Code Technology Committee
Relocatable Modular Buildings
2012 & 2013 Cycle Changes to review for
2015 & 2016 Cycle consideration

This list is a compilation of 2012/2013 Cycle code changes related to the above CTC Area of Study for which the final action was not consistent with CTC direction. These are compiled as a first step in the 2015 & 2016 Cycle for possible future code change submittals. It should be noted that there may be other code changes approved in the 2012/2013 Cycle which render the subject matter consistent with CTC direction. This will require further analysis to make such an assessment.

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G198-12
202, 107.2.6 (New), 3101.1, 3112 (New)

Proposed Change as Submitted

Proponent: Carl F. Baldassarra, P.E., FSFPE, Chair, ICC Code Technology Committee (CTC)

Revise as follows:

3101.1 Scope. The provisions of this chapter shall govern special building construction including membrane structures, temporary structures, pedestrian walkways and tunnels, automatic vehicular gates, awnings and canopies, marquees, signs, and towers, and antennas, and relocatable buildings.

SECTION 3112
RELOCATABLE BUILDINGS

3112.1 General. The provisions of this section shall apply to relocatable buildings. Relocatable buildings manufactured after the effective date of this code shall comply with the applicable provisions of this code.

3112.1.1 Compliance. A relocatable building transported to a new location, or a relocatable building that is undergoing alteration or additions shall comply with Section 3410.

3112.2 Supplemental information. Supplemental information specific to a relocatable building shall be submitted to the authority having jurisdiction, and shall, as a minimum, include all of the following:

1. Application for approval or permit
2. Manufacturer’s name, address, contact information
3. Date of manufacture
4. Serial number of module
5. Manufacturer’s design drawings
6. Type of construction in accordance with Section 602.
7. Occupancy type in accordance with Section 302.
8. Design loads including: roof live load, roof snow load, floor live load, wind load and seismic site
   class, use group and design category
9. Additional building planning and structural design data
10. Site plan indicating the location of the relocatable building
11. Site built structure or appurtenance attached to the relocatable building

3112.3 Manufacturer’s Data Plate. The manufacturer’s data plate shall be the basis for determining code
compliance. Each relocatable module shall have a data plate that is posted in the location as noted on the
drawings, and shall include the following information:

1. Manufacturer’s name and address
2. Serial number
3. Date of manufacture
4. The quality assurance agency or approved inspection agency
5. Codes, and standards of construction
6. Design live roof load, design live floor load, snow load, wind and seismic design
7. Envelope thermal resistance values
8. Electrical service size
9. Fuel burning equipment and size
10. Special limitations if any

3112.4 Inspections. Inspections of a relocatable building shall be performed in accordance with Section
110.4 of this code during off-site construction, and the applicable sections of Section 110.3 during
installation at the site.

Add new definition as follows:

SECTION 202
DEFINITIONS

RELOCATABLE BUILDING. A partially or completely assembled building constructed and designed to
be reused multiple times and transported to different building sites.

Add new text as follows:

107.2.6 Relocatable buildings. Construction documents for relocatable buildings shall comply with this
section and Section 3112.

Reason: The ICC Board established the ICC Code Technology Committee (CTC) as the venue to discuss contemporary code
issues in a committee setting which provides the necessary time and flexibility to allow for full participation and input by any
interested party. The code issues are assigned to the CTC by the ICC Board as “areas of study”. Information on the CTC,
including: meeting agendas; minutes; reports; resource documents; presentations; and all other materials developed in conjunction
with the CTC effort can be downloaded from the following website: http://www.iccsafe.org/cs/cc/ctc/index.html. Since its inception
in April, 2005, the CTC has held twenty-two meetings – all open to the public.

Unlike site-built buildings, which are typically intended to remain on their original site for the life of the building, relocatable
modular buildings are designed and intended for relocation, reuse and/or repurposing. Many states have statutes that govern the
building and relocating of relocatable modular buildings. For those that do not have state mandated requirements, much confusion
and inconsistency exists about the requirements for relocatable modular buildings as existing buildings.

The Modular Building Institute (MBI) (www.modular.org) estimates that there are over 600,000 code compliant relocatable
buildings in use in North America today. While it is impossible to determine the exact amount owned by the public at large, MBI
estimates that public school districts across North America collectively own and operate about 180,000 relocatable classrooms with
the industry owning and leasing an additional 120,000. Additionally, the industry owns and leases approximately 280,000
relocatable buildings for various other business occupancies, including construction site offices and temporary sales offices.

