



**ICC 1200-202X edition
ICC 1205-202X edition
Committee Action Report**

**For Committee Actions taken on the
Public Input Agenda based on Sept 28,
2020 public input
and at the meetings held via Webex on
Sept 30, 2020 thru Feb 3, 2021**

Matrix for ICC 1200, 1205 proposals

Proposal #	Section Number	Date of meeting proposal considered	Committee Action	Notes
Chapter 1 ADMINISTRATION PROVISIONS 1200 & 1205				
IS-OSMC 01-01-20	101.3	9/30/20	AM	
IS-OSMC 01-02-20	102.2	9/30/20	A	
IS-OSMC 01-03-20	102.3	11/12/20	A	
IS-OSMC 01-04-20	103	9/30/20	A	
IS-OSMC 01-05-20	103.1	9/30/20	A	
IS-OSMC 01-06-20	103.1	9/30/20	A	
IS-OSMC 01-07-20	103.1	9/30/20	AM	
IS-OSMC 01-08-20	103.1	11/12/20	A	
IS-OSMC 01-09-20	103.1	9/30/20	A	
IS-OSMC 01-10-20	103.3	9/30/20		WITHDRAWN
IS-OSMC 01-11-20	103.3	9/30/20	A	
IS-OSMC 01-12-20	103.3	9/30/20	A	
IS-OSMC 01-13-20	103.4	11/12/20	A	
IS-OSMC 01-14-20	103.4	9/30/20	A	
IS-OSMC 01-15-20	103.4	9/30/20	A	
IS-OSMC 01-16-20	104.1	11/12/20	AM	
IS-OSMC 01-17-20	103.1	10/14/20		WITHDRAWN
IS-OSMC 01-18-20	102.4	10/14/20	A	
IS-OSMC 01-19-20	103.1	11/12/20	AM	
IS-OSMC 01-20-20	104.3	10/14/20	A	
IS-OSMC 01-21-20	104.1	10/14/20	AM	
IS-OSMC 01-22-20	102.3	10/14/20	A	
IS-OSMC 01-23-20	103.1	10/14/20	A	
IS-OSMC 01-24-20	103.3 103.4	11/12/20	AM	
IS-OSMC 01-25-20	103.2	10/28/20		WITHDRAWN
IS-OSMC 01-26-20	102.2	10/28/20	D	Addressed in 01-02-20
Chapter 2 DEFINITIONS				
IS-OSMC 02-01-20	202	10/14/20	A	
IS-OSMC 02-02-20	202	10/14/20	A	
IS-OSMC 02-03-20	202	10/14/20	A	
IS-OSMC 02-04-20	202	10/14/20	A	
IS-OSMC 02-05-20	202	10/14/20	AM	
IS-OSMC 02-06-20	202	10/14/20	A	
IS-OSMC 02-07-20	202	10/14/20	AM	
IS-OSMC 02-08-20	202	10/14/20	A	
IS-OSMC 02-09-20	202	10/14/20	AM	
IS-OSMC 02-10-20	202	10/14/20	A	
IS-OSMC 02-11-20	202	10/28/20	D	
IS-OSMC 02-12-20	202	12/2/20 01/20/21	AM	

2021 ICC 1200, 1205 – Committee Action Report

Proposal #	Section Number	Date of meeting proposal considered	Committee Action	Notes
Chapter 3 DESIGN				
IS-OSMC 03-01-20	301.4	10/14/20	A	
IS-OSMC 03-02-20	301.5	10/14/20		WITHDRAWN
IS-OSMC 03-03-20	302.3	10/28/20		WITHDRAWN
IS-OSMC 03-04-20	310.4	01/20/21	AM	
IS-OSMC 03-05-20	310.5	10/28/20	A	
IS-OSMC 03-06-20	310.5	10/28/20	A	
IS-OSMC 03-07-20	310.5	10/28/20	AM	
IS-OSMC 03-08-20	310.7	10/28/20	AM	
IS-OSMC 03-09-20	310.7	10/28/20	A	
IS-OSMC 03-10-20	310.7	10/28/20	A	
IS-OSMC 03-11-20	311.1	10/28/20	A	
IS-OSMC 03-12-20	311.3	10/28/20	A	
IS-OSMC 03-13-20	312.2	01/20/21	AM	
IS-OSMC 03-14-20	303.3	01/20/21	AM	
IS-OSMC 03-15-20	301.3	11/12/20	AM	
IS-OSMC 03-16-20	307.3	11/12/20	A	
IS-OSMC 03-17-20	303.6	01/20/21	AM	
IS-OSMC 03-18-20	310.3	11/12/20	A	
IS-OSMC 03-19-20	310.4	11/12/20	AM	
IS-OSMC 03-20-20	310.1 310.2	11/12/20	AM	
IS-OSMC 03-21-20	311.1	11/12/20	A	
IS-OSMC 03-22-20	312.2	11/12/20	AM	
IS-OSMC 03-23-20	302.3.1	11/12/20	A	
IS-OSMC 03-24-20	302.3.3	11/12/20	A	
IS-OSMC 03-25-20	306	11/12/20		WITHDRAWN
IS-OSMC 03-26-20	307	11/12/20	A	
IS-OSMC 03-27-20	308.3.2	11/12/20	AM	
IS-OSMC 03-28-20	306.2	01/20/21	AM	
IS-OSMC 03-29-20	312.2	11/12/20	AM	
IS-OSMC 03-30-20	306	12/2/20	A	
IS-OSMC 03-31-20	311.1	12/2/20	AM	
Chapter 4 SPECIAL REQUIREMENTS BASED ON PRODUCT TYPE				
IS- OSMC 04-01-20	402.2.2	12/2/20		Addressed in 03-16-20
IS- OSMC 04-02-20	402.4	12/2/20		Addressed in 03-16-20
IS- OSMC 04-03-20	403.1.1	12/2/20	AM	
IS- OSMC 04-04-20	403.1.4	01/20/21	AM	
IS- OSMC 04-05-20	401.1	12/2/20	A	
IS- OSMC 04-06-20	402.2.2	12/2/20		Addressed in 03-16-20
IS- OSMC 04-07-20	401.1	02/03/21	AM	.
IS- OSMC 04-08-20	401.1	01/20/21	AM	
Chapter 5 MANUFACTURING PLANT				
IS-OSMC 05-01-20	504.1			WITHDRAWN
IS-OSMC 05-02-20	504.2	12/2/20	A	
IS-OSMC 05-03-20	502.1 502.2	02/03/21	A	
IS-OSMC 05-04-20	504.3.3	12/2/20	AM	

2021 ICC 1200, 1205 – Committee Action Report

Proposal #	Section Number	Date of meeting proposal considered	Committee Action	Notes
IS-OSMC 05-05-20	501.1	12/2/20	AM	
IS-OSMC 05-06-20	501.8	12/2/20	A	
IS-OSMC 05-07-20	503.1	01/20/21	AM	
IS-OSMC 05-08-20	504.3	12/2/20	A	
IS-OSMC 05-09-20	502.3	12/2/20		WITHDRAWN
IS-OSMC 05-10-20	502.2	12/2/20		Addressed in 05-03-20
Chapter 6 FABRICATION				
IS-OSMC 06-01-20	602.1	12/2/20	D	See Cardin 06-06-20
IS-OSMC 06-02-20	603.1	12/2/20	A	
IS-OSMC 06-03-20	603.2	12/2/20	A	
IS-OSMC 06-04-20	604.1	02/03/21	AM	
IS-OSMC 06-05-20	605.2	12/2/20	AM	
IS-OSMC 06-06-20	602.1	12/2/20	A	
IS-OSMC 06-07-20	601.1	12/16/20	A	
IS-OSMC 06-08-20	604.1	12/16/20	AM	
IS-OSMC 06-09-20	601.2	02/03/21	AM	
IS-OSMC 06-10-20	601.7	12/16/20	A	
IS-OSMC 06-11-20	601.8	1/6/21	AM	
IS-OSMC 06-12-20	601.6	12/16/20	AM	
IS-OSMC 06-13-20	602.1	12/16/20		WITHDRAWN
IS-OSMC 06-14-20	601.1	12/16/20	AM	
IS-OSMC 06-15-20	601.8	12/16/20		WITHDRAWN
IS-OSMC 06-16-20	601.2	02/03/21	A	
IS-OSMC 06-17-20	605	12/16/20	D	
IS-OSMC 06-18-20	601.1	12/16/20		WITHDRAWN
Chapter 7 TRANSPORTATION AND STORAGE				
IS-OSMC 07-01-20	704.1	1/6/21	A	
IS-OSMC 07-02-20	704.2	1/6/21	A	
IS-OSMC 07-03-20	704.1 704.3	1/6/21	AM	
IS-OSMC 07-04-20	706	02/03/21	A	
Chapter 8 ON-SITE INSTALLATION				
IS-OSMC 08-01-20	804.1	1/6/21	AM	
IS-OSMC 08-02-20	802.2	1/6/21	A	
IS-OSMC 08-03-20	804.1	1/6/21	AM	
IS-OSMC 08-04-20	805	1/6/21	A	
IS-OSMC 08-05-20	804.1.3	1/6/21	A	
IS-OSMC 08-06-20	801	1/6/21	AM	
Chapter 9 REFERENCED STANDARDS				

2021 ICC 1200, 1205 – Committee Action Report

Proposal #	Section Number	Date of meeting proposal considered	Committee Action	Notes
Multi-chapter proposals				

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.

Chapter 1 ADMINISTRATION PROVISIONS

IS-OSMC 01-01-20

ICC 1200 & 1205 Section 101.3

Proponent: Michael Gardner, M Gardner Services, LLC representing Wall and Ceiling Alliance

Revise as follows:

101.3 Provisions for Compliance. ~~This standard provides the minimum requirements for off-site construction. In lieu of these provisions, or where these provisions are not applicable, accepted engineering methods and practices in accordance with the appropriate sections of the International Building Code or the International Residential Code as applicable for the intended use of the structure shall be permitted to be used. Where requirements are not provided by this standard, the applicable provisions of the construction codes adopted by the authority having jurisdiction shall apply to the offsite and modular construction. In lieu of these provisions, or Where these provisions are not applicable, accepted engineering methods and practices in accordance with the appropriate sections of the International Building Code or the International Residential Code as applicable for the intended use of the structure shall be permitted to be used.~~

Reason: The proposed first sentence is unnecessary as it repeats what is in Section 101.1. It also seems that the original third sentence should trigger the original second sentence. For requirements outside of the standard, first you follow the code the AHJ uses; however, if no code exists, then you use the IBC or IRC as appropriate. Therefore, reverse the order of sentences two and three. And IBC/IRC methods and practices should not be limited to engineering-related issues, so drop the word “engineering.” Additionally, drop the phrase “and modular” as the term “off-site” includes modular (and the other disciplines). Overall intent is to make this language coordinate with language in the 1200 and 1205 documents that makes the locally-adopted code work in tandem with the 1200 and 1205 documents. The code is the initial point of regulation and the regulations in the 1200 and 1205 documents supplement the adopted code. See Section 301.1 in the 1200 document as an example.

Committee Action: Approve as modified

Committee Reason: In Lieu of is not necessary.

IS-OSMC 01-02-20

ICC 1200 & 1205 Section 102.2, Item 1

Proponent: Michael Gardner, M Gardner Services, LLC representing Wall and Ceiling Alliance

Revise as follows:

102.2 Planning Considerations.

1. Entities of the AHJ at the manufacturing facility and the project's location.

Reason: With closed construction likely will have AHJ involved at both the manufacturing facility and on-site.

