

2007/2008 INTERNATIONAL EXISTING BUILDING CODE COMMITTEE

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INTERNATIONAL EXISTING BUILDING CODE COMMITTEE HEARING RESULTS

Errata: Revise Sections 506.1, 506.1.1, 506.2 and 506.2.1 as follows:

~~506.1 General. Repairs of structural elements shall comply with this section~~ Structural repairs shall be in compliance with this section and Section 501.3. Regardless of the extent of structural or nonstructural damage, the code official shall have the authority to require the elimination of conditions deemed dangerous. Regardless of the scope of repair, new structural members and connections used for repair or rehabilitation shall comply with the detailing provisions of the *International Building Code* for new buildings of similar structure, purpose and location.

~~506.1.1 Seismic evaluation and design.~~ (Delete entire section –relocated to Section 101.5.4)

506.2 Repairs to damaged buildings. Repairs to damaged buildings shall comply with this section.

~~506.2.1 Dangerous Conditions.~~ Regardless of the extent of structural damage, dangerous conditions shall be eliminated. (Relocated to Section 506.1)

EB1-07/08

Committee Action:

Approved as Modified

Modify the proposal as follows:

506.1 General. Structural repairs shall be in compliance with this section and Section 501.3. Regardless of the extent of structural or nonstructural damage, ~~the code official shall have the authority to require the elimination of conditions deemed dangerous conditions shall be eliminated.~~ Regardless of the scope of repair, new structural members and connections used for repair or rehabilitation shall comply with the detailing provisions of the *International Building Code* for new buildings of similar structure, purpose and location.

(Portions of proposal not shown remain unchanged)

Committee Reason: The language proposed to be moved to Section 101.5 is more appropriately located there as it deals with scope and extent of work and method of compliance. The amendment restores more succinct and definitive language that is still necessary in Section 506.1.

Assembly Action:

None

EB2-07/08

Committee Action:

Disapproved

Committee Reason: The code already deals adequately with repairs. This provision would simply give the code official too much discretion. It is also unclear whether the code official would be the fire official or the building official. Finally, this would have the effect of changing the application of the Fire Code in this code, which is inappropriate.

Assembly Action:

None

EB3-07/08

Committee Action:

Disapproved

Committee Reason: The proposed language is unnecessary, and, in the opinion of the committee, potentially more prone to misinterpretation. In addition, this opens up the intent of the section to deal with the broader issue of scope of work.

Assembly Action:

None

EB4-07/08

Committee Action:

Approved as Submitted

Committee Reason: The intent of the code is clearer with this definition. In addition, the new definition cleans up several discrepancies in the existing definition.

Assembly Action:

None

EB5-07/08

Committee Action:

Disapproved

Committee Reason: This proposal offers a new definition for unsafe, as does EC4. The committee preferred the language in EC4.

Assembly Action:

None

EB6-07/08

Committee Action:

Approved as Modified

Modify the proposal as follows:

2. There exists a significant risk of collapse, detachment, or dislodgment of any portion, member, appurtenance, or ornamentation of the building or structure under ~~typical day-to-day~~ service loads.

(Portions of proposal not shown remain unchanged)

Committee Reason: The proposal makes the word "dangerous" more in line with current engineering practice. The modification was made to make the language more succinct by removing an ambiguous phrase.

Assembly Action:

None

EB7-07/08

Errata: Section 506.2.2.3: In every instance where the word "predamaged" occurs, replace it with "predamage".

Committee Action:

Approved as Modified

Modify the proposal as follows:

502.2 New and replacement materials. Except as otherwise required or permitted by this code, materials permitted by the applicable code for new construction shall be used. Like materials shall be permitted for repairs and alterations, provided no dangerous or unsafe condition, as defined in Chapter 2, is created. Hazardous materials such as asbestos and lead based paint shall not be used where the code for new construction would not permit their use in buildings of similar occupancy, purpose and location.