The Code Technology Committee Study Group on Relocatable Modular Buildings identified a number of unique characteristics
of relocatable modular buildings that are unlike site-built buildings. Their findings are as follows:

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There are sections of the IBC that are applicable equally to both site-built and relocatable modular buildings, particularly for new construction.

There are sections of the conflicting code sections that cannot be applied to both site-built and relocatable modular buildings, specifically related to construction documents, inspection, and relocation.

The IBC does not have specific requirements on how to treat these buildings. In the absence of clear definitions and requirements that are specific to both new and existing relocatable modular buildings, many code officials attempt to apply similar, but non-related sections of the building code intended for site built buildings to the relocatable modular industry. There are unique attributes to relocatable modular buildings that warrant their own requirements in a new chapter in this code.

CTC has submitted two proposals on the subject of relocatable modular buildings. One proposal for new construction (this proposal) and a second proposal to address the relocation of modular buildings (proposal to Chapter 34). This proposal includes:

- The definition has been distilled from industry publications and definitions found in state statutes that govern modular (industrialized) buildings. This definition was also approved in the 2012 IGCC.
- Identification and inclusion of relocatables into Special Construction, Chapter 31. This chapter applies to new relocatable buildings, and also new site built structures.

Moving this document forward through the ICC code development process will help the modular building industry comply with the intent of the code, provide a clear and consistent path for enforcement professionals, and for compliance by owners of relocatable buildings who wish to re-use or repurpose their existing buildings.

**Cost impact:** This code change proposal will not increase the cost of construction due to the re-usable/relocatable nature of such buildings.

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**Public Hearing Results**

**Committee Action:** Disapproved

**Committee Reason:** The concept was acceptable but the proposal was disapproved with concern for the varied use of such buildings without a particular occupancy classification being associated with the buildings. Also, it was felt that the proposal needed to better address change of occupancy. Currently only alterations and additions were addressed. Additionally, there was a suggestion that perhaps this should be located within appendix or a guidance document.

**Assembly Action:** None

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**Individual Consideration Agenda**

This item is on the agenda for individual consideration because a public comment was submitted.

**Public Comment:**

Carl Baldassarra, P.E., FSFPE, Chair, ICC Code Technology Committee requests Approval as Modified by this public comment

Modify the proposal as follows:

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**SECTION 3112**

**RELOCATABLE BUILDINGS**

**3112.1 General.** The provisions of this section shall apply to relocatable buildings. Relocatable buildings manufactured after the effective date of this code shall comply with the applicable provisions of this code.

**3112.1.1 Compliance.** A relocatable building transported to a new location, or a relocatable building that is undergoing alteration, or additions, or change in occupancy group shall comply with Section 3410.

**3112.2 Supplemental information.** Supplemental information specific to a relocatable building shall be submitted to the authority having jurisdiction, and shall, as a minimum, include all of the following:

1. Application for approval or permit
2. Occupancy type in accordance with Section 302.

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Commenter's Reason: Unlike traditional site-built buildings that are rarely, if ever, moved to another location, relocatable modular buildings are designed and intended to be relocated numerous times.

During the public hearing, there was general support for the new language in G198 that specifically addresses the unique conditions related to the permitting, installation, and inspection of new relocatable buildings. It was recognized that supplemental information is necessary to complete the permitting, approval and inspection process for new relocatable modular buildings.

Proposal G203-12 addresses the requirements to approve and re-inspect existing relocatable modular buildings when they are subsequently transported from one site to another site.

This public comment addresses the concern expressed by the committee about identifying the occupancy group of the new modular building when it is delivered from the factory. The occupancy group must be designated in the supplemental information submitted to the building department, and also must be found on the manufacturers data plate which is physically attached to each module.

The lists in 3112.2 and 3112.3 were modified to incorporate the occupancy group, and to be consistent with each other.

The ICC Board established the ICC Code Technology Committee (CTC) as the venue to discuss contemporary code issues in a committee setting which provides the necessary time and flexibility to allow for full participation and input by any interested party. The code issues are assigned to the CTC by the ICC Board as “Areas of Study”. The Area of Study for this code change and public comment is called “Relocatable Modular Buildings”. Information on the CTC, including: meeting agendas; minutes; reports; resource documents; presentations; and all other materials developed in conjunction with the CTC effort can be downloaded from the following website: http://www.iccsafe.org/cs/CTC/Pages/RelocatableModularBuildings.aspx. Since its inception in April, 2005, the CTC has held twenty-four meetings – all open to the public. In addition to holding face-to-face meetings, the CTC established Study Groups where any interested party can participate in conference calls on specific subjects such as this area of study without having to attend the face-to-face meetings.