Committee Action: Approved

IS-OSMC 01-03-20

ICC 1200 & 1205 Section 102.3

Proponent: Michael Gardner, M Gardner Services, LLC representing Wall and Ceiling Alliance

Revise as follows:

102.3 Specific Requirements of Authorities Having Jurisdiction Over Off-site Construction.

102.3.1 The project shall comply with the requirements of the AHJ over off-site construction.

102.3.2 State-wide Modular Programs. When there is an existing state-wide Modular (or Industrialized) Buildings Program, the project shall comply with both state and local jurisdiction's requirements on plan

Reason: For clarity, suggest you break this paragraph into a general comment that applies to all off-site construction and a secondary comment applicable only to modular construction.

Committee Action: Approved

IS-OSMC 01-04-20

ICC 1200 & 1205 Section 103

Proponent: Michael Gardner, M Gardner Services, LLC representing Wall and Ceiling Alliance

Revise as follows:

103.1 General requirements.

103.2 Additional requirements for non-site specific buildings. (No change to sub-text)

103.3 Additional requirements for panelized systems. (No change to sub-text)

103.4 Additional requirements for all other systems. (No change to sub-text)

Reason: It's not clear whether the requirements in 103.2, 103.3 and 103.4 are applied in lieu of the requirements in 103.1 or supplement to the requirements in 103.1. If they are supplemental, reorganize the section as noted. If they are in lieu of 103.1, make it clearer.

Committee Action: Approved

IS-OSMC 01-05-20
ICC 1200 & 1205 Section 103.1, item 3

Proponent: David Tompos, NTA

Revise as follows:

A Key Plan for off-site components shall be provided; all off-site components delivered to the site shall be identified with unique numbers. ~~Proposed location(s) of crane(s) shall be provided on the Key Plan.~~

Reason: The component/modular manufacturer does not know this information at the time the drawings are submitted for approval.

Committee Action: Approved

IS-OSMC 01-06-20
ICC 1200 & 1205 Section 103.1, item 4

Proponent: David Tompos, NTA

Revise as follows:

~~A construction sequencing plan for off-site components shall be provided.~~

Reason: The component/modular manufacturer does not know this information at the time the drawings are submitted for approval.

Committee Action: Approved

IS-OSMC 01-07-20

ICC 1200 & 1205 Section 103.1, item 5

Proponent: David Tompos, NTA

Revise as follows:

~~Mate lines shall be identified, using a manner consistent to that used for column grid lines.~~

If required, mate lines shall be identified.

Reason: This is a specific requirement and some manufacturers may use a different method to obtain the same end result.

Committee Action: Approved as modified

Committee Reason: More general in terms.

IS-OSMC 01-08-20
ICC 1200 & 1205 Section 103.1, item 7

Proponent: David Tompos, NTA

Revise as follows:

~~Shop drawings shall be approved by the registered design professional.~~

Reason: This is costly and overburdensome to a small manufacturer that does not have a PE on staff. The manufacturers should have a QC process where they confirm that they shop drawings meet the approval drawings. The third party inspector is required to inspect to the approved drawings and not the shop drawings. If there is a discrepancy then the PE will get involved. How will this work with panelized drawings?

Committee Action: Approved

IS-OSMC 01-09-20
ICC 1200 & 1205 Section 103.1, item 8

Proponent: David Tompos, NTA

Revise as follows:

~~Documents shall be reviewed by any third party or special inspectors against submitted permit drawings.~~

Reason: It is the responsibility of the third party inspector to inspect to the approved drawings approved by the third party plan reviewer. It would be added cost to the manufacturer if the inspectors had to verify that the approved drawings (third party) conformed with the permitted details.

Committee Action: Approved

IS-OSMC 01-10-20

ICC 1200 & 1205 Section 103.3

Proponent: Scott Miller, MiTek

Revise as follows:

103.3 Construction documents for enclosed panelized systems. The construction documents for ~~enclosed panel~~ panelized systems shall include:

Reason: The purpose for this addition is to clarify what I understand is intended by this section and that is that this is for enclosed panels and not open framed panels. Enclosed panels are harder to inspect and may have special connection details. Open framed panels are covered by the normal framing design and connections specified by the building EOR.

WITHDRAWN BY PROPONENT

IS-OSMC 01-11-20
ICC 1200 & 1205 Section 103.3, item 5

Proponent: David Tompos, NTA

Revise as follows:

~~Transportation requirements assumed in the design of the panels.~~

Reason: There are no transportation loads or requirements in the building codes.

Committee Action: Approved

IS-OSMC 01-12-20
ICC 1200 & 1205 Section 103.3, item 6

Proponent: David Tompos, NTA

Revise as follows:

~~Hoisting requirements assumed in the design of the units.~~

Reason: The hoisting requirements are typically done by the crane operator on site.

Committee Action: Approved

IS-OSMC 01-13-20
ICC 1200 & 1205 Section 103.4 & all items

Proponent: David Tompos, NTA

Revise as follows:

~~**103.4 Construction documents for all other systems.** The construction documents addressed by this standard shall include:~~

Reason: Why should the loading requirements in 103.4 be different from panelized in 103.3?

Staff note: See work group report above.. Move item to 1205 work group Chap 3 for possible inclusion.

Committee Action: Approved

IS-OSMC 01-14-20
ICC 1200 & 1205 Section 103.4, item 11

Proponent: David Tompos, NTA

Revise as follows:

Transportation requirements assumed in the design of the units, if applicable.

Reason: Revision stands on its own.

Committee Action: Approved

IS-OSMC 01-15-20

ICC 1200 & 1205 Section 103.4, item 12 and 13

Proponent: David Tompos, NTA

Revise as follows:

~~12. Hoisting requirements assumed in the design of the units~~

~~13. Statement on the sequence of construction.~~

Reason: Why should the loading requirements in 103.4 be different from panelized in 103.3?.

Committee Action: Approved

IS-OSMC 01-16-20 ICC 1200 & 1205 Section 104.1

Proponent: David Tompos, NTA

Revise as follows:

104.1 General. Inspections generally include in-plant inspections and on-site inspections. ~~Documentation identifying individuals or parties responsible for the inspection of installations and components shall be identified and provided to AHJ prior to the commencement of an inspection process.~~

Reason: It is the responsibility of the AHJ to determine who will inspect the installation. The manufacturer cannot identify individuals or parties responsible for the inspection of installations.

Committee Action: Approved as modified

Committee Reason: Unclear what David wanted deleted.

IS-OSMC 01-17-20
ICC 1200 & 1205 Section 103.1, item 8

Proponent: Jon-Paul Cardin, American Iron and Steel Institute

Revise as follows:

Documents shall be reviewed by any third party ~~or special~~ inspectors against submitted permit drawings.

Reason: The defined terms for inspection in this document are “third-party inspector” and “third-party site inspector”. The use of “special inspector” could be confusing to the user.

WITHDRAWN BY PROPONENT based on 01-09-20 action

IS-OSMC 01-18-20

ICC 1200 & 1205 Section 102.4, items 2 & 4

Proponent: Randy Shackelford, Simpson Strong-Tie Co., Inc.

Revise as follows:

2. ~~Off-site~~ Manufacturer of off-site construction.
4. Construction of site-built elements, including any items shipped loose to the site by the off-site manufacturer.

Reason: #2: Redundant.
#4: Reads better.

Committee Action: Approved

IS-OSMC 01-19-20

ICC 1200 & 1205 Section 103.1, items 1, 3 & 7

Proponent: Randy Shackelford, Simpson Strong-Tie Co., Inc.

Revise as follows:

103.1 General. The submittal documents shall be in accordance with IBC Section 107 - Submittal Documents or IRC Sections R105.3 and R106, as applicable, and the construction documents shall meet the following requirements:

1. The construction documents shall comply with the requirements of AHJ regarding off-site components. A state-wide Modular Buildings Program shall advise where separation of off-site components from site-built components in a set of construction documents are required.

#1: Suggest modifying to allow an alternate method when there is no state-wide Modular Buildings Program.

3. A Key Plan for off-site components shall be provided; all off-site components delivered to the site shall be identified with unique numbers. Proposed location(s) of crane(s) shall be provided on the Key Plan.

#3: Term “Key Plan” needs to be defined

7. Shop drawings for off-site components shall be approved by the registered design professional

Reason: General: If the off-site construction is a one and two family dwelling, shouldn't the documents comply with the IRC?

#1: My understanding is that every state does not have a state-wide Modular Buildings Program.

#3: I am not familiar with the term “Key Plan”.

#7. Not all elements need approval from the RDP.

Work group report:

(2) item #1: proposed change:

The construction documents shall comply with the requirements of AHJ regarding off-site components. ~~(to be deleted: A state-wide Modular Buildings Program)~~ AHJ responsible for

2021 ICC 1200, 1205 – Committee Action Report

approval of submittal documents shall advise where separation of off-site components from site-built components in a set of construction documents are required.

(3) item #3: proposed change:

When required by AHJ for projects having multiple off-site volumetric units and/or panels, a Key Plan for off-site components shall be provided, and all such off-site components delivered to the site shall be identified with unique numbers. (to be deleted: Proposed location(s) of crane(s) shall be provided on the Key Plan.)

Proposed definition of "Key Plan":

A building perimeter of the project, which shows the layout of the off-site volumetric units or panels with an unique identifier assigned to each of such units or panels.

Committee Action: Approved as modified

Committee Reason: per work group study shown above

IS-OSMC 01-20-20

ICC 1200 & 1205 Section 104.3

Proponent: Randy Shackelford, Simpson Strong-Tie Co., Inc.

Revise as follows:

104.3 On-site Inspections. On-site inspections of off-site 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 are conducted by AHJ, inspection procedures prescribed by the AHJ shall be followed. When on-site inspections are conducted by other than AHJ, scope of such inspections shall be consistent with section **102.4 Responsible Parties.**

Reason: Clarify the last sentence. I am not sure how to do that. 102.4 does not really say who the responsible party is for inspections as I read it. Needs to clarify what is being required to be inspected.

Committee Action: Approved

IS-OSMC 01-21-20

ICC 1200 & 1205 Section 104.1

Proponent: Randy Shackelford, Simpson Strong-Tie Co., Inc.

Revise as follows:

104.1 General. Inspections ~~generally shall~~ include in-plant inspections and on-site inspections. Inspections shall be in accordance with the applicable building code. building code adopted by the AHJ. Documentation identifying individuals or parties responsible for the inspection of installations and components shall be identified and provided to AHJ prior to the commencement of an inspection process.

Reason: This should make a more mandatory statement.

The building code specifies which inspections are mandatory. That should be referenced in this document.

Committee Action: Approved as modified

Committee Reason: More concise description.

IS-OSMC 01-22-20 ICC 1200 & 1205 Section 102.3

Proponent: Randy Shackelford, Simpson Strong-Tie Co., Inc.

Revise as follows:

102.3 Specific Requirements of Authorities Having Jurisdiction Over Off-site Construction. The project shall comply with the requirements of the AHJ ~~over off-site construction~~. When there is an existing state-wide Modular (or Industrialized) Buildings Program, the project shall comply with both state and local jurisdiction's requirements ~~on~~ for plan approval and inspections of off-site components in manufacturing plant and at project site. Where there is no existing state-wide Modular (or Industrialized) Buildings Program, the ~~local authority having jurisdiction shall be consulted regarding~~ local authority having jurisdiction shall determine requirements ~~of~~ for plan approval and inspections of off-site components in manufacturing plant and at project site.

Reason: The project needs to comply with ALL requirements of the AHJ, not just those for off-site construction. The AHJ is the one to determine what the requirements are, not just consulted about it.

Committee Action: Approved

IS-OSMC 01-23-20

ICC 1200 & 1205 Section 103.1, items 1 & 3

Proponent: Randy Shackelford, Simpson Strong-Tie Co., Inc.

Revise as follows:

1. The construction documents shall comply with the requirements of AHJ regarding off-site components. A state-wide Modular Buildings Program or other AHJ shall ~~advise~~ determine where separation of off-site components from site-built components in a set of construction documents ~~are~~ is required.
3. The definitions need a definition of “Key Plan”. *I am not familiar with that term.*

Reason: #1 needs to state what happens when there is no state-wide Modular Buildings Program. Also, that program or the AHJ need to be able to determine the separation, not just be consulted on it. Finally, the sentence should readseparation....is required.