506.2.1 Dangerous conditions. Regardless of the extent of structural or nonstructural damage, dangerous conditions shall be eliminated ~~the code official shall have the authority to require the elimination of conditions deemed dangerous.~~

(Portions of proposal not shown remain unchanged)

Committee Reason: This proposal is editorial in nature, replacing phrases and words with more appropriate terminology. The modification was simply to remind the reader of two very common hazardous materials, asbestos and lead-based paint.

Assembly Action:

None

EB8-07/08

Committee Action:

Disapproved

Committee Reason: The language proposed does not qualify that Section 324 of the IRC would only be applicable to buildings built in accordance with the IRC. Thus, it would allow any building to meet Section 324 of the IRC for these repairs. It is questionable in the first place whether any building within the scope of the IRC would be subject to the provisions of this code.

Assembly Action:

None

EB9-07/08

Committee Action:

Approved as Modified

Modify the proposal as follows:

506.1 General. Structural repairs shall be in compliance with this section and Section 501.3. Regardless of the extent of structural or nonstructural damage, ~~the code official shall have the authority to require the elimination of conditions deemed dangerous~~ conditions shall be eliminated. Regardless of the scope of repair, new structural members and connections used for repair or rehabilitation shall comply with the detailing provisions of the *International Building Code* for new buildings of similar structure, purpose and location.

(Portions of proposal not shown remain unchanged)

Committee Reason: The proposal provides editorial revisions and format revisions that improve clarity and flow of the section. The amendment restores more succinct and definitive language that is still necessary in Section 506.1. Note that the text will be moved to Chapter 1 in accordance with committee action on EB1-07/08.

Assembly Action:

None

EB10-07/08

Removed

Committee Action: None. EB10 was removed from consideration since it is a duplicate of G209, Part II, and was inadvertently placed in the monograph in error.

EB11-07/08

Committee Action:

Approved as Modified

Modify the proposal as follows:

Make the same revisions to footnote "a" and add footnote "b" in new tables created in the following code change proposals: EB1-07/08: Table 101.5.4.1 and Table 101.5.4.2 and EB9-07/08: Table 506.1.1.3. In both cases, the changes to the footnotes given by this code change would only apply if these code changes are ultimately approved in the Final Action.

Committee Reason: This is a necessary footnote to clarify what needs to be interpolated and how to apply this when using ASCE 31.

Assembly Action:

None

EB12-07/08

Committee Action:

Approved as Submitted

Committee Reason: This proposal would appropriately bring the seismic level established between ASCE 31 and ASCE 41 to the same level. Since ASCE 41 is the most recent standard, it reflects the most recent thinking on this.

Assembly Action:

None

EB13-07/08

Committee Action: **Disapproved**

Committee Reason: The present requirements give criteria for repairs to structural elements that are reasonable and appropriate. Even though the focus is seismic damage, this contains criteria for seismic repairs that are important.

Assembly Action: **None**

EB14-07/08

PART I – IEBC

Committee Action: **Disapproved**

Committee Reason: The proposal would relate substantial damage only to percentage of cost of a building, rather than engineering considerations related to load bearing capacity. This is inappropriate because a percentage is an arbitrarily chosen number, and over time, cost numbers are highly variable. In addition, this severely reduces the work area method at makes it almost irrelevant.

Assembly Action: **None**

PART II – IBC STRUCTURAL **Withdrawn by the Proponent**

EB15-07/08

Committee Action: **Disapproved**

Committee Reason: The proposed language is vague. In particular, the determination of disproportionate can be a point of contention. A more definitive level of proportionality would be appropriate. In addition, this should not relate only to seismic.

Assembly Action: **None**

EB16-07/08

Committee Action: **Disapproved**

Committee Reason: The provisions would provide a trigger at an unreasonably low alteration level. In addition the committee was concerned whether this was consistent with NFIP.

Assembly Action: **None**

EB17-07/08

Committee Action: **Approved as Submitted**

Committee Reason: The proposal provides a useful clarification that new interior trim materials meet Chapter 8 of the IBC.

