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DIVISION OF CODES AND STANDARDS**

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Information Bulletin 2012-01 (CM)

**TO: City and County Building Officials
Commercial Modular Dealers and Manufacturers
Third-party Agencies
Interested Parties
Division Staff**

**SUBJECT: Commercial Modular (CM) and Special Purpose Commercial Modular
Amended Design and Construction Standards FAQs**

The purpose of this Information Bulletin is to provide clarification to Information Bulletin 2011-06 (MH) issued on October 1, 2011, regarding modified regulations for the design and construction of commercial modular and special purpose commercial modular (CM/SPCM) units manufactured on or after March 31, 2012.

This bulletin provides, in FAQ format, answers to questions received by Department of Housing and Community Development (Department) staff and additional information to properly implement the changes affecting Department procedures, inspections, and alterations. It also addresses the issuance and use of a new CM insignia specifically designed to distinguish a CM unit constructed using the regulations effective March 31, 2012, from those units constructed prior.

Questions or comments regarding this announcement should be directed to Kevin Cimini, Manufactured and Factory-built Program Manager at (916) 445-3338, or by electronic mail to kcimini@hcd.ca.gov.

Kim Strange
Chief Deputy Director

Attachment

FREQUENTLY ASKED QUESTIONS
Information Bulletin 2012-01 (CM)
2012 COMMERCIAL MODULAR DESIGN, INSPECTION AND APPROVAL

I. GENERAL INFORMATION

- Q1. Will CM units designed and constructed to the 1991 UBC and on-line prior to the 3/31/2012 effective date be allowed to be labeled and delivered after the 3/31/2012 effective date of the new regulations?
- A1. No. Units on-line on or after 03/31/12 shall be designed and constructed to the CBC¹ standards and receive a new (red) insignia indicating compliance with the CBC prior to shipping. The current (black) insignia indicates compliance with the 1991 UBC.
- Q2. Using the same scenario as above; if the manufacturer has a supply of (black) insignia prior to 3/31/12 and the CM units cannot be inspected until after 3/31/12. Will those CM units be allowed to be constructed to the 1991 UBC and apply the black insignia?
- A2. No. Manufacturers may need to order both types of insignia and design for T24 as soon as possible. HCD will refund for any unused and unassigned insignia.
- Q3. If a CM unit is *remanufactured*² at a licensed CM manufacturing facility, the CM alterations are required to be in compliance with the new regulations, but the unaltered portions remain in compliance with the 1991 UBC; will the remanufactured unit obtain a 'black' insignia signifying compliance to the 1991 UBC?
- A3. Yes. In this scenario the black insignia indicating compliance with HSC 18028(b) would be issued. The new insignia indicates that the CM units were designed and constructed to comply with the CBC in its entirety.
- Q4. Can a CM unit that was not previously issued Department insignia that must undergo a "coding" inspection approval from the Department receive a "black" insignia indicating compliance with the 1991 UBC? Or will it receive the new insignia indicating compliance with the CBC?
- A4. CM units not previously designed and constructed to the CBC will receive a black insignia after passing inspection approval unless it can be verified by both structural certification and visual inspection that the unit complies with the new regulations adopting the CBC.
- Q5. How will the 3/31/12 effective date for plan submittals under the new codes affect HCD Plan Approvals that expire after the cut-off date?
- A5. All design and construction of CM units on or after the effective date shall be in accordance with the new regulations adopting the CBC.
- Q6. Are all existing plan approval numbers that have not expired still able to be used?
- A6. No.
- Q7. If we make a new project submittal before 3/31/12 for some stock units, can we then build these units later on during the year?

¹ CBC standards, or CBC, in this context, refers to the CA Code of Regulations, Title 25, Division 1, Chapter 3, Article 3 regulations for construction of commercial modulars, special purpose commercial modulars including the adoption of the CA Code of Regulations, Title 24, California Building Code (CBC)

² Title 25, Chapter 3, Subchapter 2, section 4000(pp) "Remanufacture. The alteration, conversion, replacement, addition, reconstruction, modification or removal by a mobilehome, multifamily manufactured home, commercial modular, or special purpose commercial modular manufacturer within the manufacturer's facility, of any equipment or installations comprising the structural, fire-life safety, electrical, heat-producing and plumbing systems of an existing structure."

- A7. The March 31, 2012, effective date is a hard date for conversion to the new regulations adopting the CBC. Everything on-line in the factory on and after this date shall comply with the CBC. Manufacturers, third-party agencies were given 180 days to amend its designs and prepare for implementation of the CBC.
- Q8. For a certified CM plant where each unit is only required to be inspected once, if a third party agency inspects a unit a couple of days ahead of 3/31/12, would the unit be inspected to the new or old regulations? Would the unit receive a "black" insignia indicating compliance to the 1991 UBC?
- A8. Answer to the first question is old regulations unless the CM unit cannot be finished prior to 3/31/2012. The answer to the second question is No. March 31, 2012, is the effective date, and everything on-line and everything approved on and after the effective date shall be designed and constructed in accordance with the new standards and receive the new insignia indicating compliance to the CBC. HCD provided latitude for compliance by providing 180 days to convert to the new CBC standards. Manufacturers are allowed to construct units in accordance with the new regulations *prior to the 3/31/2012 effective date*, and obtain new insignia signifying such approval.

II. ELECTRICAL

- Q9. Will the 2010 CEC Article 334, Section 334.10 (3) requiring NM cables to be protected by a 15 minute thermal barrier and NEC section 334.12(2) prohibiting NM cable exposed in dropped or suspended ceilings applicable to both CM and SPCM?
- A9. Yes. NEC Article 334 is applicable.

III. ENERGY / CALGREEN

- Q10. Was CalGreen adopted as part of the construction of CM units? Senate Bill 538 (Battin) authorizing commercial modular compliance with the CBC did not specifically instruct HCD to adopt T24, Part 11 (CalGreen).
- A10. Yes, the CalGreen³ requirements are applicable. There were no references to CalGreen codes in the legislative bill requiring HCD to adopt Title 24 CBC due to the fact that CalGreen was not an official part of the CBC. By the time HCD began the CM rulemaking, CalGreen was a mandatory requirement.
- Q11. Can you help to explain what the energy requirements will be for *Leased* Commercial Modular buildings?
- A11. The new regulations, Section 4369 (b), states as follows:

§ 4369. Energy Requirements

(a) Commercial modular units designed for installation on a foundation system shall comply with the applicable requirements of the Energy Efficiency Standards for Residential and Nonresidential Buildings of the California Code of Regulations, Title 24, Part 6, California Energy Code (CEC).

(b) Commercial modular units not designed for installation on a foundation system shall be designed to comply with the energy requirements for building envelopes in the California Code of Regulations, Title 24, Part 6, Subchapter 5, Section 141(d) (Performance Approach) or Section 143(a)(8) (Prescriptive Approach) for relocatable public school buildings.

(c) Except as required in Section 18029.4 of the California Health and Safety Code and Section 4350(c)(1) of this subarticle, the energy requirements found in this section shall not apply to special purpose commercial modular units.

- A11. Leased CM units would be covered under Subsection (b) (highlighted above) of 4369 which references 141(d) and 143(a)(8) of the CA Energy Code, 141 / 143. If the unit is not designed for installation on a

³ CalGreen means the regulations enacted pursuant to CA Code of Regulations, Title 24, Part 11.

foundation system, it shall be designed as indicated under 141(d) or 143(a)(8) which would ensure the building envelope complies with all of CA or for specific climate zones as specified by the manufacturer. NOTE: The new CM insignia will have a field for climate zone to be displayed by the manufacturer. CEC Section 143(a)(8) also requires metal identification labels installed on exterior of each CM section (as noted below). Energy forms for leased buildings (not designed or installed on a foundation system) will not be required for CMs – as this information will be contained in the existing structure package, and as indicated above, the climate zone(s) will be indicated on the insignia and the exterior metal labels.

141 (d) Relocatable public school buildings. When the manufacturer/builder certifies the relocatable public school building for use in any climate zone, the energy budget shall be met in the most severe climate zones as specified in the Nonresidential ACM Manual, assuming the prescriptive envelope criteria in Table 143-C. When the manufacturer/builder certifies that the relocatable building is manufactured for use in specific climate zones and that the relocatable building cannot be lawfully used in other climate zones, the energy budget shall be met in each climate zone that the manufacturer/building certifies, assuming the prescriptive envelope criteria in Table 143-A, including the non-north window RSHG and skylight SHGC requirements for each climate zone. The energy budget and the energy use of the proposed building shall be determined using the multiple orientation approach specified in the Nonresidential ACM Manual. The manufacturer/builder shall meet the requirements for identification labels specified in Section 143(a)8.

143(a)(8). Relocatable public school buildings. In complying with Sections 143(a)1 to 7, relocatable public school buildings shall comply either with Table 143-A, including the non-north window RSHG and skylight SHGC requirements, when the manufacturer/builder certifies that the relocatable building is manufactured only for use in a specific climate zone(s) and that the relocatable building cannot be lawfully used in other climate zones or with Table 143-C when the manufacturer/builder certifies that the relocatable building is manufactured for use in any climate zone. When the relocatable building complies with Table 143-C for use in more than one climate zone, the relocatable building shall meet the most stringent requirements for each building component in all of the climate zones for which the relocatable building is certified.

The manufacturer/builder shall place two metal identification labels on each relocatable building module, one mechanically fastened and visible from the exterior and the other mechanically fastened to the interior frame above the ceiling, at the end of the module. In addition to information required by the Division of the State Architect (DSA), the labels shall state either "Complies with Title 24, Part 6 for all Climate Zones" or "Complies with Title 24, Part 6 for Climate Zones" and then list all of the climate zones for which the manufacturer has manufactured the relocatable building to comply. The location of the identification labels shall be shown on the building plans.

Q12. What info will be required to be displayed on the insignia in the new "climate zone" box for unconditioned buildings?

A12. To enter climate zone information on the new "red" CM insignia; if a building is designed for all climate zones, zone "16" should be entered into the area provided for climate zone. Zone 16 is the most severe climate zone; and indicates that the building meets the requirements of all zones. Plus, the metal tags required by the Energy Code will provide further information. The two labels that are to be placed inside the CM, and on the outside per T24, Part 6, 143 (8) the requirements will be as follows:

(8) Relocatable public school buildings. In complying with Sections 143(a)1 to 7, relocatable public school buildings shall comply either with Table 143-A, including the non-north window RSHG and skylight SHGC requirements, when the manufacturer / builder certifies that the relocatable building is manufactured only for use in a specific climate zone(s) and that the relocatable building cannot be lawfully used in other climate zones or with Table 143-C when the manufacturer/builder certifies that the relocatable building is manufactured for use in any climate zone. When the relocatable building complies with Table 143-C for use in more than one climate zone, the relocatable building shall meet the most stringent requirements for each building component in all of the climate zones for which the relocatable building is certified.

The manufacturer/builder shall place two metal identification labels on each relocatable building module, one mechanically fastened and visible from the exterior and the other mechanically fastened to the interior frame above the ceiling, at the end of the module. In addition to information required by the Division of the State Architect (DSA), the labels shall state either "Complies with Title 24, Part 6 for all Climate Zones" or "Complies with Title 24, Part 6 for Climate Zones" and then list all of the climate zones for which the manufacturer has manufactured the relocatable building to comply. The location of the identification labels shall be shown on the building plans.

II. FIRE SPRINKLER (FS) SYSTEMS

- Q13. If FS systems are installed as an option and not required by code, are third-parties required to plan check and / or inspect such systems if installed?
- A13. Title 25, section 4006(a) states that *all* equipment and installations in the construction, fire safety... shall be subject to the approval of the department and the provisions of this chapter. Section 4852(c) states that a Design Approval Agency shall have the ability to enforce the provisions of CA law *and* regulations governing the manufacture of...commercial modulars. Therefore, DAAs in receipt of plans submitted for approval on behalf of HCD shall review all aspects of the submittal from the engineer of record / manufacture's engineer or architect, and the QAA's are required to inspect all portions of the CM unit visible at the time of the monitoring inspection.
- Q14. If, during an inspection, the third party finds a FS system installed or partially installed, and the approved plans for the FS system have not been reviewed for approval, what is the proper course of action by the third-party inspection agency? Does the third-party place the unit on hold and require a reinspection and require the FS plans to be submitted and approved?
- A14. Generally, any system discovered during inspection that is has not been previously reviewed and approved by an HCD- Design Approval Agency in the approved plans should be noted by the inspector / QAA and the manufacture ordered to 'hold" as-is until the plans are amended, or placed on hold until the unit is restored as shown on the current plans by the manufacturer.

III. CM ALTERATIONS

- Q15. When a CM unit is altered, will the CBC be applied only to the altered portion? Or will the entire CM unit have to be brought up to the new code? And, how does that work for the Energy requirements?
- A15. Yes, for alterations to the CM unit the provisions of the CBC will be applied to the alteration(s) only. Any alterations to the water-heating system, space-conditioning system, lighting system or envelope, shall be in accordance with the CA Energy code as addressed in CBC Part 6, section 149.
- Q16. What level of alterations will trigger the use of the CBC on the entire building?
- A16. At the time this Information Bulletin was written, Department staff was seeking a reasonable answer to this question, but any such outcome will require additional rulemaking.

IV. METAL ROOFS

- Q17. Is a noncombustible deck now required under a metal roof as indicated in CBC Chapter 15?
- A17. Metal roofs will require a noncombustible roof deck in accordance with the CBC, Chapter 15.

V. INSTALLATION INSTRUCTIONS

- Q18. Rather than have a 2-3 page document permanently affixed in an accessible location physically in the building, what if the Insignia included a web address and the unit serial number could be used to pull up the install instructions along with all the information available on the data plate, the maintenance manual, or some other method?

- A18. No. Installation instructions have been required for all CM units since HCD first had authority to regulate construction of commercial modular units. The new regulations pertaining to posting of installation instructions were added in order to facilitate ease of installation with the secondary CM market and local jurisdictions.