Committee Action: Approved

IS-OSMC 01-24-20

ICC 1200 & 1205 Sections 103.3, 103.4

Proponent: Randy Shackelford, Simpson Strong-Tie Co., Inc.

Revise as follows:

Delete 103.3 or significantly revise. I don't understand why there should be different requirements for panelized systems. Floors and roofs can be panelized too. Include this information and consolidate with 103.4.

Otherwise, limit the section to "panelized wall systems".

103.4 should just refer to the information required by the IBC for construction documents.

Reason I don't think there needs to be separate requirements for panelized systems. Floors and roofs can be panelized too. Better to just include and consolidate with 103.4 so that all bases are covered.

*Work group report: 103.3 only deal with "panelized systems". It should list only requirements which are unique to this type of system. **Should keep only these items: #4, #7, #8, #9***

Committee Action: Approved as modified

Committee Reason: Per work group study shown above and discussion on 01-13-20.

IS-OSMC 01-25-20 ICC 1200 & 1205 Section 103.2

Proponent: Noah Klammer, National Renewable Energy Laboratory

Revise as follows:

103.2 Non-site-specific buildings. A non-site-specific building shall be identified as not having an available address on construction documents. It is suggested that in lieu of a project address, the modular manufacturer implement a universally unique system of identification (UUID). See also section 701.4 of Standard 1205. The construction documents for non-site-specific buildings shall meet with the requirements of AHJ.

Reason: It is suggested that a universally unique identifier (UUID) program be implemented for modules similar to the VIN system in US automotive industry. Using project location as unique identifier may pose problems for the OSMC participants.

Standard 1205 for reference:

701.4 Manufacturer's data plate. A manufacturer's data plate shall be provided for each dwelling unit or building. The following information shall be placed on a permanent manufacturer's data plate as identified on the cover sheet of the plans and in a location that is readily accessible for inspection. The compliance assurance agency shall approve the form and location of the data plate and shall insure that the data plate is complete with the following information:

WITHDRAWN BY PROPONENT

IS-OSMC 01-26-20

ICC 1200 & 1205 Section 102.2, item 1

Proponent: Noah Klammer, National Renewable Energy Laboratory

Revise as follows:

102.2 Planning Considerations. Projects which include off-site construction shall identify and consider the following:

1. Entities of the AHJ at the project's location and at the location(s) of fabrication or assembly.

Reason: In at least one state, Washington, the OSMC builder must consider both project site AHJ and assembly location AHJ. For the example state given, it would be a combination of the Washington State Department of Labor and Industries for assembly and the Washington State Building Code Council. Language in 102.2.1 should encourage readers to consider that there may be an AHJ other than at the eventual project site location. The generalized treatment of AHJs suggested will also contextualize sections 103.1.1 and 301.1.

Committee Action: Disapproved

Committee Reason: Addressed in 01-02-20 to include manufacturing facility.

Chapter 2 DEFINITIONS

IS-OSMC 02-01-20 ICC 1200 & 1205 Section 202

Proponent: Michael Gardner, M Gardner Services, LLC representing Wall and Ceiling Alliance

Revise as follows:

CONSTRUCTION DOCUMENTS. Designs, plans, and specifications, including written, graphic, and pictorial documents, prepared or assembled for describing the design, location and physical characteristics of the off-site construction ~~the elements of a modular building~~ necessary to show compliance with the applicable building codes.

Reason: Definition needs to apply to more than modular based on the scope of the document.

Committee Action: Approved

IS-OSMC 02-02-20
ICC 1200 & 1205 Section 202

Proponent: Michael Gardner, M Gardner Services, LLC representing Wall and Ceiling Alliance

Revise as follows:

~~EQUIPMENT BUILDING OR SHELTER.~~

Reason: Doesn't appear that definition is used in the body of the document.

Committee Action: Approved

IS-OSMC 02-03-20

ICC 1200 & 1205 Section 202

Proponent: Michael Gardner, M Gardner Services, LLC representing Wall and Ceiling Alliance

Revise as follows:

MANUFACTURING PLANT. The location other than the building site, at which modular buildings, modular components, modules, panels, or tiny houses are assembled or manufactured prior to transport to the final construction site.

Reason: Needs to correlate with document scope.

Committee Action: Approved

IS-OSMC 02-04-20 ICC 1200 & 1205 Section 202

Proponent: Michael Gardner, M Gardner Services, LLC representing Wall and Ceiling Alliance

Revise as follows:

ON-SITE CONSTRUCTION. Preparation of the site; foundation construction; construction of the supporting structure; assembly and connection of all off-site or open construction elements; ~~the modules or modular components, affixing the modular building to the permanent foundation, connecting the modular buildings together and completion of~~ completing all site-related construction in accordance with the construction documents and details.

Reason: Definition is written “too modular.” Needs to be more general to incorporate all scope items. Use the off-site and open construction definitions for clarity. Add language about the supporting structure.

Committee Action: Approved

IS-OSMC 02-05-20

ICC 1200 & 1205 Section 202

Proponent: Michael Gardner, M Gardner Services, LLC representing Wall and Ceiling Alliance

Revise as follows:

PANEL. A distinct, sectional element in a panelized system, typically manufactured as off-site construction.

Reason: Term is used throughout the document but not defined.

Committee Action: Approved as modified

Committee Reason: More concise definition.

IS-OSMC 02-06-20

ICC 1200 & 1205 Section 202

Proponent: Michael Gardner, M Gardner Services, LLC representing Wall and Ceiling Alliance

Revise as follows:

~~RESIDENTIAL STRUCTURE. Housing designed in accordance with the International Residential Code for occupancy and use as a residence by one or more families.~~

Reason: Term is only used in the document in another definition for industrialized housing. Also, multi-family residential is generally constructed to the IBC. Going to cause significant confusion if left as is. The word residential can be deleted from the Industrialized Housing definition and that (the Industrialized Housing) definition will still work.

Committee Action: Approved

IS-OSMC 02-07-20 ICC 1200 & 1205 Section 202

Proponent: Michael Gardner, M Gardner Services, LLC representing Wall and Ceiling Alliance

Revise as follows:

~~MODULAR STRUCTURE. That which is built or constructed from the assembly of one or more modules or modular components designed to be used together to form a completed modular building.~~

Delete entire definition of structure.

Reason: The term structure is used in many different manners throughout the documents, most often to refer to a building structure. This definition as written will create significant confusion as a result because it is written to be specific to modular construction.

Suggest you either delete it entirely or change the term to say “Modular Structure” and then change the document where the term is used exclusively with modular construction as appropriate.

Committee Action: Approved as modified

Committee Reason: To avoid confusion the definition is deleted entirely.

IS-OSMC 02-08-20

ICC 1200 & 1205 Section 202

Proponent: David Tompos, NTA

Revise as follows:

~~**ALTERATION DECAL.** Certification issued by the third-party inspection agency to an industrialized installer or retailer to be permanently attached to a modular building indicating that alterations have been constructed to meet or exceed the applicable building code requirements and is in accordance with this standard.~~

Reason: This decal does not exist. Any alterations to the building once delivered is the responsibility of the AHJ.

Committee Action: Approved

IS-OSMC 02-09-20 ICC 1200 & 1205 Section 202

Proponent: Randy Shackelford, Simpson Strong-Tie Co., Inc.

Revise as follows:

Add abbreviation for FWHA FHWA

Federal Highway Administration

~~**100 PERCENT INSPECTION.** Inspection of each module, modular component or panelized system at every stage of construction including the framing, mechanical, plumbing, electrical, energy compliance systems, and system testing.~~

1200 only

~~**ALTERATION DECAL.** Certification issued by the third-party inspection agency to an industrialized installer or retailer to be permanently attached to a modular building indicating that alterations have been constructed to meet or exceed the applicable building code requirements and is in accordance with this standard.~~

Reason: FWHA is used in the Standard in the transportation section.

Delete term “100 percent inspection”. It is not used in this standard (it is used in 1205).

I did not see the term Alteration Decal used in 1200.

Committee Action: Approved as modified

Committee Reason: Abbreviation was corrected due to typo. 100 Percent Inspection definition is used in 1205 only.

IS-OSMC 02-10-20
ICC 1200 & 1205 Section 202

Proponent: Randy Shackelford, Simpson Strong-Tie Co., Inc.

Revise as follows:

OFF-SITE CONSTRUCTION. A modular building, modular component, panelized system or tiny house which is designed and constructed in compliance with this standard 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.

Reason: I think it is worth clarifying that the building site must be separate from the manufacturing site.

Committee Action: Approved

IS-OSMC 02-11-20 ICC 1200 & 1205 Section 202

Proponent: Jon-Paul Cardin, American Iron and Steel Institute

Revise as follows:

PANELIZED SYSTEM – Wall, roof, or floor ~~components~~ assemblies 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~~ with the intention to be transported to, and installed at, the building site.

Reason: Based on the original proposed definition, “open construction” would not be considered a panelized system. The definition of open construction currently includes “panelized systems”.

Committee Action: Disapproved

Committee Reason:

IS-OSMC 02-12-20 ICC 1200 Section 202

Proponent: Jon-Paul Cardin, American Iron and Steel Institute

Revise as follows:

Propose the following definitions to be deleted:

~~100 PERCENT INSPECTION
BUILDING THERMAL ENVELOPE
CLOSED CONSTRUCTION
COMPLIANCE ASSURANCE PROGRAM
DATA PLATE
EQUIPMENT BUILDING, OR SHELTER
FINAL ON-SITE INSPECTION REPORT
INTEGRATOR
MANUFACTURING PLANT, PRIMARY (Only used in Manufacturing Plant,
Subsidiary definition)
MANUFACTURING PLANT, SUBSIDIARY (Only used in Manufacturing Plant,
Primary definition)
OPEN CONSTRUCTION
QUALITY ASSURANCE
QUALITY CONTROL
REGISTRANT
RELOCATABLE BUILDING
REPLICABLE INDUSTRIALIZED BUILDING
SPECIAL CONDITION NOTES
STATION~~

~~REPLICABLE INDUSTRIALIZED BUILDING~~ – Remove from standards. Does NOT appear in standards

Work Group Report:

Items from Public Comment IS-OSMC 02-12-20 that will be remain in standard (NO ACTION REQUIRED):

100 PERCENT INSPECTION (*ICC 1205 only*)
BUILDING THERMAL ENVELOPE
DATA PLATE
MANUFACTURING PLANT, PRIMARY
MANUFACTURING PLANT, SUBSIDIARY
REGISTRANT
STATION

2021 ICC 1200, 1205 – Committee Action Report

Items from Public Comment IS-OSMC 02-12-20 that will be REMOVED from standard (NO ACTION REQUIRED): Text in red below have been removed during task group meeting on 1.12.21

REPLICABLE INDUSTRIALIZED BUILDING
COMPLIANCE CONTROL PROGRAM
EQUIPMENT BUILDING, OR SHELTER
FINAL ON-SITE INSPECTION REPORT
INTEGRATOR
QUALITY ASSURANCE
RELOCATABLE BUILDING
SPECIAL CONDITION NOTES

Items from Public Comment IS-OSMC 02-12-20 that have been REVISED -

CLOSED CONSTRUCTION. A modular building, component, or assembly manufactured in such a manner that all portions cannot be readily inspected at the installation site without disassembly, damage or destruction thereof.

COMPLIANCE ASSURANCE. Procedures that state the guiding principles and define the framework for ensuring that construction documents approved by a third-party review agency, or that modular buildings inspected by a third-party inspection agency, comply with the applicable building codes.

