not stacked. They should still be protected from weather regardless of stacking or not stacking. These extra words are not needed. "Events" implies distinct time periods, but weather is continuous and detrimental effects like corrosion of metals occur gradually over time and do not occur in distinct time events. "Weather events" is not used in the IBC, but "weather" is used multiple times.

Staff note: Proponent submitted a reason statement in response to staff request.

Committee Action:

IS-OSMEP 06-02-23 ICC 1210 Section 604.1

Proponent: Chris Jensen, UL

Revise as follows:

604.1 Materials Protection. All building mechanical, electrical, and plumbing materials, appliances and equipment shall be protected from weather, moisture and contaminate sources in accordance with their material manufacturer's recommendations.

Reason The term "building materials" is broad and out of scope for 1210 which is all about MEP materials. Also this should be expanded to cover appliances and equipment as well as material.

Staff note:

Committee Action:

Chapter 7 TRANSPORTATION AND STORAGE

IS-OSMEP 07-01-23 ICC 1210 Section 702.3

Proponents: Chris Jensen, UL & Bill Gould, MiTek

Revise as follows:

702.3 Weather and <u>Mechanical-Physical</u> Protection. The construction contractor shall protect stacked and stored components from weather events and mechanical physical damage.

Reason: Jensen: The phrase "Physical Damage" is more encompassing of types of damage then just limiting the damage to mechanical damage. This aligns closer to language found in the codes.

Gould: Modules may be stored but not stacked. They should still be protected from weather regardless of stacking or not stacking. These extra words are not needed. "Events" implies distinct time periods, but weather is continuous and detrimental effects like corrosion of metals occur gradually over time and do not occur in distinct time events. "Weather events" is not used in the IBC, but "weather" is used multiple times.

Staff note: Proponent Gould submitted a reason statement in response to staff request.

Committee Action:

IS-OSMEP 07-02-23 ICC 1210 Section 702.5.1

Proponent: Chris Jensen, UL

Revise as follows:

702.5.1 Refrigeration equipment. Refrigeration system LInternal and external components of <u>refrigeration systems</u>, including wiring, tubing and drain connections shall be protected from impact, vibration and exposure to corrosive environments. The system shall be sealed from dust, debris, insects and corrosive contaminants during construction processes. Refrigerant ports shall be closed and sealed according to manufacturer's guidelines for transportation and storage.

Reason: This public input adds tubing to clarify that line sets need to be protected. Additionally, the last sentence of Section 702.5.2 is being relocated to this section since it is specifically about refrigeration. Also, this section was revised for readability.

Staff note:

Committee Action:

IS-OSMEP 07-03-23 ICC 1210 Section 702.5.2

Proponent: Chris Jensen, UL

Revise as follows:

702.5.2 HVAC and Plumbing Equipment. Mechanical system I Internal and external components of <u>HVAC and plumbing equipment</u>, including wiring, refrigerant and drain connections shall be protected from impact, vibration and exposure to corrosive environments. Packaged and split system outdoor and indoor units shall be sealed from dust, debris, insects and corrosive contaminants during construction processes. Refrigerant ports shall be closed and sealed according to manufacturer's guidelines for transportation and storage.

Reason: This public input will revise this section for readability and remove the requirements for refrigeration which are covered in existing Section 702.5.1.

Staff note:

Committee Action:

IS-OSMEP 07-04-23 ICC 1210 Section 702.5.3

Proponent: Bill Gould, MiTek

Revise as follows:

702.5.3 Exhaust and Ventilation Systems. Exhaust and ventilation systems shall be protected from damage or compression of duct materials. Openings shall be sealed from foreign objects and substances including insects and rodents.

Reason: "Damage" would encompass compression of duct materials. It is assumed that compression means crushing, but duct materials could also be damaged by puncturing, bending, fracturing or metallic corrosion and all sorts of other damage. "Damage" would adequately address all of these types of potential actions which must be protected against.

Staff note: Proponent submitted a reason statement in response to staff request.