G198-12
Final Action: AS AM AMPC D

G203-12
202, 3401.1, 3410.1, 3410.2 (New); [IEBC (B0 401.1, 409.1, 409.2 (New)]

Proposed Change as Submitted

Proponent: Carl F. Baldassarra, P.E., FSFPE, Chair, ICC Code Technology Committee (CTC)

Revise as follows:

RELOCATABLE BUILDING. A partially or completely assembled building constructed and designed to be reused multiple times and transported to different building sites.

CTC Relocatable modular bldgs.
3401.1 (IEBC [B] 401.1) Scope. The provisions of this chapter shall control the alteration, repair, addition and change of occupancy, and the relocation of existing buildings and structures.

Exception: Existing bleachers, grandstands and folding and telescopic seating shall comply with ICC 300.

3410.1 (IEBC [B] 409.1) Conformance. Structures moved into or within the jurisdiction shall comply with the provisions of this code for new structures.

Exception: Existing relocatable buildings moved into or within the jurisdiction shall be permitted to comply with the provisions of Chapter 13 of the International Existing Building Code.

3410.2 (IEBC [B] 409.2) Additions and Alterations. Additions and alterations made to relocatable buildings shall comply with the applicable provisions of Section 3403 and 3404 or the International Existing Building Code.

Reason: Unlike site-built buildings, which are typically intended to remain on their original site for the life of the building, relocatable modular buildings are designed and intended for relocation, reuse and/or repurposing. Many states have statutes that govern the building and relocating of relocatable modular buildings. For those that do not have state mandated requirements, much confusion and inconsistency exists about the requirements for relocatable modular buildings as existing buildings.

The Modular Building Institute (MBI) (www.modular.org) estimates that there are over 600,000 code compliant relocatable buildings in use in North America today. While it is impossible to determine the exact amount owned by the public at large, MBI estimates that public school districts across North America collectively own and operate about 180,000 relocatable classrooms with the industry owning and leasing an additional 120,000. Additionally, the industry owns and leases approximately 280,000 relocatable buildings for various other business occupancies, including construction site offices and temporary sales offices.

The Code Technology Committee Study Group on Relocatable Modular Buildings identified a number of unique characteristics of relocatable modular buildings that are unlike site-built buildings and compared them to the IBC and the IEBC. Their findings are as follows:

- There are provisions of the IBC that are not applicable/appropriate to relocatable modular buildings. Specifically, there is an unintended conflict between the IBC Section 3410, and the intent of the IEBC that cannot be realistically applied to relocatable modular buildings.
- There are sections of the conflicting code sections that cannot be applied to both site-built and relocatable modular buildings, specifically related to construction documents, inspection, and relocation.

Both the IBC and the IEBC are unclear on how to treat these buildings, particularly when they are relocated to a new site. In the absence of clear definitions and requirements that are specific to both new and existing relocatable modular buildings, many code officials attempt to apply similar, but non-related sections of the building code intended for site built buildings to the relocatable modular industry. There are unique attributes to relocatable modular buildings that warrant their own requirements in a new chapter in this code.

CTC has submitted two proposals on the subject of relocatable modular buildings. One proposal to Section 3112 for new construction and this proposal for existing buildings which are relocated. This proposal includes:

- The definition has been distilled from industry publications and definitions found in state statutes that govern modular (industrialized) buildings. This definition was also approved in the 2012 IGCC.
- An exception to IBC 3410 for relocatable buildings (currently treats all moved buildings as “new” buildings) with a pointer to Chapter 13 of IEBC. Moved relocatable modular buildings are to be treated as existing buildings.
- Relocatables undergoing additions or alterations shall comply with the appropriate section of the IEBC, which also applies to site built buildings. This section clarifies that there is no difference between the requirements for modular buildings and site built buildings when either undergoes construction for alteration or addition.

Moving this document forward through the ICC code development process will help the modular building industry comply with the intent of the code, provide a clear and consistent path for enforcement professionals, and for compliance by owners of relocatable buildings who wish to re-use or repurpose their existing buildings.