OPEN CONSTRUCTION. A modular building, component, panelized system or tiny house manufactured in such a manner that all portions can be readily inspected at the building site without disassembly, damage or destruction thereof.

QUALITY ASSURANCE/QUALITY CONTROL. Controls and inspections implemented by the manufacturer to ensure the material provided and work performed meet the requirements of the approved construction documents and applicable building codes.

OFF-SITE CONSTRUCTION. A modular building, component, panelized system or tiny house designed, constructed and wholly or partially fabricated in a manufacturing plant for installation or assembly on a separate building site, manufactured using either open construction or closed construction methods.

Items not included in public comment that have been REVISED by Definitions working group –

~~**DESIGN REVIEW AGENCY.**~~ **THIRD PARTY REVIEW AGENCY.** An organization, private or public, determined by the authority having jurisdiction to be qualified by reason of facilities, personnel, experience, and demonstrated reliability to review the design package and certify compliance to the applicable building codes.

Reason: None of the above noted terms are used in the within standard.

Committee Action: Approved as modified. 1/20/21

Committee Reason: Initial committee action agreed on Replicable Industrialized Building only. Additional committee action on modification based on work group report above.

Chapter 3 DESIGN

IS-OSMC 03-01-20 ICC 1200 Section 301.4

Proponent: David Tompos, NTA

Revise as follows:

~~**301.4 Modules.** Modules shall meet the requirements of and be coordinated with the FHWA or State department of transportation standards and ensure shipping controls exist to withstand the designed structural integrity.~~

Reason: What is FHWA? What type of shipping controls are required to exist to withstand the designed structural integrity?

Committee Action: Approved

IS-OSMC 03-02-20
ICC 1200 Section 301.5

Proponent: David Tompos, NTA

Revise as follows:

301.5 Use of Shipping Containers Repurposed as Buildings and Building Components. A structure incorporating shipping containers shall be designed and constructed to comply with International Building Code Chapter 16 and ICC Guideline G5, *Guideline for the Safe Use of ISO Intermodal Shipping Containers Repurposed as Buildings and Building Components*.

Reason: Most container manufacturers can meet the building code without meeting ICC Guideline G5. This is an overburdensome requirement.

WITHDRAWN BY PROPONENT

IS-OSMC 03-03-20
ICC 1200 Section 302.3

Proponent: David Tompos, NTA

Revise as follows:

302.3 Construction Documents. Construction documents shall be submitted to the Authority Having Jurisdiction, and shall include:

Reason: Should the third party or state agency be added in addition to the AHJ?

WITHDRAWN BY PROPONENT

IS-OSMC 03-04-20
ICC 1205 Section 310.4

Proponent: David Tompos, NTA

Revise as follows:

310.4 Specifications of materials. ~~Specifications of~~ Materials shall be identified and shall meet the requirements of the applicable building code. ~~identify the grade, species and specifications of wood materials, the evaluation report, or specification for steel materials and the evaluation report.~~

Reason: Stands to be written more concise.

Committee Action: Approved as modified

Committee Reason: More concise

IS-OSMC 03-05-20
ICC 1205 Section 310.5, item 3

Proponent: David Tompos, NTA

Revise as follows:

Truss or rafter uplift connections ~~provided ice shield underlayment.~~

Reason: Extraneous verbiage.

Committee Action: Approved

Committee Reason:

IS-OSMC 03-06-20
ICC 1205 Section 310.5, item 12

Proponent: David Tompos, NTA

Revise as follows:

Details of module ~~integration~~ interconnection.

Reason: Clearer wording.

Committee Action: Approved

IS-OSMC 03-07-20
ICC 1205 Section 310.5, item 14

Proponent: David Tompos, NTA

Revise as follows:

~~Floor specifications. Floor details~~ to be consistent with engineered roof details.

Reason: More detail.

Committee Action: Approved as modified

Committee Reason: More concise wording.

IS-OSMC 03-08-20
ICC 1205 Section 310.7, item 2

Proponent: David Tompos, NTA

Revise as follows:

Minimum Concrete strength ~~required~~ appropriate for specified ~~hold-down~~ anchoring devices.

Reason: This would address both uplift and lateral conditions.

Committee Action: Approved as modified

Committee Reason: Enforceable language.

IS-OSMC 03-09-20
ICC 1205 Section 310.7, item 3

Proponent: David Tompos, NTA

Revise as follows:

Locations and specifications for ~~hold-down~~ anchoring devices.

Reason: This would address both uplift and lateral conditions.

Committee Action: Approved

IS-OSMC 03-10-20

ICC 1205 Section 310.7, new item 4

Proponent: David Tompos, NTA

Revise as follows:

4. The actual gravity, lateral and uplift loads.

Reason: Another necessary item.

Committee Action: Approved

IS-OSMC 03-11-20 ICC 1205 Section 311.1

Proponent: David Tompos, NTA

Revise as follows:

311.1 On-site connections. On-site connections including module-to-module interconnection details and instructions and connections from site-built elements to the modules or components such as canopies and awnings, shall be provided. ~~Building system documentation shall contain variations or a range of variations for one or more elements of modular or component described in the building system documentation, provided that the approved building system documentation conforms to the applicable requirements of the applicable codes and standards under each variation or set of variations within the range of variations. Any material deviation from variations contained within the approved building system documentation shall be approved by the evaluation agency, consistent with this chapter, prior to the start of construction. Where building system documents are utilized, the specific elements utilized in the submittal shall be referenced on the construction documents.~~

Reason: The second sentence starting with “building system...” has nothing to do with connections. This should be a separate section to allow the approval of building systems.

Committee Action: Approved

IS-OSMC 03-12-20

ICC 1205 Section 311.3

Proponent: David Tompos, NTA

Revise as follows:

311.3 Manufacturer’s instructions. On-site connections shall follow approved manufacturer’s instructions, ~~where applicable~~.

Reason: If this is referring to the modular manufacturer’s instructions, “where applicable” does not apply. If this is relating to hold-down, straps, anchor, etc., it should be more clear. The wording where applicable will never apply to manufacturer’s instructions. They must always be followed.

Committee Action: Approved

IS-OSMC 03-13-20
ICC 1205 Section 312.2

Proponent: David Tompos, NTA

Revise as follows:

312.2 In-Plant inspections. In-plant inspections that are conducted by employees of a Third-Party Inspection Agency shall verify that constructions are in compliance with the approved construction documents ~~or standards~~. The Third-Party Inspection Agency shall inspect each modular unit in a phase of construction or periodically inspect modular components to verify that construction is in compliance with the approved construction documents ~~or standards~~.

Reason: Standards are used as well. Written on cover sheet.

Committee Action: Approved as modified

Committee Reason: Extraneous wording.

IS-OSMC 03-14-20 ICC 1200 Section 303.3

Proponent: Noah Klammer, National Renewable Energy Laboratory

Revise as follows:

~~**303.3 Construction Documents.** The design documentation shall clearly describe and delineate the portions of the systems that are to be constructed off-site from those that are to be finished on-site and the responsibility for each. The designs shall include accommodation, clearances, chase ways, material specifications and equipment to facilitate the completion of the systems on-site. **Where expected site work is not defined to make accommodations prior to construction, responsibility for design of this the site work shall be the owner's responsibility.**~~

303.3 Construction Documents. The design documentation shall ~~clearly describe and delineate the portions of the systems that are to be constructed off-site from those that are to be constructed finished on-site and identify the registered design professional responsible for off-site and on-site elements responsibility for each. The designs shall include~~ accommodation, clearances, chase ways, material specifications and equipment to facilitate the completion of the systems on-site. ~~Where expected site work is not defined to make accommodations prior to construction, responsibility for design of this the site work shall be the owner's responsibility.~~

This will replace text in following sections: 1200 Sections 303.3, 304.3, 305.3 and 306.1.3.

Reason: Adds to coordination between organizations.

Committee Action: Approved as modified.

Committee Reason: Clearly” is subjective and should be deleted. Constructed is more broad than “Finished”. RDP is appropriate for construction documents and makes clear it is RDP and not the owner, contractor, etc. Deleted text is really contractor/manufacturer means and methods which is typically not detailed in construction documents but instead is the responsibility of the contractor/s.

IS-OSMC 03-15-20

ICC 1200 Section 301.3

Proponent: Randy Shackelford, Simpson Strong-Tie Co., Inc.

Revise as follows:

301.3 Transportation. Transportation considerations shall be in accordance with Chapter 7. The design of off-site construction shall be meet all federal and state highway shipping requirements during transportation. adequate for transport, shall meet federal highway administration shipping standards or ISO/TC 104 transport standards.

Reason: This only applies to the off-site construction, not the entire building.

Committee Action: Approved as modified

Committee Reason: More concise reference.

IS-OSMC 03-16-20

ICC 1200 Section 307.3 (402)

Proponent: Randy Shackelford, Simpson Strong-Tie Co., Inc.

Revise as follows:

~~**307.3 Special requirements for tiny homes.** The interior environment in a tiny house shall comply with the requirements of Section 402.~~

~~**SECTION 402**~~

~~**TINY HOMES**~~

Reason: There should be no special requirements for Tiny Homes in this document. The Building Code is the correct location for tiny homes requirements.

They should be built to the requirements of the Authority Having Jurisdiction.

Placing specific requirements in this standard increases the possibility of introducing conflict between the requirements of this standard and those in the IRC, which already cover Tiny Homes. This document should not contain technical requirements that have the potential to create conflicts with applicable code requirements.

References to Section 402 which appear elsewhere in document will be deleted by staff
Tiny Homes shall comply with Appendix Q of the IRC (moved to Section 301)

Committee Action: Approved

IS-OSMC 03-17-20 ICC 1205 Section 303.6

Proponent: Randy Shackelford, Simpson Strong-Tie Co., Inc.

Revise as follows:

303.6 Exterior wall envelope. Information on exterior ~~wall envelope~~ including ~~weather~~ water-resistive barriers, ~~roof~~, and any required fire-resistance rated assemblies shall be provided in accordance with the ~~IBC Section XXX or IRC Section XXX, as applicable building code~~ for information on exterior wall envelope

Reason: If the building is a one- and two-family dwelling the applicable code would be the IRC, not the IBC. This comment would apply throughout wherever the IBC is referenced.

The Section title should say “envelope”, not wall since the section refers to the roof also.

I think if you specify the section number, you don't need to say exactly what is applicable to.

Committee Action: Approved as modified

Committee Reason: Envelope is a more encompassing term.

IS-OSMC 03-18-20

ICC 1205 Section 310.3, item 3

Proponent: Randy Shackelford, Simpson Strong-Tie Co., Inc.

Revise as follows:

3. Demonstrate compliance with ~~maximum load parameters, alternatively, provide calculations for varying design parameters/varying load conditions~~ the loads required by the building code adopted by the AHJ.

Reason: The calculations should demonstrate compliance with the loads in the building code. I do not understand what is meant by maximum load parameters or varying load conditions. If you are talking about a building designed to be located in various locations, you could say the following:
Demonstrate compliance with the most severe loads expected for the possible locations of the building, provided these are clearly indicated on the calculations.

Committee Action: Approved

IS-OSMC 03-19-20 ICC 1205 Section 310.4

Proponent: Randy Shackelford, Simpson Strong-Tie Co., Inc.

Revise as follows:

310.4 Specifications of materials. Specifications of materials shall comply with the material requirements of the IBC or IRC, as applicable, and shall provide ~~enough~~ information to enable determination of design strengths. ~~identify the grade, species and specifications of wood materials, the evaluation report, or specification for steel materials.~~

Reason: The building code has a much better description of the information required for specification of materials. Why not just reference that? This list is incomplete.

Committee Action: Approved as modified

Committee Reason: vague term

IS-OSMC 03-20-20 ICC 1205 Sections 310.1 & 310.2

Proponent: Randy Shackelford, Simpson Strong-Tie Co., Inc.