Committee Action:

IS-OSMEP 07-05-23 ICC 1210 Section 702.5.4

Proponent: Bill Gould, MiTek

Revise as follows:

702.5.4 Ducts. HVAC ductwork shall be protected from shearing, damage or compression of duct construction materials. Openings shall be sealed from foreign objects and substances including insects and rodents.

Reason: "Damage" would encompass compression of duct construction materials. It is assumed that compression means crushing, but duct construction materials could also be damaged by puncturing, bending, fracturing or metallic corrosion and all sorts of other damage. "Damage" would generically address all of these types of potential actions which must be protected against.

Staff note: Proponent submitted a reason statement in response to staff request.

Committee Action:

IS-OSMEP 07-06-23 ICC 1210 Section 702.5.5

Proponents: Chris Jensen, UL & Bill Gould, MiTek

Revise as follows:

702.5.5 Piping. Mechanical, <u>fuel gas</u>, and plumbing piping shall be protected from damage, <u>compression</u> or <u>shearing</u>. Openings shall be sealed from foreign objects and substances including insects and rodents. Contractors responsible for installing the fire suppression piping shall cap and strap all open connections.

Reason: Jensen: Adding fuel gas into this section clarifies that it applies to all piping not just mechanical and plumbing.

Gould: "Damage" would encompass compression of duct construction materials. It is assumed that compression means crushing, but duct construction materials could also be damaged by puncturing, bending, fracturing or metallic corrosion and all sorts of other damage. "Damage" would generically address all of these types of potential actions which must be protected against.

Staff note:

Committee Action:

IS-OSMEP 07-07-23 ICC 1210 Section 702.5 & new 702.5.6

Proponent: Chris Jensen, UL

Revise as follows:

702.5 Protection of Systems. Protection of systems shall be in accordance with Sections 702.5.1 through 702.5.5<u>6</u>.

702.5.6 Electrical Equipment. Electrical equipment shall be protected from physical damage, contamination by dust and debris, and damage from weather during construction.

Reason: Electrical equipment needs to be protected during on-site storage similar to mechanical and plumbing equipment.

Staff note:

Committee Action:

Chapter 8 ON-SITE INSTALLATION

IS-OSMEP 08-01-23 ICC 1210 Sections 802 Title & 802.2

Proponent: Bill Gould, MiTek

Revise as follows:

SECTION 802 SOILS AND FOUNDATION

802.1 Foundation. A separate plan, prepared where required by a registered design professional, shall be submitted for permit.

802.2 Loads. The foundation shall be designed to support the building, all live and dead applied loads, and all construction loads. The foundation shall be designed to consider all geotechnical and soil limits places on the building and foundation at the site.

Reason: Section 802 should address Soils and Foundations as in Chapter 18 of the IBC. This section should also address other potential loads applied to foundations such as flood loads and seismic loads.

Staff note:

Committee Action:

IS-OSMEP 08-02-23 ICC 1210 Sections 802.1

Proponent: Chris Jensen, UL

Revise as follows:

802.1 Foundation. Where a foundation is installed, A<u>a</u> separate plan, prepared where required by a registered design professional, shall be submitted for permit.

Reason: Not all MEP modules and modular components are required to be connected to a foundation. This change clarifies that this applies when a foundation is installed.

Staff note:

Committee Action:

IS-OSMEP 08-03-23 ICC 1210 Section 804.1, items 1, 4, 7, new item 9

Proponent: Bill Gould, MiTek

Revise as follows:

804.1 Manufacturer Instructions. The manufacturer shall provide instructions that describe the details for the following:

1. Connecting the modules or panelized systems to provide the required structural strength and rigidity stiffness.

4. Maintaining the integrity of fire separations and providing fire blocking <u>and firestopping</u> between modules where required.

7. Information on the connection of services <u>for MEP, energy efficiency and water conservation</u> <u>systems.</u>

9. <u>Connections of nonstructural components including MEP systems should also be seismically</u> braced in accordance with ASCE/SEI 7 if the on-site building location is in a seismic region.