Assembly Action: **None**

EB18-07/08

Withdrawn

Committee Action: None. This is a duplicate of G213 Part II and was inadvertently included in the monograph in error.

EB19-07/08

Withdrawn

Committee Action: None. This is a duplicate of G213 Part II and was inadvertently included in the monograph in error.

EB20-07/08

Committee Action: Approved as Submitted

Committee Reason: This proposal provides several editorial improvements to make the code clearer by reorganizing the section into distinct subsections and by differentiating between Level 1 alteration work and triggers for additional scope that could be required for level 1 alteration work.

Assembly Action: None

EB21-07/08

Committee Action: Disapproved

Committee Reason: The committee preferred the approach and language of EB22 and EB23.

Assembly Action: None

EB22-07/08

Errata: 606.2.2: In the second line add the words “is issued for reroofing” after “Where a permit”

606.2.3: In the first line change the word “reproofing” to reroofing”

Committee Action: Approved as Submitted

Committee Reason: The proposal makes this section consistent with the standard code approach for existing buildings, to first determine if there are deficiencies, then fix them. It is important that all unreinforced masonry parapets be dealt with, not just masonry parapet in unreinforced masonry buildings.

Assembly Action: None

EB23-07/08

Committee Action: Approved as Modified

Modify the proposal as follows:

606.2.2 Parapet bracing and wall anchors for unreinforced masonry bearing wall buildings. Where a permit is issued for reproofing for more than 25 percent of the roof area of an unreinforced masonry bearing wall building assigned to Seismic Design Category D, E, or F, the work shall include installation of parapet bracing and wall anchors at the roof line to resist the reduced *International Building Code* seismic forces as specified in Section 506.1.1.3, unless an evaluation demonstrates compliance of such items.

Committee Reason: The modification reflects the original intent of the proposal, to install a trigger of 25 percent of the roof area for installation of parapet bracing and wall anchors. This provides an appropriate upgrade trigger that would require parapet wall bracing and wall anchors.

Assembly Action: None

EB24-07/08

Committee Action: **Disapproved**

Committee Reason: The proposal would not bring the requirement to all high wind regions where this is necessary.

Assembly Action: **None**

EB25-07/08

Committee Action: **Approved as Submitted**

Committee Reason: This appropriately limits the need for roof diaphragms and connections to be upgraded to present day code in high wind regions only.

Assembly Action: **None**

EB26-07/08

Committee Action: **Disapproved**

Committee Reason: These prescriptive details are more appropriately placed in a referenced standard, not in the text of this code.

Assembly Action: **None**

EB27-07/08

Committee Action: **Disapproved**

Committee Reason: Deletion of the reference to fire pumps would, in essence, require installation of a fire pump to bring water to the floor area, as long as a municipal supply is available. This is an expensive measure that would discourage renovation from taking place.

Assembly Action: **None**

EB28-07/08

Committee Action: **Approved as Submitted**

Committee Reason: The proposal eliminates an exception for Group R occupancies, which is an area where fire loss data shows to be a big concern. Therefore it is appropriate not to exempt these areas from sprinkler requirements.

Assembly Action: **None**

EB29-07/08

Committee Action: **Disapproved**

Committee Reason: See EB27.

Assembly Action: **None**

EB30-07/08

Committee Action: Disapproved

Committee Reason: See EB27.

Assembly Action: None

EB31-07/08

Committee Action: Disapproved

Committee Reason: The original intent for Level 2 Alterations was to limit the scope of the upgrades for fire alarm systems. This extends the requirements beyond the original scope of Level 2.

Assembly Action: None

EB32-07/08

Committee Action: Disapproved

Committee Reason: The organization of the text makes it unclear exactly what the trigger is for requiring an accessible route between levels. In addition, the committee was concerned whether this level of renovation is within the scope of Chapter 7.