Revise as follows:

310.1 Load listings. ~~Listing of all loads upon which design is based shall be provided. The listing shall include items listed in section 1603 of the International Building Code.~~ Construction Documents shall include the information required by Section 1603 of the International Building Code.

310.2 Engineering analysis. An engineering analysis for ~~design gravity, uplift and lateral~~ loads to support the selection of all structural members and connections in compliance with applicable codes shall be provided.

Reason: The load listing should be the same as that required in the IBC. Any other list is incomplete or possible conflicting.

Engineering analysis is also required for uplift loads.

Committee Action: Approved as modified

Committee Reason: more concise term

IS-OSMC 03-21-20

ICC 1205 Section 311.1

Proponent: Randy Shackelford, Simpson Strong-Tie Co., Inc.

Revise as follows:

311.1 On-site connections. On-site connections including module-to-module interconnection details and instructions and connections from site-built elements to the modules or components such as canopies and awnings, shall be provided. Building system documentation shall contain variations or a range of variations for one or more elements of modular or component described in the building system documentation, provided that the approved building system documentation conforms to the applicable requirements of the applicable codes and standards under each variation or set of variations within the range of variations. Any material deviation from variations contained within the approved building system documentation shall be approved by the evaluation agency and the AHJ, consistent with this chapter, prior to the start of construction. Where building system documents are utilized, the specific elements utilized in the submittal shall be referenced on the construction documents.

Reason: Once we get to the site, isn't it important to also have approval from the AHJ?

Committee Action: Approved

IS-OSMC 03-22-20 ICC 1205 Section 312.2

Proponent: Randy Shackelford, Simpson Strong-Tie Co., Inc.

Revise as follows:

(From 301.2) **312.2.1 Remote Virtual Inspections.** The AHJ shall have the option to conduct remote virtual inspections (RVI) in accordance with section 301.2. ~~Except for Unmanned Aerial Vehicles (drone), the camera shall be operated by the permit holder at the direction of the inspector. The inspector shall have the ability to communicate directly with the camera operator to perform a thorough inspection of the project. The response of the camera operator to the directions of the inspector shall be verified by live video feed. State and local requirements shall be followed as if in-person inspections are being conducted.~~

Reason: What about the inspections that are conducted by someone other than a Third-Party Inspection Agency? Should the language about remote inspections either be here or be repeated or referenced here?

Staff note:

Committee Action: Approved as modified

Committee Reason: refers to previous section, less repetitive language.

IS-OSMC 03-23-20
ICC 1200 Section 302.53.1

Proponent: Jon-Paul Cardin, American Iron and Steel Institute

Revise as follows:

302.53.1 Secondary Attachments to Structural Members. Where primary and secondary ~~structural steel~~ members require fire protection, secondary attachments to those structural members shall be protected with the same fire-resistive material and thickness as required for the structural member. The protection shall extend away from the structural member a distance of not less than 12 inches, or shall be applied to the entire length when the attachment is less than 12 inches long. When an attachment is hollow and the ends are open, the fire-resistive material and thickness shall be applied to both exterior and interior of the hollow ~~steel~~ attachment.

Reason: Why is the fire resistance requirements of secondary structural members only specific to structural steel elements? Is this not still applicable to other materials such as Cross-Laminated Timber (CLT)? Also, I believe the section is misnumbered as noted above.

Committee Action: Approved

IS-OSMC 03-24-20

ICC 1200 Section 302.3.3

Proponent: Jon-Paul Cardin, American Iron and Steel Institute

Revise as follows:

~~**302.3.3** Where load-bearing walls are provided, the construction documents shall include the structural load paths and must demonstrate continuous load paths for the full height of each load-bearing wall.~~

Reason: These are the only structural requirements listed in the Fire and Smoke Protection Features section. In addition, structural load paths are not typically included in construction documents.

Committee Action: Approved

IS-OSMC 03-25-20

ICC 1200 Section 306

Proponent: Jon-Paul Cardin, American Iron and Steel Institute

Revise as follows:

~~SECTION 306~~ ~~FIRE PROTECTION~~

~~**306.1 Scope.** The provisions of this section shall govern the design, installation and operation of fire protection systems for offsite construction.~~

~~**306.2 Application.** Design and installation of fire protection systems shall be in accordance with the provisions of the fire protection codes and standards adopted by the authority having jurisdiction. The requirements in this section shall be in addition to the requirements of the applicable codes and standards.~~

~~**306.1.3 Construction Documents.** The design documentation shall clearly describe and delineate the portions of the systems that are to be constructed off-site from those that are to be finished on-site and the responsibility for each. The designs shall include accommodation, clearances, chase ways, and equipment to facilitate the completion of the systems on site. Where expected site work is not defined to make accommodations prior to construction, responsibility for design of this site work shall be the owner's.~~

Reason: It is not clear as to any additional information provided within this section that is not already included in Section 302.

WITHDRAWN BY PROPONENT

IS-OSMC 03-26-20 ICC 1200 Section 306

Proponent: Jon-Paul Cardin, American Iron and Steel Institute

Revise as follows:

~~SECTION 307~~ ~~INTERIOR ENVIRONMENT~~

~~**307.1 Scope.** The provisions of this chapter shall govern the interior environment spaces of modules and tiny homes.~~

~~**307.2 Application.** The requirements for the interior environment spaces shall be in accordance with the provisions of the codes and standards adopted by the authority having jurisdiction. The requirements in this section shall be in addition to the requirements of the applicable codes and standards.~~

~~**307.3 Special requirements for tiny homes.** The interior environment in a tiny house shall comply with the requirements of Section 402.~~

Reason: It is not clear as to why this section is needed if the only effect of this section is directing users to Section 402.

Committee Action: Approved

IS-OSMC 03-27-20

ICC 1200 Section 308.3.2

Proponent: Noah Klammer, National Renewable Energy Laboratory

Revise as follows:

308.3.2 ~~Weather barriers. Control Layers.~~ Weather As applicable, all air, vapor, and weather barrier systems shall be designed and installed to provide continuity of the insulation or barrier.

Reason: “Weather barrier systems shall be designed and installed to provide continuity of the insulation or barrier.” Insulation, WRBs, and air barriers can be three different control layers. Call out each individually, as each should be continuous. This would bring this section into alignment with language used in section 804.1.2 of this same standard.

SECTION 804 MODULE CONNECTIONS

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

1. Connecting the modules or panelized systems to provide the required structural strength and rigidity.
2. Maintaining the integrity of the air barrier system, vapor barrier, insulation, sheathing membrane, cladding, roofing and flashing at the joints between each module or panelized system.

Committee Action: Approved as modified

Committee Reason: more encompassing term

IS-OSMC 03-28-20

ICC 1205 Section 306.2

Proponent: Noah Klammer, National Renewable Energy Laboratory

Revise as follows:

306.2 Heat loss calculation. Where required by the applicable building code AHJ, a room by room heat loss calculation shall be provided. The assumptions of the heat loss calculation shall be included. These assumptions include, but are not limited to:

1. The published reference of outdoor design conditions and design location
2. The design ventilation rate
3. The design sensible heat ratio
4. The sizing factor

Reason: The assumptions (climate, ventilation rate, sensible heat ratio, sizing factor, etc.) in the room by room heating load and cooling calculations should be listed in the case that the building is not assigned to a specific location (see draft section 103.2). The inclusion of this information in the EPA ENERGY STAR standard for new construction encourages best engineering practice and responsible equipment selection. The repetition and control typical of the OSMC process will facilitate this additional record keeping.

For reference:

103.2 Non-site-specific buildings. A non-site-specific building shall be identified as not having an available address on construction documents. The construction documents for non-site-specific buildings shall meet with the requirements of the AHJ.

Committee Action: Approved as modified

Committee Reason: assumptions are part of a heat loss calc

IS-OSMC 03-29-20 ICC 1205 Section 312.2

Proponent: Noah Klammer, National Renewable Energy Laboratory

Revise as follows:

312.2 In-Plant inspections. In-plant inspections that are conducted by employees of a Third-Party Inspection Agency shall verify that constructions are in compliance with the approved construction documents. The Third-Party Inspection Agency shall inspect each modular or panelized unit a full or partial set of identical modules in a phase of construction to verify that construction is in compliance with the approved construction documents and the approved quality documents.

Reason: It is suggested that the AHJ-sanctioned third-party inspection agency be allowed final authority on inspection sampling rate and may allow less than “each modular unit” to be inspected to verify compliance—see language in Std 1200 504.2. Also please remove or further define “modular unit” in Chapter 2 Definitions. There may be confusion as to whether a modular unit is a uniquely existing module or a group by type of module in repetitive production. In the context of the draft language I interpret “modular unit” to mean the former.

Standard 1200 for reference:

CHAPTER 5 MANUFACTURING PLANT SECTION 504 QA/QC PROCESS

504.2 QA/QC Frequency. Observation of the manufacturing and construction activities shall be performed as often as is necessary to ensure compliance with the QA/QC manual.

Committee Action: Approve as modified

Committee Reason: more detailed.

IS-OSMC 03-30-20
ICC 1200 Section 306

Proponent: Michael Gardner, M Gardner Services, LLC representing Wall and Ceiling Alliance

Revise as follows:

SECTION 306
FIRE PROTECTION AND LIFE SAFETY SYSTEMS

Reason: For clarity, modify section title to match Chapter 9 of IBC.

Committee Action: Approved

IS-OSMC 03-31-20

ICC 1205 Section 311.1

Proponent: Michael Gardner, M Gardner Services, LLC representing Wall and Ceiling Alliance

Revise as follows:

311.1 On-site connections. On-site connections including ~~module-to-module~~ interconnection details and instructions and connections from site-built elements to the modules, panels or components ~~such as canopies and awnings~~, shall be provided. Building system documentation shall contain information on variations or a range of variations for one or more elements of ~~modular or component~~ described in the building system documentation, provided that the approved building system documentation conforms to the applicable...(Remainder unchanged.)

Reason: First two sentences are too modular-centric and need to change to reflect document scope.

Committee Action: Approved as modified

Committee Reason: Canopies and awnings are components.

Chapter 4

SPECIAL REQUIREMENTS BASED ON PRODUCT TYPE

IS-OSMC 04-01-20 ICC 1200 Section 402.2.2

Proponent: David Tompos, NTA

Revise as follows:

~~402.2.2 Wind shear requirements. Wind shear requirements shall be as defined by the Authority Having Jurisdiction.~~

Reason: Shear walls must meet and be designed to the loading conditions in the IRC per the specific location.

Addressed in 03-16-20

IS-OSMC 04-02-20

ICC 1200 Section 402.4

Proponent: David Tompos, NTA

Revise as follows:

~~**402.4 Special horizontal assembly requirements.** A chassis used as a horizontal assembly in a tiny house shall comply with **(NAME OF STANDARD.)**~~

Reason: The chassis is an integral part of the home and is structurally designed to comply with the design loads. There is not standards for chassis.

Addressed in 03-16-20

IS-OSMC 04-03-20

ICC 1200 Section 403.1.1

Proponent: David Tompos, NTA

Revise as follows:

403.1.1 Stiffness. Modules shall incorporate stiffness to limit deflections, lateral drift ~~if~~ where applicable, vibration, or any other deformations that adversely affect the intended use and performance of the module or building. Modules shall have strength and stiffness for both temporary conditions such as transportation, hoisting and erection and permanent conditions.

Reason: A single or two story residential house is not a problem.

This section is requiring a structural design for transporting the erection of the module, which is not a present requirement. It is based on experience now. This requirement would add significant cost for a PE to prepare these designs.

Committee Action: Approved as modified

Committee Reason: Standards language.

IS-OSMC 04-04-20
ICC 1200 Section 403.1.4

Proponent: David Tompos, NTA

Revise as follows:

403.1.4 Diaphragm and Shear Walls. Analysis and design of the completed building shall account for the effect of discontinuities in the diaphragm and shear walls between modules.