The ICC Board established the ICC Code Technology Committee (CTC) as the venue to discuss contemporary code issues in a committee setting which provides the necessary time and flexibility to allow for full participation and input by any interested party. The code issues are assigned to the CTC by the ICC Board as “areas of study”. Information on the CTC, including: meeting agendas; minutes; reports; resource documents; presentations; and all other materials developed in conjunction with the CTC effort can be downloaded from the following website: http://www.iccsafe.org/cs/cc/ctc/index.html. Since its inception in April, 2005, the CTC has held twenty-two meetings – all open to the public.

Cost Impact: This code change proposal will not increase the cost of construction.

Public Hearing Results

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Committee Action: Disapproved

Committee Reason: The main concern was related to how change of occupancy would be addressed from one site to the next. Similar to G198-12 it was suggested that perhaps these issues are addressed in an appendix since states deal with these buildings in varied ways. There was concern generally that these provisions are necessary but are not quite ready to be enforced.

Assembly Action: None

**Individual Consideration Agenda**

This item is on the agenda for individual consideration because a public comment was submitted.

**Public Comment:**

Carl Baldassarra, P.E., FSFPE, Chair, ICC Code Technology Committee, requests Approval as Modified by this public comment

Modify the proposal as follows:

3410.2 (IEBC [B] 409.2) Additions, and Alterations, or Change of Occupancy. Additions, and alterations, or change of occupancy classification from one group to a different group made to relocatable buildings shall comply with the applicable provisions of Section 3403 and 3404 or the International Existing Building Code.

(Provisions of proposal not shown remain unchanged)

Commenter’s Reason: Unlike traditional site-built buildings that are rarely, if ever, moved to another location, relocatable modular buildings are designed and intended to be relocated numerous times.

During the public hearing, there was general support for the new language in G198 that specifically addresses the unique conditions related to the permitting, installation, and inspection of new relocatable buildings. It was recognized that supplemental information is necessary to complete the permitting, approval and inspection process when existing relocatable modular buildings are subsequently transported from one site to another site.

Proposal G203-12 provides a pointer to the International Existing Building Code which will contain the requirements to approve and re-inspect relocatable buildings when they are transported to future sites. During the Group B code change cycle, additional information will be proposed to the International Existing Building Code that will specifically address the relocation of modular buildings from one site to another site.

This public comment addresses the concern expressed by the committee about identifying the occupancy group of an existing relocatable modular building when it is moved to another location and used for different purpose, or when it stays in the same jurisdiction, but is used for a different purpose.

If the occupancy group changes when the building is reused for a different purpose other than those uses within the designated occupancy group, then the new occupancy group must be designated in the supplemental information and submitted to the building department. The new occupancy group must also be indicated on the manufacturers’ data plate which is physically attached to each module.

The ICC Board established the ICC Code Technology Committee (CTC) as the venue to discuss contemporary code issues in a committee setting which provides the necessary time and flexibility to allow for full participation and input by any interested party. The code issues are assigned to the CTC by the ICC Board as “Areas of Study”. The Area of Study for this code change and public comment is called “Relocatable Modular Buildings”. Information on the CTC, including: meeting agendas; minutes; reports; resource documents; presentations; and all other materials developed in conjunction with the CTC effort can be downloaded from the following website: http://www.iccsafe.org/cs/CTC/Pages/RelocatableModularBuildings.aspx. Since its inception in April, 2005, the CTC has held twenty-four meetings – all open to the public. In addition to holding face-to-face meetings, the CTC established Study Groups where any interested party can participate in conference calls on specific subjects such as this area of study without having to attend the face-to-face meetings.

G203-12
Final Action: AS AM AMPC D

G204 – 12
3401.1

Proponent: David Bonowitz, David Bonowitz S.E., representing NCSEA Code Advisory Committee, Existing Buildings Subcommittee (dbonowitz@att.net)
Revise as follows:

3401.1 Scope. The provisions of this chapter shall control the alteration, repair, addition, moving, and change of occupancy of existing buildings and structures.

Exception: Existing bleachers, grandstands and folding and telescopic seating shall comply with ICC 300.

Reason: Chapter 34 includes Section 3410 for Moved Structures.

Cost Impact: The proposed changes will not increase the cost of construction.

G204-12
Public Hearing: Committee: AS AM D
Assembly: ASF AMF DF

G204-12
Committee Action: Approved as Submitted

Committee Reason: The proposal was approved as submitted since Chapter 34 regulates structures that have been moved.

Assembly Action: None