Assembly Action: None

EB33-07/08

Committee Action: Approved as Modified

Modify the proposal as follows:

707.4 Existing structural elements carrying gravity loads. Alterations shall not reduce the capacity of existing gravity load-carrying structural elements unless it is demonstrated that the elements have the capacity to ~~resist~~ carry the applicable design gravity loads required by the *International Building Code*. Existing structural elements supporting any additional gravity loads as a result of the alterations, including the effects of snow drift, shall comply with the *International Building Code*.

(Portions of proposal not shown remain unchanged)

Committee Reason: The committee considers that these proposed changes are editorial in nature, making the code clearer. The modification simply made some additional clarifications.

Assembly Action: None

EB34-07/08

Committee Action: Disapproved

Committee Reason: This provision would require a report of information to the code official making the AHJ aware of some technical information, but with no information about what to do with that information. The committee was concerned that some liability is being transferred to the code official.

Assembly Action: None

EB35-07/08

Committee Action:

Approved as Submitted

Committee Reason: This provides reference to Section 506.1.1.2, which will give an option to use ASCE 41. This is a new standard, and use of this standard for design options is useful and provides flexibility for the designer.

Assembly Action:

None

EB36-07/08

Committee Action:

Approved as Submitted

Committee Reason: The sentence proposed for deletion is not necessary, and can cause confusion.

Assembly Action:

None

EB37-07/08

Committee Action:

Approved as Submitted

Committee Reason: The committee agrees with the proponent that Type B units should be required for a change of occupancy, just as they would be required for new construction.

Assembly Action:

None

EB38-07/08

Committee Action:

Approved as Submitted

Committee Reason: This provides reference to Section 506.1.1.2, which will give an option to use ASCE 41. This is a new standard, and use of this standard for design options is useful and provides flexibility for the designer.

Assembly Action:

None

EB39-07/08

Committee Action:

Approved as Modified

Modify the proposal as follows:

1005.1 Minimum requirements. Accessibility provisions for new construction shall apply to additions. An addition that affects the accessibility to, or contains an area of, primary function shall comply with the requirements of Sections 605 and 706, as applicable.

(Portions of proposal not shown remain unchanged)

Committee Reason: The reference to Section 706 is necessary to pick up certain Level II requirements for additions and alterations when applicable. The modification simply clarifies that the sections are to be referenced only when they are applicable.

Assembly Action:

None

EB40-07/08

Committee Action:

Approved as Submitted

Committee Reason: The proposal makes the text clear and definitive as to what a "high seismic zone" is.

Assembly Action:

None

EB41-07/08

Committee Action:

Disapproved

Committee Reason: The proponent did not provide any technical justification for inclusion of Seismic Design Category C within the scope of this provision.

Assembly Action:

None

EB42-07/08

Committee Action:

Disapproved

Committee Reason: The term "dangerous" is the appropriate term. In the context of historic buildings, the intent of these provisions were that they were triggered by structural conditions that were dangerous, as defined in Chapter 2.

Assembly Action:

None

EB43-07/08

Committee Action:

Approved as Modified

Modify the proposal as follows:

1103.8 Glazing in fire-resistance-rated systems. Historic glazing materials ~~shall~~ may be permitted in interior walls required to have a 1-hour fire-resistance rating where the opening is provided with approved smoke seals and the area affected is provided with an automatic sprinkler system.

Committee Reason: The committee agrees that the meaning of the section is clearer with the language of this code change proposal. The modification was intended to ensure that this provision is an option, not a requirement.

Assembly Action:

None

Analysis: The modification has the effect of making the text ambiguous and inconsistent with the principles of enforceable code language. The substitution of the word "may" for "shall" has changed the original intent which was clearly to allow (not require) the historic glazing under specified conditions. The intent of "shall be permitted" was to state that allowance. Literally, the modified text now says that the glazing materials are "permitted to be permitted" or they "might be permitted" which begs the question of under what circumstances will they be permitted.

EB44-07/08

Committee Action:

Disapproved

Committee Reason: There were several problems with the language that were identified. In addition, there were references to figures not provided. Finally, the committee felt that this type of prescriptive provision is more appropriately located in an appendix, a guide, or a standard.