Committee Action: Approved as modified

Committee Reason: Shear walls are important to be described in the interconnections.

IS-OSMC 04-05-20 ICC 1205 Section 401.1

Proponent: David Tompos, NTA

Revise as follows:

401.1 Evaluation agency. Manufacturers that use an evaluation agency, other than the state, to perform in-plant inspections, evaluate quality control procedures, approve engineering manuals, and approve plans, shall have such agency request approval from the state. ~~The request shall contain the signature of a responsible officer, owner, or partner of the submitting third party agency.~~ Approval requests shall contain the following requirements:

19. The request shall contain the signature of a responsible officer, owner, or partner of the submitting third party agency.

Reason: Reads better when verbiage is in item form.

Committee Action: Approved

IS-OSMC 04-06-20

ICC 1200 Section 402.2.2

Proponent: Randy Shackelford, Simpson Strong-Tie Co., Inc.

Revise as follows:

402.2.2 ~~Wind shear requirements~~Environmental Loads. ~~Wind shear requirements shall be as defined by the Authority Having Jurisdiction.~~

Environmental Loads. Tiny homes shall be constructed to resist the environmental loads of the building code adopted by the Authority Having Jurisdiction.

Reason: Why specifically talk about wind shear? What about wind uplift? Earthquake shear? Snow Loads? The list will be incomplete. Just reference the building code.

Addressed in 03-16-20

IS-OSMC 04-07-20

ICC 1205 Section 401.1 & items 6, 8, 15, 16

Proponent: Randy Shackelford, Simpson Strong-Tie Co., Inc.

Revise as follows:

401.1 ~~Evaluation agency~~ Third-Party Review and Inspection Agencies.

I think you need to provide a definition of “evaluation agency”. I think there could be confusion with this entity and “product evaluation agencies”. Would it be better to just call this the third-party inspection agency, as it is called later in the section? This applies wherever “evaluation agency” is used.

Also, this section requires that the agency request approval from the state. What if there is no state agency for Modular Construction?

6. A copy of the evaluation agency's International Accreditation Service Board (IAS) or other approved accreditation agency certificate.

8. *The third sentence, “Either residential or commercial (ICC Level III plan review certification).” is not a complete sentence. More importantly, this section contains a conflict. The first part says the reviewer must be certified. But the second part says unlicensed reviewers can review provided they work under an engineer or architect or a certified plan reviewer. Maybe the last sentence is better formatted as an Exception as shown here.*

Exception: Unlicensed plan reviewers shall be permitted to review plans provided they work directly under the supervision of a Professional Engineer or Architect or ICC Level III certified plan reviewer.

#15 has requirements for issuing labels. But then #16 talks about certification marks. Are these the same thing? If so can they be named consistently?

Reason: See above for reasons on each item.

REVISE CHAPTER 4 TITLE TO Third-Party Review and Inspection Agencies

Work Group Report:

CHAPTER 4 THIRD-PARTY REVIEW AND INSPECTION AGENCIES SECTION 401 GENERAL

401.1 Third-Party Review and Inspection ~~Evaluation agency~~. Manufacturers that use an ~~evaluation~~ Third-party agencies agency, other than the state, ~~to that~~ perform in-plant inspections,

2021 ICC 1200, 1205 – Committee Action Report

evaluate quality control procedures, approve engineering manuals, and approve plans, shall ~~have such agency~~ request approval from the AHJ state. ~~The request shall contain the signature of a responsible officer, owner, or partner of the submitting third party agency.~~ Approval requests shall contain the following requirements as applicable:

1. Name and address of the entity making application.
2. Disciplines for which the third-party ~~inspection~~ agency seeks approval.
3. A list of key personnel indicating their primary functions or duties.
4. The number of years the entity has actively engaged in the business for which it seeks approval.
5. A statement by the evaluation agency that it shall adhere to the requirements of the state regulations of the AHJ.
6. A copy of the accreditation certificate, issued by an ISO/IEC 17011-compliant accreditation body, that establishes the ability to provide services in accordance with the ISO/IEC 17065 standard for product evaluation or the ISO/IEC 17020 standard for inspection service, as appropriate. *(Reflects 04-08-20 committee action)*
7. A copy of the registered design professional certification for any employee that shall be responsible for plan review and approval work.
8. A copy of the professional license or ~~International Code Council (ICC)~~ plan review certification for all employees that shall be performing plan review. The plan reviewer must only review plan and specific disciplines in the area in which they are certified or licensed. ~~Either residential or commercial (ICC Level III plan review certification).~~

Exception: Unlicensed plan reviewers shall be permitted to review plans provided they work directly under the supervision of a Professional Engineer or Architect or ICC Level III certified plan reviewer.

9. A copy of the professional license or ICC inspector certifications for personnel that shall be performing in-plant inspections. The inspector shall only inspect in areas in which they are licensed or certified ~~either residential ICC Level I or commercial ICC Level II. A Certified residential ICC Level I inspector is qualified to inspect dwelling portions of commercial units but not structural or common areas.~~

10. A statement that the ~~evaluation third-party~~ agency is independent and does not have any actual or potential conflict of interest and is not affiliated with, influenced by, or controlled by any present or potential client manufacturer in any manner that might affect its capacity to render service or reports of findings objectively and without bias.

11. A statement that the ~~evaluation third-party~~ agency shall review each design as required for plan approval and identify deficiencies on a corrective action report item by item with citations to the standards. The ~~evaluation third-party~~ agency shall verify that deficiencies have been corrected prior to issuing acceptance. The ~~evaluation third party~~ agency shall signify approval of a design by placing its stamp of approval or authorized signature on each page and submit a copy to the state AHJ and manufacturer, ~~or local jurisdiction where no state program exists.~~

12. A statement that the ~~evaluation third-party~~ agency shall perform an initial plant certification and document a written certification report to the manufacturer and state AHJ. The initial plant certification shall require 100 percent inspection of the aspects of construction on not less than one module or modular component and verify that the manufacturer has a functioning quality assurance process. This inspection shall be made by one or more qualified engineers who have reviewed the approved design and by an inspector qualified with the proper ICC certifications. If

2021 ICC 1200, 1205 – Committee Action Report

the initial module or modular component fails to conform with the design or standard, additional modules or modular components shall be inspected until the evaluation third-party agency is satisfied that the manufacturer complies to the approved design, the standards, and the quality assurance manual.

13. A statement that for on-going inspections the evaluation third-party agency shall inspect each module in a phase of construction to verify that the quality assurance process is in compliance with the initial manufacturing plant certification. If the evaluation third-party agency finds deficiencies, additional action shall be taken to assure the quality assurance process is in compliance with the initial manufacturing plant certification.

14. A statement that for on-going inspections the evaluation third-party agency shall determine the frequency of inspection of a modular component or panelized system as necessary to assure the quality assurance process is functioning in compliance with the initial manufacturing plant certification. If the evaluation third-party agency finds deficiencies, additional action shall be taken to assure the quality assurance process is in compliance with the initial manufacturing plant certification.

15. The evaluation third-party agency shall provide to the manufacturer, a written or electronic inspection report after each inspection identifying each deficiency to the standard or approved designs. The evaluation third-party agency shall only issue labels after all deficiencies have been corrected.

16. A procedure for maintaining records to control the agency's certification marks labels.

17. A procedure to identify all module or modular components produced and inspections performed.

18. The third-party inspection body agency shall have insurance to cover liabilities arising from possible errors and omissions from its operations.

19. The request for approval shall contain the signature of a responsible officer, owner, or partner of the submitting third party agency. *(Reflects 04-05-20 committee action)*

~~**401.2 Quality assurance administrator.** The quality assurance administrator shall be a Registered Design Professional with not less than two years of actual or supervisory experience in modular or component products, and not less than two years of experience in the quality assurance function.~~

~~**401.3 Quality assurance supervisor.** The quality assurance supervisor shall have not less than two years of experience as an inspector in the modular or component industry.~~

401.4² Unlicensed inspector. An unlicensed inspector shall be considered an inspector in training and must receive a professional license or ICC inspector certification within two years of the date of employment. The third-party inspection agency shall have an inspector training procedure that is to be monitored by the state or the accreditation agency. The training shall be done by a licensed professional or a certified ICC inspector.

SECTION 403

2021 ICC 1200, 1205 – Committee Action Report

QUALITY ASSURANCE PERSONNEL

~~401.2~~ **3.1 Quality assurance administrator.** The quality assurance administrator shall be a Registered Design Professional with not less than two years of actual or supervisory experience in modular or component products, and not less than two years of experience in the quality assurance function.

~~401.3~~ **3.2 Quality assurance supervisor.** The quality assurance supervisor shall have not less than two years of experience as an inspector in the modular or component industry.

Committee Action: Approved as modified

Committee Reason: Consistent verbiage throughout as per work group report above.

IS-OSMC 04-08-20

ICC 1205 Section 401.1, item 6

Proponent: David Tompos, NTA

Revise as follows:

~~6.— A copy of the evaluation agency's International Accreditation Service Board (IAS) or other approved accreditation certificate certifying the agency to ISO/IES 17065 conformity assessment— Requirements for bodies certifying products, processes and services.~~

"A copy of the ~~evaluation agency's~~ accreditation certificate, issued by an ISO/IEC 17011-compliant accreditation body, that establishes the ~~agency's~~ ability to provide services in accordance with the ISO/IEC 17065 standard for product evaluation or the ISO/IEC 17020 standard for inspection service, as appropriate."

Reason: If we are going require the Third parties to be certified we must have a standard for certification and this is the widely accepted standard.

Committee Action: Approved as modified

Committee Reason: Important describe the accreditation standards that certify the agency.

Chapter 5 MANUFACTURING PLANT

IS-OSMC 05-01-20 ICC 1200 Section 504.1

Proponent: David Tompos, NTA

Revise as follows:

504.1 QA/QC personnel. Each manufacturing plant shall identify a responsible party that shall implement the QA/QC processes within the facility. The person responsible for the quality program shall have the authority necessary to ensure compliance with this Standard. Quality program personnel shall demonstrate to the inspection agency that they have adequate knowledge of the product, factory operations, and the codes and standards to which the product is being manufactured and shall also demonstrate the ability to perform their required duties.

Reason: Should approved documents be added along with “this standard”?

WITHDRAWN BY PROPONENT

IS-OSMC 05-02-20
ICC 1200 Section 504.2

Proponent: Jon-Paul Cardin, American Iron and Steel Institute

Revise as follows:

504.2 QA/QC Frequency. Observation of the manufacturing and construction activities shall be performed as often as is necessary to ensure compliance with the QA/QC ~~manual~~ plan.

Reason: “QA/QC manual” is not utilized anywhere else in this document. I believe this is intended to be “QA/QC Plan”

Committee Action: Approved

IS-OSMC 05-03-20

ICC 1200 Sections 502.1, 502.2

Proponent: Randy Shackelford, Simpson Strong-Tie Co., Inc.

Revise as follows:

502.1 Location. Where facilities used to manufacturer or construct tiny houses, modules or modular components in accordance with this standard shall be not be are located directly upon the work site where the proposed modules, panelized systems or modular components are to be installed, they shall not be considered off-site construction and this standard shall not apply.

502.2 On-site panelized system fabrication. Where an operation directly on the work site and specifically intended for the fabrication of panelized systems is not shall be located separately from the structure under construction, the operation shall not be considered off-site construction and this standard shall not apply.

Reason: BOTH SECTIONS: Instead of prohibiting it, just say that if they are built on site then they are not off-site construction and do not use this standard.

Committee Action: Approved

IS-OSMC 05-04-20 ICC 1200 Sections 504.3.3

Proponent: Randy Shackelford, Simpson Strong-Tie Co., Inc.

