

## S242-12

### 2207.4

**Proponent:** George R. Stevenson, Jr., S.E., Structural Concepts, Inc., representing Structural Engineers Association of Arizona (gstevenson@scice.com)

#### Revise as follows:

**2207.4 Steel joist drawings.** Steel joist placement plans shall be provided to show the steel joist products as specified on the *construction documents* and are to be utilized for field installation in accordance with specific project requirements as stated in Section 2207.2. Steel placement plans shall include, at a minimum, the following:

1. Listing of all applicable loads as stated in Section 2207.2 and used in the design of the steel joists and joist girders as specified in the *construction documents*.
2. Profiles for nonstandard joist and joist girder configurations (standard joist and joist girder configurations are as indicated in the SJI catalog).
3. Connection requirements for:
  - 3.1. Joist supports;
  - 3.2. Joist girder supports;
  - 3.3. Field splices; and
  - 3.4. Bridging attachments.
4. Deflection criteria for live and total loads for non-SJI standard joists.
5. Size, location and connections for all bridging.
6. Joist headers.

~~Steel joist placement plans do not require the seal and signature of the joist manufacturer's registered design professional. If required by the registered design professional in responsible charge, the steel joist manufacturer shall submit steel joist drawings bearing the seal and signature of the joist manufacturer's registered design professional.~~

**Reason:** The sentence deleted above was first included in the 2006 IBC and has caused widespread havoc for structural engineers checking submittals for steel joists since that time. For many decades, it has been customary and necessary for the registered design professional in responsible charge (or engineer of record - EOR) to specify that the joist manufacturer provide structural calculations and joist drawings signed and sealed by their registered design professional. Since 2006, the deleted sentence has commonly been cited by joist suppliers as code-sanctioned grounds why they no longer need to provide signed and sealed joist drawings even if the EOR has specified the requirement. This proposed modification will clarify the code so as to not interfere with submittal requirements specified by the EOR. The language is consistent with that in section 2207.3 for required seals on joist calculations.

As background information, the verification of specified joist loading is one of the most important items to be checked in a joist submittal. The joist loading is typically clearly shown on the joist drawings as required by section 2207.4.1. But, per current code, the joist drawings need not be sealed by the joist engineer; the joist engineer only seals the calculations, which do not clearly show joist loading. Because the calculations and joist drawings are not both sealed by the joist engineer, there is no link between them and it is very difficult for the EOR to determine if the joist engineer used the correct loading by looking at the calculations only, which are typically printouts of some proprietary calculation software. This leads to a safety issue because the joist design cannot be adequately reviewed or verified by the EOR.

**Cost Impact:** The code change proposal will not increase the cost of construction. No additional work is required.

#### S242-11

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| Public Hearing: Committee: | AS  | AM  | D  |
| Assembly:                  | ASF | AMF | DF |

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**Committee Action:**

**Disapproved**

**Committee Reason:** The proposed wording is confusing and could contradict state engineering license regulations as well as agreements between the owner and the design professional. In addition it would replace a current requirement that represent a consensus between NCSEA and SJI.

**Assembly Action:**

**None**

These are all arguments from SJI that cannot be substantiated.

This is the real problem. NCSEA has "made a concession" in dealing with SJI.

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**Analysis:** This code change proposal references RMI standard MH16.1-11 rather than the edition presently referenced in the code, which is the -08 edition. The update to this standard will be considered by the Administrative Code Committee during the 2013 Code Development Cycle.

**Committee Action:**

**Approved as Submitted**

**Committee Reason:** There is no need to keep the reference to IBC acceleration parameters since the latest edition of the RMI standard is now coordinated with the ASCE 7 ground motions.

**Assembly Action:**

**None**

## S244-12

**Note:** For staff analysis of the content of SDI C relative to CP#28, Section 3.6, please visit: [http://www.iccsafe.org:8888/cs/codes/Documents/2012-13cycle/Proposed-A/00a\\_updates.pdf](http://www.iccsafe.org:8888/cs/codes/Documents/2012-13cycle/Proposed-A/00a_updates.pdf)

**Committee Action:**

**Approved as Submitted**

**Committee Reason:** The committee feels it is good to include the proposed reference standard for composite slab construction now that it has completed the ANSI standard process.

**Assembly Action:**

**None**

## S245-12

**Note:** For staff analysis of the content of AISI S220 relative to CP#28, Section 3.6, please visit: [http://www.iccsafe.org:8888/cs/codes/Documents/2012-13cycle/Proposed-A/00a\\_updates.pdf](http://www.iccsafe.org:8888/cs/codes/Documents/2012-13cycle/Proposed-A/00a_updates.pdf)

**Committee Action:**

**Approved as Submitted**

**Committee Reason:** This code change adds a new performance standard for cold-formed steel which allows removal and clarification of conflicting code text on cold-formed steel framing.

**Assembly Action:**

**None**

## S246-12

**Committee Action:**

**Approved as Modified**

**Modify proposal as follows:**

**2309.1 Wood Frame Construction Manual.** Structural design in accordance with the WFCM shall be permitted for buildings in any use group assigned to Risk Category I or II subject to the limitations of Section 1.1.3 of the WFCM and the load assumptions contained therein. Structural elements beyond these limitations shall be designed in accordance with accepted engineering practice.

*(Portions of proposal not shown are unchanged)*