Assembly Action:

None

EB45-07/08

Committee Action: **Approved as Submitted**

Committee Reason: This is a minor editorial fix to use correct terminology.

Assembly Action: **None**

EB46-07/08

Committee Action: **Approved as Submitted**

Committee Reason: The committee agrees with the proponent that this proposal improves the organization of this section, and therefore makes the section easier to understand and use.

Assembly Action: **None**

EB47-07/08

Committee Action: **Approved as Submitted**

Committee Reason: Given that the 1.4 factor is included in ASCE 7, it is no longer needed in this paragraph.

Assembly Action: **None**

EB48-07/08

Committee Action: **Approved as Modified**

Modify the proposal as follows:

In every instance where Chapter 16 is referenced, replace it with "Section 1613".

Committee Reason: This proposal provides needed specific references to the IBC, Chapter 16. The modification points the user directly to the appropriate Section of the IBC.

Assembly Action: **None**

EB49-07/08

Committee Action: **Approved as Submitted**

Committee Reason: This proposal is editorial in nature given that the tables are no longer applicable.

Assembly Action: **None**

EB50-07/08

Committee Action: **Approved as Modified**

Modify the proposal as follows:

Delete sections A503 and A504 in their entirety:

**SECTION A503
DEFINITIONS**

~~For the purposes of this chapter, the applicable definitions and notations in the building code and the following shall apply:~~

~~**SEISMIC USE GROUP III.** Those buildings categorized as essential facilities or hazardous facilities, or as designated by the building official.~~

**SECTION A504
SYMBOLS AND NOTATIONS**

For the purposes of this chapter, the applicable symbols and notations in the building code and the following shall apply:

V — Total design base shear.
 W — Total design seismic dead load as prescribed in the building code.
 w_i — Portion of W that is located at or assigned to level i .

Modify Section A505.2 as follows:

A505.2 Properties of in-place materials. Except where specifically permitted herein, the stress-strain relationship of concrete and reinforcement shall be determined from published data or by testing. All available information, including building plans, original calculations and design criteria, site observations, testing, and records of typical materials and construction practices prevalent at the time of construction, shall be considered when determining material properties.

For Tier 3 analyses, expected material properties shall be used in lieu of nominal properties in the calculation of strength, stiffness and deformability of building components.

The procedure for testing and determination of ~~stress-strain values~~ material properties shall be from Section 6.2 of ASCE 41-06.

Modify Section A508.3.2 as follows:

A508.3.2 Component stiffness. Component stiffness shall be calculated based on the approximate values shown in Table ~~605~~ 6-5 of ASCE 41-06.

(Portions of proposal not shown remain unchanged)

Committee Reason: The proposed change brings consistency with new standard ASCE 41 and eliminates methodology that is outdated.

Assembly Action: **None**

EB51-07/08

Committee Action: **Disapproved**

Committee Reason: This procedure is too technically complex and rigorous to be useful as a prescriptive method in this code appendix.

Assembly Action: **None**

EB52-07/08

Errata: Add the following code change (Code change did not appear in the Monograph):

EB52-07/08
Chapter 15

Proponent: Peter Somers, PE, Magnusson Klemencic Associates, representing NCSEA Existing Building Committee

Revise Chapter 15 as follows:

ASCE
ASCE 31-~~03~~ 08 Seismic Evaluation of Existing Buildings

Reason: The purpose of the proposed change is to maintain in the IEBC the most current update and state of the practice references for seismic evaluation. In accordance with ASCE practice, standards are reaffirmed or updated in intervals of no more than five years. Therefore, by the time the 2009 IEBC is published, there will be a newer version of ASCE 31. The updated version will be available in time for the final action hearings.

Cost Impact: This revision is not expected to impact construction cost.

Committee Action: **Disapproved**

Committee Reason: The proponent advised that the standard is not ready at this time.

Assembly Action: **None**