Revise as follows:

504.3.3 Documentation Retention. All documentation required by the QA/QC plan shall be retained by the manufacturer for not less than 12 months after the delivery of the module, panel or component. ~~final construction is granted a Certificate of Occupancy.~~

Reason: Seems like records should be kept until after the building gets its CO.

Staff note:

Committee Action: Approved as modified

Committee Reason: Manufacturer would not know when Certificate of Occupancy is granted.

IS-OSMC 05-05-20
ICC 1205 Sections 501.1

Proponent: Randy Shackelford, Simpson Strong-Tie Co., Inc.

Revise as follows:

501.1 General. The Quality Assurance manual shall be submitted to the AHJ on 8-1/2" x 1 1" paper bound into an **comprehensively** indexed booklet or electronic equivalent.

Reason: This section needs to say to whom the quality assurance manual is submitted.

Committee Action: Approved as modified

Committee Reason: Subjective term.

IS-OSMC 05-06-20
ICC 1205 Sections 501.8

Proponent: Randy Shackelford, Simpson Strong-Tie Co., Inc.

Revise as follows:

501.8 Inspection checklist. A detailed list of ~~work~~ inspections performed at each station and sign-offs shall be provided.

Reason: It was unclear to me how 501.8 was different from 501.6. So I took a shot assuming that the difference was the inspections performed at the station. But I could be misunderstanding it.

Committee Action: Approved

IS-OSMC 05-07-20 ICC 1205 Sections 503.1

Proponent: Randy Shackelford, Simpson Strong-Tie Co., Inc.

Revise as follows:

503.1 General. A procedure for certification label control and month end reporting shall be provided. The manufacturer shall purchase and apply the certification label in accordance with the requirements of the AHJ. ~~A certification label shall be purchased by the manufacturer for each module or component. The certification label shall not be attached to the module or modular component until inspection and approval by the third-party inspection agency.~~

Reason: The sentence seemed incomplete.

Committee Action: Approved as modified

Committee Reason: Clearer language.

IS-OSMC 05-08-20
ICC 1200 Section 504.3

Proponent: Jon-Paul Cardin, American Iron and Steel Institute

Revise as follows:

504.2 QA/QC Frequency. Observation of the manufacturing and construction activities shall be performed as often as is necessary to ensure compliance with the QA/QC ~~manual~~ plan.

Reason: “QA/QC manual” is not utilized anywhere else in this document. I believe this is intended to be “QA/QC Plan” as established in Section 503.

Committee Action: Approved

IS-OSMC 05-09-20
ICC 1205 Section 502.3

Proponent: Noah Klammer, National Renewable Energy Laboratory

Revise as follows:

502.3 Rejected materials. A procedure for the segregation and disposal of rejected materials and waste/lap materials shall be outlined.

Reason A materials disposal protocol offers the chance at better recycling and/or secondary value streams. It also provides opportunity for quantification and reduction of waste, incentive for lean construction and automation, and can help guide material choices regarding environmental impact (e.g., embodied carbon). Since the segregation and disposal of rejected materials protocol is already in draft language, waste materials can easily be included.

WITHDRAWN BY PROPONENT

IS-OSMC 05-10-20

ICC 1200 Section 502.2

Proponent: Michael Gardner, M Gardner Services, LLC representing Wall and Ceiling Alliance

Revise as follows:

502.2 On-site panelized system fabrication. An operation directly on the work site and specifically intended for the fabrication of panelized systems shall be permitted and shall be located separate from the structure under construction.

Reason: Unlike most of the other construction types addressed by these standards, a panelization operation can be sited on the same property as the structure under construction. It occasionally occurs when a specific segment of a project is manufactured using panels. Change clarifies the intent of the language.

Addressed in 05-03-20

Chapter 6 FABRICATION

IS-OSMC 06-01-20 ICC 1200 Section 602.1

Proponent: David Tompos, NTA

Revise as follows:

602.1 Volumetric modular construction. Each modular building or module shall be identified where individually or in combination form structural components. Attention to the connections and erection of the unit or sections that form the structure as well as the ~~Main Windforce Resistance System~~ design load shall be identified in addition to the connections to the foundation.

Reason: more generic

Committee Action: Disapproved

Committee Reason: Important to specify windforce as a lateral force against the module.

IS-OSMC 06-02-20
ICC 1200 Section 603.1

Proponent: David Tompos, NTA

Revise as follows:

603.1 Deformation compatibility. Materials expected to be subjected to deformation during the fabrication, ~~transportation or installation~~ process shall comply with requirements of this section.

Reason: Doesn't belong in Chapter 6

Committee Action: Approved

IS-OSMC 06-03-20
ICC 1200 Section 603.2

Proponent: David Tompos, NTA

Revise as follows:

603.2 Design. Buildings and components shall be designed and detailed for deformation compatibility where required by ASCE 07–~~Chapter 12~~. These shall include Interior and Exterior Non-bearing, Non-shear Walls, Structural Separation Walls, Interconnected Modules – Diaphragms, Chords, and Collectors.

Reason: ASCE 07, chapter 12, is for seismic conditions. Other years of ASCE 07 do not have a chapter 12. Delete reference to chapter 12. Do we reference the IRC or IBC in addition or in place of ASCE 07?

Committee Action: Approved

IS-OSMC 06-04-20
ICC 1200 Section 604.1

Proponent: David Tompos, NTA

Revise as follows:

604.1 Temporary supports and shoring. Where required by the AHJ, the designer shall provide during manufacture, transportation, on-site storage and erection the details required to retain the same vertical support arrangement throughout and preserve the integrity of the structure.

Reason: This is going to require additional drawings and temporary support details not being provided now. What problems exist to require this information?

Committee Action: Approved as modified

Committee Reason: Requirements vary by location.

IS-OSMC 06-05-20
ICC 1200 Section 605.2

Proponent: David Tompos, NTA

Revise as follows:

605.2 Weather ~~and Mechanical~~ Protection. The manufacturer shall take precautions to protect stacked and stored modules from weather events ~~and mechanical damage~~.

Reason: Not covered here.

Committee Action: Approved as modified

Committee Reason: Mechanical damage protection beyond scope.

IS-OSMC 06-06-20
ICC 1200 Section 602.1

Proponent: Jon-Paul Cardin, American Iron and Steel Institute

Revise as follows:

602.1 Volumetric modular construction. Each modular building or module shall be identified where individually or in combination form structural components. Attention to the connections and erection of the unit or sections that form the structure as well as the ~~Main Windforce~~ Lateral Force Resistance System shall be identified in addition to the connections to the foundation.

Reason: Recommend this change to account for both wind and seismic lateral force resisting systems as applicable.

Committee Action: Approved

IS-OSMC 06-07-20
ICC 1200 Section 601.1

Proponent: Randy Shackelford, Simpson Strong-Tie Co., Inc.

Revise as follows:

601.1 General. Off-site construction and manufacturing of modules, panelized systems or modular components shall be in accordance with the approved plans and provisions of the applicable codes and standards adopted by the authority having jurisdiction. The requirements in this section shall be in addition to the requirements of the applicable codes and standards.

Reason: Would want to reinforce that construction has to be per the approved plans.

Committee Action: Approved

IS-OSMC 06-08-20
ICC 1200 Section 604.1

Proponent: Randy Shackelford, Simpson Strong-Tie Co., Inc.

Revise as follows:

604.1 Temporary supports and shoring. The designer shall provide the details ~~where~~ required to retain the same vertical support arrangement throughout and preserve the integrity of the structure during manufacture, transportation, on-site storage and erection. ~~the details required to retain the same vertical support arrangement throughout and preserve the integrity of the structure.~~

Reason: The designer provides the details. It seems to read better when re-arranged.

Committee Action: Approved as modified

Committee Reason: staff editorial for code language

IS-OSMC 06-09-20 ICC 1205 Section 601.2, item 3

Proponent: Randy Shackelford, Simpson Strong-Tie Co., Inc.

Revise as follows:

3. ~~Unless required by state or local builder licensing laws~~ A person who purchases a modular building or modular component for private use and who assumes responsibility for all or part of the construction relating to the installation or alteration of the modular building shall personally file for a permit and shall not be required to register as an industrialized installer modular builder, unless required by state or local builder licensing laws.

Reason: As written, this may conflict with state or local builder licensing laws.

Committee Action: Approved as modified

Committee Reason: Not technical and unnecessary

IS-OSMC 06-10-20
ICC 1205 Section 601.7

Proponent: Randy Shackelford, Simpson Strong-Tie Co., Inc.

Revise as follows:

~~**601.7 Limitation of manufacturer's liability.** The manufacturer of a registered modular building shall not be required to remedy violations caused by on-site work by others not under the manufacturer's control or violations involving components and materials furnished by others and not included with the registered modular building.~~

Reason: This seems like something that should be governed by the contract between the builder and the owner, not something enforceable by the AHJ.

Committee Action: Approved

IS-OSMC 06-11-20 ICC 1205 Section 601.8

Proponent: Randy Shackelford, Simpson Strong-Tie Co., Inc.

Revise as follows:

~~601.8 Duties and responsibilities of building officials.~~ Duties and responsibilities of building officials in the installation or erection of a registered modular building shall be responsible to conduct the following:

- ~~1. Verify through inspection that the registered modular building displays the required certification label and the label of the third-party inspection agency.~~
- ~~2. Verify through inspection that the registered modular building has not been damaged in transit to a degree that would render it unsafe. If the building has been damaged, the building official is authorized to ~~have remedied~~ require tests for tightness of plumbing systems and gas piping and an operational test to ensure that all luminaries and receptacles are operable. If the building has been structurally damaged, the building official is authorized to require evaluation by a registered design professional or tests for structural strength.~~
- ~~3. Verify that any modules are installed on the site in accordance with the approved plans.~~

Renumber remainder of items....

Work Group Report:

102.3 Specific Requirements of Authorities Having Jurisdiction Over Off-site Construction.

~~102.3.1~~ The project shall comply with the requirements of the AHJ ~~over off-site construction.~~

~~102.3.2 State-wide Modular Programs~~ When there is an existing state-wide Modular (or Industrialized) Buildings Program, the project shall comply with both state and local jurisdiction's requirements on for plan approval and inspections of off-site components in manufacturing plant and at project site.

~~102.3.3 No State-wide Modular Programs~~ Where there is no existing state-wide Modular (or Industrialized) Buildings Program, the local authority having jurisdiction shall be consulted regarding ~~determine~~ requirements of for plan approval and inspections of off-site components in manufacturing plant and at project site.

~~601.8~~ **102.3.2 Duties and responsibilities of building officials.** Duties and responsibilities of building officials in the installation or erection of a ~~registered~~ modular building ~~or building component~~ shall be responsible to conduct the following:

2021 ICC 1200, 1205 – Committee Action Report

1. Verify through inspection that the ~~registered~~ modular building **or component** displays the required certification label and the label of the third-party inspection agency or comply with the labeling requirements of the AHJ.
- ~~2.~~ Verify through inspection that the ~~registered~~ modular building **or component** has not been damaged in transit to a degree that would render it unsafe. If the building **or component** has been damaged, the building official is authorized to require ~~tests for tightness of plumbing systems and gas piping and an operational test to ensure that all luminaries and receptacles are operable.~~ remedies deemed necessary. If **the** modular building **or component** has been structurally damaged, the building official is authorized to require evaluation by a registered design professional or test on structural elements for strength.
3. Verify that all off site components are installed on site in accordance with the approved plans.
4. Prevent the use or occupancy of a ~~registered~~ modular building that in the opinion of the building official contains a serious defect or imminent safety hazard and notify the AHJ immediately.

Notify the state program administrator, if applicable, of any ~~apparent~~ violations of this standard ~~to include defects and noncompliance.~~

Reason: In #2, the list of tests is inadequate. Structural tests or evaluation should also be required if there is structural damage.

I propose a new #3. It seems one of the most important duties of the AHJ is to ensure that the modules are installed on the site correctly.

Finally, in #1, are the certification label and the third-party inspection label two different things? And isn't there also a required manufacturer's label?

Committee Action: Approved as modified

Committee Reason: Was better addressed in Chap 1.

IS-OSMC 06-12-20 ICC 1205 Section 601.6

Proponent: Randy Shackelford, Simpson Strong-Tie Co., Inc.

Revise as follows:

~~601.6 Notice of violation. Wherever the administrator AHJ shall finds any violation of this standard, the administrator shall order the owner or designee of the owner to bring the building into compliance with the a notice of violation.~~

Reason: It was unclear to me who the “administrator” is. There is a quality assurance administrator. There is also a State program administrator. But this section seems to exclusively be discussing the AHJ, so I propose using that here.

Committee Action: Approved as modified.

Committee Reason: AHJ has this authority via code.

IS-OSMC 06-13-20

ICC 1200 Section 602.1

Proponent: Noah Klammer, National Renewable Energy Laboratory

Revise as follows:

602.1 Volumetric modular construction. Each modular building or module shall be identified where individually or in combination form structural components. Attention to the connections and erection of the unit or sections that form the structure as well as the Main Windforce Resistance System shall be identified in addition to the connections to the foundation. The adaptation of drying or setting construction processes for volumetric factory construction shall be given special consideration in regard to differences in the indoor air environment and the outdoor air environment.

Reason: It is suggested that Standard 1200 ask OSMC builders to take appropriate consideration of the limitations of an enclosed construction environment versus one that is exposed to ambient. This could include the setting of adhesives, caulks, mastic, gels, foams, grout, plasters, and cements. This could include off-gassing of those mentioned construction materials and the potential risk to occupational health. Certain construction materials that set using a hydrate reaction (e.g., cement, drywall putty) may be slow to set without sufficient air exchange. Likewise temporary construction materials (concrete formwork) made from absorbent materials like wood may retain moisture longer than in ambient air.

WITHDRAWN BY PROPONENT

IS-OSMC 06-14-20 ICC 1205 Section 601.1

Proponent: Noah Klammer, National Renewable Energy Laboratory

Revise as follows:

601.1 Registration of manufacturers and modular builders. Manufacturers and modular builders shall not engage in ~~any~~ business activity relating to the construction ~~or location~~ of modular buildings without being approved by the Authority Having Jurisdiction. ~~A manufacturer shall not construct for the state or locality until the manufacturing plant has been approved in accordance with this standard, or by allowance of the AHJ.~~

Reason: “A manufacturer shall not construct for the state or locality until the manufacturing plant has been approved in accordance with this standard.” This presents a considerable economic barrier to market competition to firms that want to enter new real estate markets in other AHJs. Consider allowing the AHJ authority a probation period while the plant is still under the approval process.

Committee Action: Approved as modified

Committee Reason: vague term and location too restrictive.

IS-OSMC 06-15-20

ICC 1205 Section 601.8, item 2

Proponent: Noah Klammer, National Renewable Energy Laboratory

Revise as follows:

601.8 Duties and responsibilities of building officials. Duties and responsibilities of building officials in the installation or erection of a registered modular building shall be responsible to conduct the following:

2. Verify through inspection that the registered modular building has not been damaged in transit to a degree that would render it unsafe. If the building has been damaged, the building official is authorized to require tests for tightness of plumbing systems and gas piping and an operational test to ensure that all luminaries and receptacles are operable. If the building has been damaged in transit, the official is authorized to subject the building to a new review of building code compliance.

Reason: This section is important as lien or bailment holders (e.g., transport insurers) would like to know the legal/financial exposure to damage sustained during transport/port inspection. If remediation or cost of replacement are left undefined, insurers will underwrite conservatively.

Language does not include other critical aspects of building performance such as life safety systems, ventilation, and energy performance, etc. Consider expanding scope of inspection of damage.

WITHDRAWN BY PROPONENT

IS-OSMC 06-16-20

ICC 1205 Section 601.2, item 6.7

Proponent: Noah Klammer, National Renewable Energy Laboratory

Revise as follows:

601.2 Requirements for modular builders. Requirements for modular builders are as follows:

6. An approved manufacturer or modular builder shall notify the department in writing not more than 10 days if:

~~6.7 A modular builder transfers or sells a module or modular component to another modular builder or manufacturer takes possession of units previously reported as shipped to a modular builder.~~

Reason: This requirement may pose unintended compliance difficulties. It is suggested that a universally unique identifier (UUID) program be implemented for modules similar to the VIN system in US automotive industry. In this way, the regulatory tracking of modules can be accomplished with less record-keeping and record-processing. See my suggestions for section 103.2 in draft Standard 1200.

Committee Action: Approved

IS-OSMC 06-17-20
ICC 1200 Section 605

Proponent: Michael Gardner, M Gardner Services, LLC representing Wall and Ceiling Alliance

Revise as follows:

SECTION 605
OFF-SITE STORAGE OF MODULES

Reason: Section appears to be specific to modular units. Need to make that clearer.

Staff note:

Committee Action: Disapproved

Committee Reason: disagree

IS-OSMC 06-18-20

ICC 1200 Section 601.1

Proponent: Michael Gardner, M Gardner Services, LLC representing Wall and Ceiling Alliance

Revise as follows:

~~601.1 Registration of manufacturers and modular builders. Manufacturers and modular builders shall not engage in any business activity relating to the construction or location of modular buildings without being approved by the Authority Having Jurisdiction. A manufacturer shall not construct for the state or locality until the manufacturing plant has been approved in accordance with this standard.~~

Reason: The use of the term “manufacturer” in the first sentence would require any entity, small or large, looking to start a modular, panelizing, or tiny house business to have the business approved by an AHJ before beginning the manufacturing process. To date, that has not been a requirement for penalization contractors. So why create it?

In addition, why burden AHJs with the responsibility of enforcing what is essentially a business chartering issue? They don’t do it now to my knowledge.

The language is too restrictive and I doubt a similar requirement exists for a new traditional construction entity – why should it exist here? We’re trying to help off-site construction grow, we’re not trying to constrain it.

WITHDRAWN BY PROPONENT

Chapter 7 TRANSPORTATION AND STORAGE

IS-OSMC 07-01-20 ICC 1200 Section 704.1

Proponent: David Tompos, NTA

Revise as follows:

~~**704.1 Structural Support During Transportation.** The method of transport that is utilized shall be structurally adequate to limit deformation of modules, panelized systems or modular components to not exceed allowable limits.~~

Reason: What are the allowable limits for deformation in transportation?

Committee Action: Approved

IS-OSMC 07-02-20
ICC 1200 Section 704.2

Proponent: David Tompos, NTA

Revise as follows:

~~**704.2 Allowable Deformation Limits.** Allowable deformation during transportation shall not exceed the vertical and lateral deflection limits indicated in the applicable structural requirements for the element.~~

Reason: What element?? You have door, windows, open side walls/marriage walls. I do not believe this section is achievable.

Committee Action: Approved

IS-OSMC 07-03-20

ICC 1200 Section 704.1 704.3

Proponent: Randy Shackelford, Simpson Strong-Tie Co., Inc.

Revise as follows:

~~704.1 Structural Support During Transportation. The method of transport that is utilized shall not cause structural be structurally adequate to limit deformation of modules, panelized systems or modular components to not that exceeds allowable limits.~~

~~704.3. Securement. Modules, panelized systems or modular components shall be secured during transportation.~~ Secured from what? Theft? Movement? Falling off trailers? Please clarify

Reason: The “method of transport” is not “structurally adequate”. The method of transport causes the deformation. I think this reorganizations clarifies.

Securement needs to be better defined as to what is being secured and why.

Committee Action: Approved as modified

Committee Reason: Both sections deemed unneeded.

IS-OSMC 07-04-20
ICC 1200 Section 706

Proponent: Michael Gardner, M Gardner Services, LLC representing Wall and Ceiling Alliance

Revise as follows:

SECTION 706
ON-SITE STORAGE OF MODULES

Reason: Section content is specific to modules. Should be clarified.

Committee Action: Approved

Chapter 8 ON-SITE INSTALLATION

IS-OSMC 08-01-20

ICC 1200 Section 804.1, item 6

Proponent: Jon-Paul Cardin, American Iron and Steel Institute

Revise as follows:

~~Maximum pier loading, spacings, and any additional information necessary for the proper support of the modular building.~~

~~6. Maximum foundation support pier loading, spacings, and any additional information necessary for the proper support of the modular building.~~

~~7. —Anchorage, including the location and required capacity of anchorage devices; and skirting.~~

Reason: Recommend striking number 6. I believe the “foundation support and anchorage details” in number 5 would adequately address the “information necessary for the proper support of the modular building”.

Committee Action: Approved as modified

Committee Reason: Clearer language in item 6 diminishes the need for item 7.

IS-OSMC 08-02-20

ICC 1200 Section 802.2

Proponent: Randy Shackelford, Simpson Strong-Tie Co., Inc.

Revise as follows:

802.2 Loads. The foundation shall be designed to ~~shall~~ support the modular building, and all live and dead loads, and all construction loads.

Reason: The foundation design does not support the building, the foundation does. Also this document is not just about modular buildings, the foundation needs to support the entire building, as well as any construction loads.

Committee Action: Approved

IS-OSMC 08-03-20

ICC 1200 Section 804.1, items 5 & 7

Proponent: Randy Shackelford, Simpson Strong-Tie Co., Inc.

Revise as follows:

5. Foundation ~~support loads~~ , and anchorage details, and required capacity of anchorage devices.
7. ~~Anchorage, including the Location and required capacity of anchorage devices; and skirting.~~

Reason: Can #5 and #7 be combined? Maybe move the anchorage part of #7 to #5 and leave the skirting issue in #7. They both address anchorage so it would seem to be clearer if they were combined.

Committee Action: Approved as modified

Committee Reason: Loads are more relevant.

IS-OSMC 08-04-20
ICC 1200 Section 805

Proponent: Randy Shackelford, Simpson Strong-Tie Co., Inc.

Revise as follows:

~~SECTION 805~~
~~MODULE CLOSE-UP~~

Reason: Delete this section if there is no text to be included here. Or add applicable text.

Committee Action: Approved

IS-OSMC 08-05-20
ICC 1200 Section 804.1, item 3

Proponent: Noah Klammer, National Renewable Energy Laboratory

Revise as follows:

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

3. Connecting ducting, piping and wiring, and maintaining the integrity of sealing and insulation.

Reason: The proposed addition in section 804.1 item 3 acknowledges that duct and pipe systems are designed with barriers to mass and heat transfer (sealing and insulation, respectively) and brings 804.1, item 3 into alignment with language used before and after.

Committee Action: Approved

IS-OSMC 08-06-20

ICC 1200 Section 801

Proponent: Michael Gardner, M Gardner Services, LLC representing Wall and Ceiling Alliance

Revise as follows:

SECTION 801 GENERAL

801.1 General. The manufacturer shall provide, ~~with each set of modules that are to be installed in the same manner,~~ instructions that include installation procedures and layout information.

SECTION 802 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 design shall support the ~~modular~~ building and all live and dead loads. The foundation shall be designed to consider all geotechnical limits places on the building and foundation at the site.

SECTION ~~803~~ 403.1.5 INSTALLATION TOLERANCES

803.1 Installation Tolerances. The registered design professional shall detail in the construction documents the required construction tolerances for fitting each module to each module and to the foundation. Terms shall be as defined in ISO 6707-1:2020.

SECTION ~~804~~ 803 MODULE CONNECTIONS

(Remainder unchanged.)

Reason: Sections 801 and 802 appear to be written specific to modular units but are really general information.

Section 803 is specific to modular units and probably should be in section 403 as special information. Section 804 has a modular title but contains information for panels and other unit types.

Changes are suggested to clarify on all points.

Committee Action: Approved as modifye.

Committee Reason: Numbering sequence. Previous Sec 802 committee action.