Reason:

804.1 (1) I think the proper engineering terminology is "stiffness" and "stiffness" is used in the IBC multiple times. Strength and stiffness are commonly used as performance measurements in testing of structural components and systems including connections. Rigidity is not commonly used a term describing structural performance or connections.

804.1 (4) Firestopping is different than fireblocking and should be included. Firestopping of through penetrations and joints is addressed in IBC Sections 714, 715 and 1705.

804.1 (7) The additional language is proposed just to clarify what "services" applies to (the subject of the standard).

804.1 (9) Nonstructural components and systems are required to be seismically braced if the building is located in a seismic region or higher seismic design category. ASCE/SEI 7 is referenced in IBC Section 1613.1 for seismic requirements for nonstructural components, which includes anchorage and bracing requirements in Chapter 13.

Staff note: Proponent submitted a reason statement in response to staff request.

Committee Action:

IS-OSMEP 08-04-23 ICC 1210 Sections 805.2, new 805.2.1

Proponent: Chris Jensen, UL

Revise as follows:

805.2 Mechanical Components. Mechanical components, <u>appliances</u> and equipment that have been altered, extended, or repaired shall be tested in accordance with the manufacturer's installation instructions or Inspections and Testing section of the IMC, <u>IFGC or IRC as applicable</u> to disclose leaks and defects.

805.2.1 Reconditioning and Repair. Damaged mechanical components, appliances and equipment shall be reconditioned or repaired in accordance with the applicable requirements in the IMC, IFGC or IRC as applicable and the equipment manufacturer's instructions.

Reason: Adding references to the applicable sections of the IFGC and IRC will include systems under the scope of those codes. Adding appliances to this section for clarification. Adding a new section to address reconditioning and repair of mechanical systems will correlate with a similar requirement for electrical systems.

Staff note:

Committee Action:

IS-OSMEP 08-05-23 ICC 1210 Section 805.3.3

Proponent: Bill Gould, MiTek

Revise as follows:

805.3.3 Reconditioning and Repair. Damaged electrical equipment and wiring shall be reconditioned or repaired in accordance with the applicable requirements in NFPA 70 and the electrical equipment manufacturer's instructions. Electrical equipment prohibited from being reconditioned in accordance with NFPA 70 shall not be reconditioned or repaired used.

Reason: The sentence prior to this indicates that recondition or repair is permitted.

Staff note:

Committee Action:

IS-OSMEP 08-06-23 ICC 1210 Section 805.4.1

Proponent: Chris Jensen, UL

Revise as follows:

805.4.1 Rough Piping Installation. Where completion of <u>When completed</u>, the rough piping installation; water, drain waste and venting systems shall be tested <u>in accordance with the applicable requirements</u> in Section 312 of the IPC or Section P2503 of the IRC. by a vacuum without evidence of leakage. The test shall be applied to the complete water and drainage system. The vacuum test shall be maintained for the duration of the construction and to the finial site destination, as follows:

1. The portion under test shall be evacuated of air by a vacuum-type pump to achieve a uniform gauge pressure of -5 pounds per square inch or a negative 10 inches of mercury column (-34 kPa).

Reason: As currently written in this section a water test is not permitted for DWV systems. The IPC and IRC already have adequate requirements for testing and inspection.

Staff note:

Committee Action:

IS-OSMEP 08-07-23 ICC 1210 Section 805.4.3

Proponent: Chris Jensen, UL

Revise as follows:

805.4.3 Medical Gas and Vacuum Systems. Medical gas and vacuum systems shall be in tested in accordance with the current version of NFPA 99, Health Care Facilities Code.

Reason: This is the only reference to a code in this standard that states, "the current version". It should be assumed that the edition of the code being reference is the one that the jurisdiction has adopted.

Staff note:

Committee Action:

Chapter 9 REFERENCED STANDARDS

IS-OSMEP 09-01-23 ICC 1210 Section

Proponent:

Revise as follows:

Reason:

Staff note:

Committee Action:

Multi-chapter proposals

IS-OSMEP 10-01-23 ICC 1210 Sections

Proponent:

Revise as follows:

Reason:

Committee Action: