# INTERNATIONAL CODE COUNCIL 2009/2010 CODE DEVELOPMENT CYCLE

# 2009/2010 REPORT OF THE PUBLIC HEARING ON THE 2009 EDITIONS OF THE

ICC ADMINISTRATIVE CODE PROVISIONS
INTERNATIONAL BUILDING CODE®
INTERNATIONAL ENERGY CONSERVATION CODE®
INTERNATIONAL EXISTING BUILDING CODE®
INTERNATIONAL FIRE CODE®
INTERNATIONAL FUEL GAS CODE®
INTERNATIONAL MECHANICAL CODE®
INTERNATIONAL PLUMBING CODE®
INTERNATIONAL PRIVATE SEWAGE DISPOSAL CODE®
INTERNATIONAL PROPERTY MAINTENANCE CODE®
INTERNATIONAL RESIDENTIAL CODE®
INTERNATIONAL WILDLAND-URBAN INTERFACE CODE®
INTERNATIONAL ZONING CODE®

HELD IN BALTIMORE, MARYLAND OCTOBER 24 – NOVEMBER 11, 2009

PUBLIC COMMENT DEADLINES: FOR CODE CHANGE PROPOSALS HEARD IN DALLAS, TX: FEBRUARY 8, 2010 CHARLOTTE, NC: JULY 1, 2010



#### First Printing

Publication Date: December 2009

Copyright © 2009

By
International Code Council, Inc.

ALL RIGHTS RESERVED. This 2009/2010 Code Development Cycle Report of the Public Hearing on the 2009 Editions of the *International Codes* is a copyrighted work owned by the International Code Council, Inc. Without advanced written permission from the copyright owner, no part of this book may be reproduced, distributed, or transmitted in any form or by any means, including, without limitations, electronic, optical or mechanical means (by way of example and not limitation, photocopying, or recording by or in an information storage retrieval system). For information on permission to copy material exceeding fair use, please contact: Publications, 4051 West Flossmoor Road, Country Club Hills, IL 60478 (Phone 1-888-422-7233).

Trademarks: "International Code Council," the "International Code Council" logo are trademarks of the International Code Council, Inc.

PRINTED IN THE U.S.A.

# TABLE OF CONTENTS

Page
Introductioniv
Public Comment Office Locationiv
ICC Website
Referenced Standards Update
Modifications by Public Comment
Final Action Consideration
Call for Adoption Information
ICC Code Development Procedures (Council Policy CP #28) v
Report of Public Hearing Table of Contentsxix

## INTRODUCTION

This publication contains the 2009/2010 Report of the Public Hearing on the proposed revisions to the International Building Code, International Energy Conservation Code, International Existing Building Code, International Fire Code, International Fuel Gas Code, International Mechanical Code, International Plumbing Code, International Private Sewage Disposal Code, International Property Maintenance Code, International Residential Code, International Wildland-Urban Interface Code, and International Zoning Code held in Baltimore, Maryland, October 24 – November 11, 2009.

This report includes the recommendation of the code development committee and the committee's reason on each proposed item. It also includes actions taken by the assembly in accordance with Section 5.7 of the *ICC Council Policy CP#28-05 Code Development (CP #28)*. Where the committee or assembly action was Approved as Modified, the proposed change, or a portion thereof, is included herein with the modification indicated in strikeout/underline format. Where this report indicates Withdrawn by Proponent the proposed change was withdrawn by the proponent and is not subject to any further consideration.

The text of the original code change proposals is published in the monograph titled 2009/2010 Code Development Cycle Proposed Changes to the 2009 Editions of the International Building Code, International Energy Conservation Code, International Existing Building Code, International Fire Code, International Fuel Gas Code, International Mechanical Code, International Plumbing Code, International Private Sewage Disposal Code, International Property Maintenance Code, International Residential Code, International Wildland-Urban Interface Code, and International Zoning Code.

There will be two Final Action Hearings held in 2010. On the following page, the codes or portions of codes to be considered at each Final Action Hearing are listed below the dates of their respective Final Action Hearing. For instance, the IFC Final Action Agenda will be heard during the hearings **May 14 – 23**, **2010 at the Sheraton Dallas Hotel in Dallas, TX**. The IECC Final Action Agenda will be heard during the hearings **October 28 - November 1, 2010 at the Charlotte Convention Center in Charlotte, NC**.

Proposals on which there was a successful assembly action will be automatically included on the applicable final action agenda for individual consideration and voting by eligible voting members in accordance with Section 6.1.2 of CP #28.

Persons who wish to recommend an action other than that taken at the public hearing may submit a public comment in accordance with Section 6.0 of the *ICC CP#28-05 Code Development* (see page xii). The deadline for receipt of public comments is February 8, 2010 for code change proposals to be heard in Dallas, TX and July 1, 2010 for code change proposals to be heard Charlotte, NC. Proposals which receive a public comment will be included on the final action agenda for individual consideration and voting by eligible voting members in accordance with Section 6.1.1 of CP #28.

PUBLIC COMMENTS SHOULD BE SENT
TO THE FOLLOWING OFFICE VIA REGULAR MAIL OR EMAIL:

#### Send to:

Chicago District Office 4051 West Flossmoor Road Country Club Hills, IL 60478-5795 Fax: 708/799-0320 publiccomments@iccsafe.org

2009 ICC PUBLIC HEARING RESULTS

### Acronym ICC Code Name (Code change number prefix)

#### Public Comments Due February 8, 2010 for hearings in Dallas, TX (May 16-23, 2010)

IBC International Building Code (E, FS, G, S)
IEBC International Existing Building Code (EB)

IFC International Fire Code (F)
IFGC International Fuel Gas Code (FG)
IMC International Mechanical Code (M)
IPC International Plumbing Code (P)

IPSDC International Private Sewage Disposal Code (PSD)
IRC International Residential Code (RB, RM, RP)
INUIC International Wildland-Urban Interface Code (WUIC)

#### Public Comments Due July 1, 2010 for hearings in Charlotte, NC (October 28-November 1, 2010)

IADMINICC Administrative Code Provisions (ADM)IECCInternational Energy Conservation Code (EC)IPMCInternational Property Maintenance Code (PM)

IRC (ENERGY) International Residential Code (RE)
IRC INTERNATIONAL INTER

### ICC WEBSITE - WWW.ICCSAFE.ORG

While great care has been exercised in the publication of this document, errata may occur. Errata will be posted on the ICC website at www.iccsafe.org. Users are encouraged to review the ICC Website for errata to the 2009/2010 Code Development Cycle Proposed Changes and the 2009/2010 Report of the Public Hearing.

#### REFERENCED STANDARDS UPDATES

In accordance with Section 4.5 of ICC Council Policy #CP28-05, referenced standards updates were included in a single code change proposal and heard at the Code Development Hearings by the ICC Administrative Code Development Committee (IADMIN). This single code change proposal is ADM39-09/10. Any public comments on ADM39-09/10 will be heard during the hearings in Charlotte, NC, October 28 – Nov. 1, 2010.

Code change proposal ADM39-09/10 provides a comprehensive list of all standards that the respective standards promulgators have indicated have been, or will be, updated from the listing in the 2009 Editions of the International Codes. According to Section 4.5 of ICC Council Policy #CP 28, Code Development Policy, the updating of standards referenced by the Codes shall be accomplished administratively by the Administrative Code Development Committee. Therefore, referenced standards that are to be updated for the 2012 edition of any of the I-Codes are listed in this single code change proposal. This is unlike the way these standards were updated in the past code change cycles, where updates for standards were dealt with by each committee for their respective codes. The code change includes standards that the promulgators have already updated or will have updated by December 1, 2011 in accordance with CP#28.

#### MODIFICATIONS BY PUBLIC COMMENT

Section 6.4.3 of CP #28 allows modifications to be proposed by a public comment to code changes for consideration at the Final Action Hearings. For the modification to be considered at the Final Action Hearings, the public comment must request Approval as Modified with the specific modification included in the public comment. The modification must be within the scope of the original proposed code change and relevant to the specific issue in the original code change.

## **FINAL ACTION CONSIDERATION**

In summary, the items that will be on the agenda for individual consideration and action are:

- 1. Proposed changes that received a successful Assembly Action (Section 5.7); or
- 2. Proposed changes that received a public comment (Section 6.0).

#### **CALL FOR ADOPTION INFORMATION**

Please take a minute to visit the ICC Code Adoption Maps at <a href="www.iccsafe.org/gr/Pages/adoptions.aspx">www.iccsafe.org/gr/Pages/adoptions.aspx</a> scroll to the bottom of the page and click on one of the jurisdiction maps and review the information as it relates to your jurisdiction. To see state/jurisdiction in chart form (PDF), go to Related Links (right side of screen) and choose the related file. If your jurisdiction is not listed, or is listed with incorrect information, click on the Code Adoption Resources (left side of screen), and click on Submit Adoption Info and provide correct information.

## **CP# 28-05 CODE DEVELOPMENT**

Approved: 9/24/05 Revised: 2/27/09

CP # 28-05 is an update to ICC's Code Development Process for the International Codes dated May 15, 2004.

#### 1.0 Introduction

- **1.1 Purpose:** The purpose of this Council Policy is to prescribe the Rules of Procedure utilized in the continued development and maintenance of the International Codes (Codes).
- **1.2 Objectives:** The ICC Code Development Process has the following objectives:
  - **1.2.1** The timely evaluation and recognition of technological developments pertaining to construction regulations.
  - **1.2.2** The open discussion of proposals by all parties desiring to participate.
  - **1.2.3** The final determination of Code text by officials representing code enforcement and regulatory agencies and by honorary members.
- **1.3 Code Publication:** The ICC Board of Directors (ICC Board) shall determine the title and the general purpose and scope of each Code published by the ICC.
  - 1.3.1 Code Correlation: The provisions of all Codes shall be consistent with one another so that conflicts between the Codes do not occur. Where a given subject matter or code text could appear in more than one Code, the ICC Board shall determine which Code shall be the primary document, and therefore which code development committee shall be responsible for review and maintenance of the code text. Duplication of content or text between Codes shall be limited to the minimum extent necessary for practical usability of the Codes, as determined in accordance with Section 4.4.
- 1.4 Process Maintenance: The review and maintenance of the Code Development Process and these Rules of Procedure shall be by the ICC Board. The manner in which ICC codes are developed embodies core principles of the organization. One of those principles is that the final content of ICC codes is determined by a majority vote of the governmental and honorary members. It is the policy of the Board that there shall be no change to this principle without the affirmation of two-thirds of the governmental and honorary members responding.
- 1.5 Secretariat: The Chief Executive Officer shall assign a Secretariat for each of the Codes. All correspondence relating to code change proposals and public comments shall be addressed to the Secretariat.
- Video Taping: Individuals requesting permission to video tape any meeting, or portion thereof, shall be required to provide the ICC with a release of responsibility disclaimer and shall acknowledge that they have insurance coverage for liability and misuse of video tape materials. Equipment and the process used to video tape shall, in the judgment of the ICC Secretariat, be conducted in a manner that is not disruptive to the meeting. The ICC shall not be responsible for equipment, personnel or any other provision necessary to accomplish the videotaping. An unedited copy of the video tape shall be forwarded to ICC within 30 days of the meeting.

## 2.0 Code Development Cycle

**2.1 Intent:** The code development cycle shall consist of the complete consideration of code change proposals in accordance with the procedures herein specified, commencing with

the deadline for submission of code change proposals (see Section 3.5) and ending with publication of final action on the code change proposals (see Section 7.6).

- **New Editions:** The ICC Board shall determine the schedule for publishing new editions of the Codes. Each new edition shall incorporate the results of the code development activity since the last edition.
- **2.3 Supplements:** The results of code development activity between editions may be published.
- **2.4 Emergency Procedures:** In the event that the ICC Board determines that an emergency amendment to any Code is warranted, the same may be adopted by the ICC Board. Such action shall require an affirmative vote of at least two-thirds of the ICC Board.

The ICC membership shall be notified within ten days after the ICC Boards' official action of any emergency amendment. At the next Annual Business Meeting, any emergency amendment shall be presented to the members for ratification by a majority of the ICC Governmental Member Representatives and Honorary Members present and voting.

All code revisions pursuant to these emergency procedures and the reasons for such corrective action shall be published as soon as practicable after ICC Board action. Such revisions shall be identified as an emergency amendment.

Emergency amendments to any Code shall not be considered as a retro-active requirement to the Code. Incorporation of the emergency amendment into the adopted Code shall be subjected to the process established by the adopting authority.

## 3.0 Submittal of Code Change Proposals

- **3.1 Intent:** Any interested person, persons or group may submit a code change proposal which will be duly considered when in conformance to these Rules of Procedure.
- **Withdrawal of Proposal:** A code change proposal may be withdrawn by the proponent (WP) at any time prior to Final Action Consideration of that proposal. A withdrawn code change proposal shall not be subject to a public hearing, motions, or Final Action Consideration.
- **3.3** Form and Content of Code Change Submittals: Each code change proposal shall be submitted separately and shall be complete in itself. Each submittal shall contain the following information:
  - **3.3.1 Proponent:** Each code change proposal shall include the name, title, mailing address, telephone number, and email address of the proponent.
    - **3.3.1.1** If a group, organization or committee submits a code change proposal, an individual with prime responsibility shall be indicated.
    - **3.3.1.2** If a proponent submits a code change on behalf of a client, group, organization or committee, the name and mailing address of the client, group, organization or committee shall be indicated.
  - **3.3.2** Code Reference: Each code change proposal shall relate to the applicable code sections(s) in the latest edition of the Code.
    - **3.3.2.1** If more than one section in the Code is affected by a code change proposal, appropriate proposals shall be included for all such affected sections.
    - **3.3.2.2** If more than one Code is affected by a code change proposal, appropriate proposals shall be included for all such affected Codes and appropriate cross referencing shall be included in the supporting information.

- **3.3.3 Multiple code change proposals to a code section.** A proponent shall not submit multiple code change proposals to the same code section. When a proponent submits multiple code change proposals to the same section, the proposals shall be considered as incomplete proposals and processed in accordance with Section 4.3. This restriction shall not apply to code change proposals that attempt to address differing subject matter within a code section.
- **3.3.4 Text Presentation:** The text proposal shall be presented in the specific wording desired with deletions shown struck out with a single line and additions shown underlined with a single line.
  - **3.3.4.1** A charging statement shall indicate the referenced code section(s) and whether the proposal is intended to be an addition, a deletion or a revision to existing Code text.
  - **3.3.4.2** Whenever practical, the existing wording of the text shall be preserved with only such deletions and additions as necessary to accomplish the desired change.
  - **3.3.4.3** Each proposal shall be in proper code format and terminology.
  - **3.3.4.4** Each proposal shall be complete and specific in the text to eliminate unnecessary confusion or misinterpretation.
  - **3.3.4.5** The proposed text shall be in mandatory terms.
- **3.3.5 Supporting Information:** Each code change proposal shall include sufficient supporting information to indicate how the proposal is intended to affect the intent and application of the Code.
  - **3.3.5.1 Purpose:** The proponent shall clearly state the purpose of the proposed code change (e.g. clarify the Code; revise outdated material; substitute new or revised material for current provisions of the Code; add new requirements to the Code; delete current requirements, etc.)
  - 3.3.5.2 Reasons: The proponent shall justify changing the current Code provisions, stating why the proposal is superior to the current provisions of the Code. Proposals which add or delete requirements shall be supported by a logical explanation which clearly shows why the current Code provisions are inadequate or overly restrictive, specifies the shortcomings of the current Code provisions and explains how such proposals will improve the Code.
  - 3.3.5.3 Substantiation: The proponent shall substantiate the proposed code change based on technical information and substantiation. Substantiation provided which is reviewed in accordance with Section 4.2 and determined as not germane to the technical issues addressed in the proposed code change shall be identified as such. The proponent shall be notified that the proposal is considered an incomplete proposal in accordance with Section 4.3 and the proposal shall be held until the deficiencies are corrected. The proponent shall have the right to appeal this action in accordance with the policy of the ICC Board. The burden of providing substantiating material lies with the proponent of the code change proposal.
  - **3.3.5.4 Bibliography:** The proponent shall submit a bibliography of any substantiating material submitted with the code change proposal. The bibliography shall be published with the code change and the proponent shall make the substantiating materials available for review at the appropriate ICC office and during the public hearing.
  - 3.3.5.5 Copyright Release: The proponent of code change proposals, floor modifications and public comments shall sign a copyright release reading: "I hereby grant and assign to ICC all rights in copyright I may have in any authorship contributions I make to ICC in connection with any proposal and public comment, in its original form submitted or revised form, including written and verbal modifications submitted in accordance Section 5.5.2. I understand that I will have no rights in any ICC publications that use such contributions in the form submitted by me or another similar form

- and certify that such contributions are not protected by the copyright of any other person or entity."
- **3.3.5.6 Cost Impact:** The proponent shall indicate one of the following regarding the cost impact of the code change proposal: 1) the code change proposal will increase the cost of construction; or 2) the code change proposal will not increase the cost of construction. This information will be included in the published code change proposal.
- **Number:** One copy of each code change proposal, two copies of each proposed new referenced standard and one copy of all substantiating information shall be submitted. Additional copies may be requested when determined necessary by the Secretariat to allow such information to be distributed to the code development committee. Where such additional copies are requested, it shall be the responsibility of the proponent to send such copies to the respective code development committee. A copy of the code change proposal in electronic form is preferred.
- 3.5 Submittal Deadline: Each code change proposal shall be received at the office of the Secretariat by the posted deadline. Such posting shall occur no later than 120 days prior to the code change deadline. The submitter of a proposed code change is responsible for the proper and timely receipt of all pertinent materials by the Secretariat.
- **3.6** Referenced Standards: In order for a standard to be considered for reference or to continue to be referenced by the Codes, a standard shall meet the following criteria:

#### 3.6.1 Code References:

- **3.6.1.1** The standard, including title and date, and the manner in which it is to be utilized shall be specifically referenced in the Code text.
- **3.6.1.2** The need for the standard to be referenced shall be established.

#### 3.6.2 Standard Content:

- **3.6.2.1** A standard or portions of a standard intended to be enforced shall be written in mandatory language.
- **3.6.2.2** The standard shall be appropriate for the subject covered.
- **3.6.2.3** All terms shall be defined when they deviate from an ordinarily accepted meaning or a dictionary definition.
- **3.6.2.4** The scope or application of a standard shall be clearly described.
- **3.6.2.5** The standard shall not have the effect of requiring proprietary materials.
- **3.6.2.6** The standard shall not prescribe a proprietary agency for quality control or testing.
- **3.6.2.7** The test standard shall describe, in detail, preparation of the test sample, sample selection or both.
- **3.6.2.8** The test standard shall prescribe the reporting format for the test results. The format shall identify the key performance criteria for the element(s) tested.
- **3.6.2.9** The measure of performance for which the test is conducted shall be clearly defined in either the test standard or in Code text.
- 3.6.2.10 The standard shall not state that its provisions shall govern whenever the referenced standard is in conflict with the requirements of the referencing Code.
- **3.6.2.11** The preface to the standard shall announce that the standard is promulgated according to a consensus procedure.

## 3.6.3 Standard Promulgation:

3.6.3.1 Code change proposals with corresponding changes to the code text which include a reference to a proposed new standard or a proposed update of an existing referenced shall comply with this section. The standard shall be completed and readily available prior to Final Action Consideration based on the cycle of code development which includes the proposed code change proposal. In order for a new standard to be considered for reference by the Code, such standard shall be submitted in at least a consensus draft form in accordance with Section 3.4. Updating of standards without corresponding

- code text changes shall be accomplished administratively in accordance with Section 4.5.
- **3.6.3.2** The standard shall be developed and maintained through a consensus process such as ASTM or ANSI.

## 4.0 Processing of Proposals

- **4.1 Intent:** The processing of code change proposals is intended to ensure that each proposal complies with these Rules of Procedure and that the resulting published proposal accurately reflects that proponent's intent.
- **4.2 Review:** Upon receipt in the Secretariat's office, the code change proposals will be checked for compliance with these Rules of Procedure as to division, separation, number of copies, form, language, terminology, supporting statements and substantiating data. Where a code change proposal consists of multiple parts which fall under the maintenance responsibilities of different code committees, the Secretariat shall determine the code committee responsible for determining the committee action in accordance with Section 5.6.
- 4.3 Incomplete Proposals: When a code change proposal is submitted with incorrect format, without the required information or judged as not in compliance with these Rules of Procedure, the Secretariat shall notify the proponent of the specific deficiencies and the proposal shall be held until the deficiencies are corrected, with a final date set for receipt of a corrected submittal. If the Secretariat receives the corrected proposal after the final date, the proposal shall be held over until the next code development cycle. Where there are otherwise no deficiencies addressed by this section, a proposal that incorporates a new referenced standard shall be processed with an analysis of referenced standard's compliance with the criteria set forth in Section 3.6.
- **Editorial:** The Chief Executive Officer shall have the authority at all times to make editorial and format changes to the Code text, or any approved changes, consistent with the intent, provisions and style of the Code. An editorial or format change is a text change that does not affect the scope or application of the code requirements.

#### 4.5 Updating Standards:

- 4.5.1 Standards referenced in the 2012 Edition of the I-Codes: The updating of standards referenced by the Codes shall be accomplished administratively by the Administrative code development committee in accordance with these full procedures except that the deadline for availability of the updated standard and receipt by the Secretariat shall be December 1, 2011. The published version of the 2012 Code which references the standard will refer to the updated edition of the standard. If the standard is not available by the deadline, the edition of the standard as referenced by the newly published Code shall revert back to the reference contained in the previous edition and an errata to the Code issued Multiple standards to be updated may be included in a single proposal.
- 4.5.2 Standards referenced in the 2015 Edition and following Editions of the I-Codes: The updating of standards referenced by the Codes shall be accomplished administratively by the Administrative code development committee in accordance with these full procedures except that multiple standards to be updated may be included in a single proposal. The standard shall be completed and readily available prior to Final Action Consideration of the Administrative code change proposal which includes the proposed update.
- **Preparation:** All code change proposals in compliance with these procedures shall be prepared in a standard manner by the Secretariat and be assigned separate, distinct and consecutive numbers. The Secretariat shall coordinate related proposals submitted in accordance with Section 3.3.2 to facilitate the hearing process.
- **4.7 Publication:** All code change proposals shall be posted on the ICC website at least 30 days prior to the public hearing on those proposals and shall constitute the agenda forthe public hearing. Code change proposals which have not been published shall not be considered.

## 5.0 Public Hearing

- 5.1 Intent: The intent of the public hearing is to permit interested parties to present their views including the cost and benefits on the code change proposals on the published agenda. The code development committee will consider such comments as may be presented in the development of their action on the disposition of such proposals. At the conclusion of the code development committee deliberations, the committee action on each code change proposal shall be placed before the hearing assembly for consideration in accordance with Section 5.7.
- **5.2 Committee:** The Code Development Committees shall be appointed by the applicable ICC Council.
  - **5.2.1 Chairman/Moderator:** The Chairman and Vice-Chairman shall be appointed by the Steering Committee on Councils from the appointed members of the committee. The ICC President shall appoint one or more Moderators who shall act as presiding officer for the public hearing.
  - 5.2.2 Conflict of Interest: A committee member shall withdraw from and take no part in those matters with which the committee member has an undisclosed financial, business or property interest. The committee member shall not participate in any committee discussion on the matter or any committee vote. Violation thereofshall result in the immediate removal of the committee member from the committee. A committee member who is a proponent of a proposal shall not participate in any committee discussion on the matter or any committee vote. Such committee member shall be permitted to participate in the floor discussion in accordance with Section 5.5 by stepping down from the dais.
  - **5.2.3** Representation of Interest: Committee members shall not represent themselves as official or unofficial representatives of the ICC except at regularly convened meetings of the committee.
  - **5.2.4 Committee Composition:** The committee may consist of representation from multiple interests. A minimum of thirty-three and one-third percent (33.3%) of the committee members shall be regulators.
- **5.3 Date and Location:** The date and location of each public hearing shall be announced not less than 60 days prior to the date of the public hearing.
- **5.4 General Procedures:** *The Robert's Rules of Order* shall be the formal procedure for the conduct of the public hearing except as a specific provision of these Rules of Procedure may otherwise dictate. A quorum shall consist of a majority of the voting members of the committee.
  - **5.4.1 Chair Voting:** The Chairman of the committee shall vote only when the vote cast will break a tie vote of the committee.
  - 5.4.2 Open Meetings: Public hearings of the Code Development Committees are open meetings. Any interested person may attend and participate in the Floor Discussion and Assembly Consideration portions of the hearing. Only eligible voters (see Section 5.7.4) are permitted to vote on Assembly Considerations. Only Code Development Committee members may participate in the Committee Action portion of the hearings (see Section 5.6).
  - 5.4.3 Presentation of Material at the Public Hearing: Information to be provided at the hearing shall be limited to verbal presentations and modifications submitted in accordance with Section 5.5.2. Audio-visual presentations are not permitted. Substantiating material submitted in accordance with Section 3.3.4.4 and other material submitted in response to a code change proposal shall be located in a designated area in the hearing room and shall not be distributed to the code development committee at the public hearing.
  - **5.4.4 Agenda Order:** The Secretariat shall publish an agenda for each public hearing, placing individual code change proposals in a logical order to facilitate the hearing. Any public hearing attendee may move to revise the agenda order as the first order of business at the public hearing, or at any time during the hearing except while another proposal is being discussed. Preference shall be given to grouping like subjects together, and for moving items back to a later position on

- the agenda as opposed to moving items forward to an earlier position. A motion to revise the agenda order is subject to a 2/3 vote of those present and voting.
- **5.4.5** Reconsideration: There shall be no reconsideration of a proposed code change after it has been voted on by the committee in accordance with Section 5.6; or, in the case of assembly consideration, there shall be no reconsideration of a proposed code change after it has been voted on by the assembly in accordance with Section 5.7.
- **5.4.6 Time Limits:** Time limits shall be established as part of the agenda for testimony on all proposed changes at the beginning of each hearing session. Each person requesting to testify on a change shall be given equal time. In the interest of time and fairness to all hearing participants, the Moderator shall have limited authority to modify time limitations on debate. The Moderator shall have the authority to adjust time limits as necessary in order to complete the hearing agenda.
  - **5.4.6.1 Time Keeping:** Keeping of time for testimony by an individual shall be by an automatic timing device. Remaining time shall be evident to the person testifying. Interruptions during testimony shall not be tolerated. The Moderator shall maintain appropriate decorum during all testimony.
  - **5.4.6.2 Proponent Testimony:** The Proponent is permitted to waive an initial statement. The Proponent shall be permitted to have the amount of time that would have been allocated during the initial testimony period plus the amount of time that would be allocated for rebuttal. Where the code change proposal is submitted by multiple proponents, this provision shall permit only one proponent of the joint submittal to be allotted additional time for rebuttal.
- **5.4.7 Points of Order:** Any person participating in the public hearing may challenge a procedural ruling of the Moderator or the Chairman. A majority vote of the eligible voters as determined in Section 5.7.4 shall determine the decision.
- **5.5 Floor Discussion:** The Moderator shall place each code change proposal before the hearing for discussion by identifying the proposal and by regulating discussion as follows:

#### 5.5.1 Discussion Order:

- 1. Proponents. The Moderator shall begin by asking the proponent and then others in support of the proposal for their comments.
- Opponents. After discussion by those in support of a proposal, those opposed hereto, if any, shall have the opportunity to present their views.
- 3. Rebuttal in support. Proponents shall then have the opportunity to rebut points raised by the opponents.
- 4. Rerebuttal in opposition. Opponents shall then have the opportunity to respond to the proponent's rebuttal.
- **Modifications:** Modifications to proposals may be suggested from the floor by any person participating in the public hearing. The person proposing the modification is deemed to be the proponent of the modification.
  - **5.5.2.1 Submission and Written Copies.** All modifications must be written, unless determined by the Chairman to be either editorial or minor in nature. The modification proponent shall provide 20 copies to the Secretariat for distribution to the committee.
  - **5.5.2.2 Criteria.** The Chairman shall rule proposed modifications in or out of order before they are discussed on the floor. A proposed modification shall be ruled out of order if it:
    - 1. is not legible, unless not required to be written in accordance with Section 5.5.2.1; or
    - 2. changes the scope of the original proposal; or
    - 3. is not readily understood to allow a proper assessment of its impact on the original proposal or the code.

The ruling of the Chairman on whether or not the modification is in or out of order shall be final and is not subject to a point of order in accordance with Section 5.4.7.

- **5.5.2.3 Testimony.** When a modification is offered from the floor and ruled in order by the Chairman, a specific floor discussion on that modification is to commence in accordance with the procedures listed in Section 5.5.1.
- **Committee Action:** Following the floor discussion of each code change proposal, one of the following motions shall be made and seconded by members of the committee.
  - 1. Approve the code change proposal as submitted (AS) or
  - 2. Approve the code change proposal as modified with specific modifications (AM), or
  - 3. Disapprove the code change proposal (D)

Discussion on this motion shall be limited to Code Development Committee members. If a committee member proposes a modification which had not been proposed during floor discussion, the Chairman shall rule on the modification in accordance with Section 5.5.2.2 If a committee member raises a matter of issue, including a proposed modification, which has not been proposed or discussed during the floor discussion, the Moderator shall suspend the committee discussion and shall reopen the floor discussion for comments on the specific matter or issue. Upon receipt of all comments from the floor, the Moderator shall resume committee discussion.

The Code Development Committee shall vote on each motion with the majority dictating the committee's action. Committee action on each code change proposal shall be completed when one of the motions noted above has been approved. Each committee vote shall be supported by a reason.

The Code Development Committee shall maintain a record of its proceedings including the action on each code change proposal.

- 5.7 Assembly Consideration: At the conclusion of the committee's action on a code change proposal and before the next code change proposal is called to the floor, the Moderator shall ask for a motion from the public hearing attendees who may object to the committee's action. If a motion in accordance with Section 5.7.1 is not brought forward on the committee's action, the results of the public hearing shall be established by the committee's action. If a motion in accordance with Section 5.7.1 is brought forward and is sustained in accordance with Section 5.7.3, both the committee's action and the assemblies' action shall be reported as the results of the public hearing. Where a motion is sustained in accordance with Section 5.7.3, such action shall be the initial motion considered at Final Action Consideration in accordance with Section 7.3.8.2.
  - **5.7.1 Floor Motion:** Any attendee may raise an objection to the committee's action in which case the attendee will be able to make a motion to:
    - 1. Approve the code change proposal as submitted from the floor (ASF), or
    - 2. Approve the code change proposal as modified from the floor (AMF) with a specific modification that has been previously offered from the floor and ruled in order by the Chairman during floor discussion (see Section 5.5.2) or has been offered by a member of the Committee and ruled in order by the Chairman during committee discussion (see Section 5.6), or
    - 3. Disapprove the code change proposal from the floor (DF).
  - **5.7.2 Discussion:** On receipt of a second to the floor motion, the Moderator shall place the motion before the assembly for a vote. No additional testimony shall be permitted.
  - **5.7.3 Assembly Action:** The assembly action shall be in accordance with the following majorities based on the number of votes cast by eligible voters (See 5.7.4).

Committee Action	Desired Assembly Action			
	ASF	AMF	DF	
AS		<sup>2</sup> / <sub>3</sub> Majority	<sup>2</sup> / <sub>3</sub> Majority	
AM	<sup>2</sup> / <sub>3</sub> Majority	<sup>2</sup> / <sub>3</sub> Majority	<sup>2</sup> / <sub>3</sub> Majority	
D	<sup>2</sup> / <sub>3</sub> Majority	<sup>2</sup> / <sub>3</sub> Majority		

- 5.7.4 Eligible Voters: All members of ICC in attendance at the public hearing shall be eligible to vote on floor motions. Only one vote authorized for each eligible attendee. Code Development Committee members shall be eligible to vote on floor motions. Application, whether new or updated, for ICC membership must be received by the Code Council ten days prior to the commencement of the first day of the public hearing.
- **Report of the Public Hearing:** The results of the public hearing, including committee action and successful assembly action, shall be posted on the ICC website not less than 60 days prior to Final Action Consideration except as approved by the ICC Board.

#### 6.0 Public Comments

- 6.1 Intent: The public comment process gives attendees at the Final Action Hearing an opportunity to consider specific objections to the results of the public hearing and more thoughtfully prepare for the discussion for Final Action Consideration. The public comment process expedites the Final Action Consideration at the Final Action Hearing by limiting the items discussed to the following:
  - **6.1.1** Consideration of items for which a public comment has been submitted; and
  - **6.1.2** Consideration of items which received a successful assembly action at the public hearing.
- **6.2 Deadline:** The deadline for receipt of a public comment to the results of the public hearing shall be announced at the public hearing but shall not be less than 30 days from the availability of the report of the results of the public hearing (see Section 5.8).
- 6.3 Withdrawal of Public Comment: A public comment may be withdrawn by the public commenter at any time prior to Final Action Consideration of that comment. A withdrawn public comment shall not be subject to Final Action Consideration. If the only public comment to a code change proposal is withdrawn by the public commenter prior to the vote on the consent agenda in accordance with Section 7.3.4, the proposal shall be considered as part of the consent agenda. If the only public comment to a code change proposal is withdrawn by the public commenter after the vote on the consent agenda in accordance with Section 7.3.4, the proposal shall continue as part of the individual consent agenda in accordance with Section 7.3.5, however the public comment shall not be subject to Final Action Consideration.
- **6.4 Form and Content of Public Comments:** Any interested person, persons, or group may submit a public comment to the results of the public hearing which will be considered when in conformance to these requirements. Each public comment to a code change proposal shall be submitted separately and shall be complete in itself. Each public comment shall contain the following information:
  - 6.4.1 Public comment: Each public comment shall include the name, title, mailing address, telephone number and email address of the public commenter. If group, organization, or committee submits a public comment, an individual with prime responsibility shall be indicated. If a public comment is submitted on behalf a client, group, organization or committee, the name and mailing address of the client, group, organization or committee shall be indicated. The scope of the public comment shall be consistent with the scope of the original code change proposal, committee action or successful assembly action. Public comments which are determined as not within the scope of the code change proposal, committee action or successful assembly action shall be identified as such. The public commenter shall be notified that the public comment is considered an incomplete public comment in accordance with Section 6.5.1 and the public comment shall be held until the deficiencies are corrected. A copyright

- release in accordance with Section 3.3.4.5 shall be provided with the public comment.
- **6.4.2 Code Reference:** Each public comment shall include the code change proposal number and the results of the public hearing, including successful assembly actions, on the code change proposal to which the public comment is directed.
- **6.4.3** Multiple public comments to a code change proposal. A proponent shall not submit multiple public comments to the same code change proposal. When a proponent submits multiple public comments to the same code change proposal, the public comments shall be considered as incomplete public comments and processed in accordance with Section 6.5.1. This restriction shall not apply to public comments that attempt to address differing subject matter within a code section.
- **6.4.4 Desired Final Action:** The public comment shall indicate the desired final action as one of the following:
  - 1. Approve the code change proposal as submitted (AS), or
  - Approve the code change proposal as modified (AM) by one or more specific modifications published in the Results of the Public Hearing or published in a public comment, or
  - 3. Disapprove the code change proposal (D)
- 6.4.5 Supporting Information: The public comment shall include in a statement containing a reason and justification for the desired final action on the code change proposal. Reasons and justification which are reviewed in accordance with Section 6.4 and determined as not germane to the technical issues addressed in the code change proposal or committee action shall be identified as such. The public commenter shall be notified that the public comment is considered an incomplete public comment in accordance with Section 6.5.1 and the public comment shall be held until the deficiencies are corrected. The public commenter shall have the right to appeal this action in accordance with the policy of the ICC Board. A bibliography of any substantiating material submitted with a public comment shall be published with the public comment and the substantiating material shall be made available at the Final Action Hearing.
- **6.4.6 Number:** One copy of each public comment and one copy of all substantiating information shall be submitted. Additional copies may be requested when determined necessary by the Secretariat. A copy of the public comment in electronic form is preferred.
- **Review:** The Secretariat shall be responsible for reviewing all submitted public comments from an editorial and technical viewpoint similar to the review of code change proposals (See Section 4.2).
  - **6.5.1 Incomplete Public Comment:** When a public comment is submitted with incorrect format, without the required information or judged as not in compliance with these Rules of Procedure, the public comment shall not be processed. The Secretariat shall notify the public commenter of the specific deficiencies and the public comment shall be held until the deficiencies are corrected, or the public comment shall be returned to the public commenter with instructions to correct the deficiencies with a final date set for receipt of the corrected public comment.
  - **6.5.2 Duplications**: On receipt of duplicate or parallel public comments, the Secretariat may consolidate such public comments for Final Action Consideration. Each public commenter shall be notified of this action when it occurs.
  - **6.5.3 Deadline:** Public comments received by the Secretariat after the deadline set for receipt shall not be published and shall not be considered as part of the Final Action Consideration.
- **Publication:** The public hearing results on code change proposals that have not been public commented and the code change proposals with public commented public hearing results and successful assembly actions shall constitute the Final Action Agenda. The Final Action Agenda shall be posted on the ICC website at least 30 days prior to Final Action consideration.

#### 7.0 Final Action Consideration

- 7.1 Intent: The purpose of Final Action Consideration is to make a final determination of all code change proposals which have been considered in a code development cycle by a vote cast by eligible voters (see Section 7.4).
- **7.2 Agenda:** The final action consent agenda shall be comprised of proposals which have neither an assembly action nor public comment. The agenda for public testimony and individual consideration shall be comprised of proposals which have a successful assembly action or public comment (see Sections 5.7 and 6.0).
- **7.3 Procedure:** *The Robert's Rules of Order* shall be the formal procedure for the conduct of the Final Action Consideration except as these Rules of Procedure may otherwise dictate.
  - **7.3.1 Open Meetings:** Public hearings for Final Action Consideration are open meetings. Any interested person may attend and participate in the Floor Discussion.
  - 7.3.2 Agenda Order: The Secretariat shall publish an agenda for Final Action Consideration, placing individual code change proposals and public comments in a logical order to facilitate the hearing. The proponents or opponents of any proposal or public comment may move to revise the agenda order as the first order of business at the public hearing, or at any time during the hearing except while another proposal is being discussed. Preference shall be given to grouping like subjects together and for moving items back to a later position on the agenda as opposed to moving items forward to an earlier position. A motion to revise the agenda order is subject to a 2/3 vote of those present and voting.
  - **7.3.3** Presentation of Material at the Public Hearing: Information to be provided at the hearing shall be limited to verbal presentations. Audio-visual presentations are not permitted. Substantiating material submitted in accordance with Section 6.4.4 and other material submitted in response to a code change proposal or public comment shall be located in a designated area in the hearing room.
  - 7.3.4 Final Action Consent Agenda: The final action consent agenda (see Section 7.2) shall be placed before the assembly with a single motion for final action in accordance with the results of the public hearing. When the motion has been seconded, the vote shall be taken with no testimony being allowed. A simple majority (50% plus one) based on the number of votes cast by eligible voters shall decide the motion.
  - **7.3.5** Individual Consideration Agenda: Upon completion of the final action consent vote, all proposed changes not on the final action consent agenda shall be placed before the assembly for individual consideration of each item (see Section 7.2).
  - **7.3.6 Reconsideration:** There shall be no reconsideration of a proposed code change after it has been voted on in accordance with Section 7.3.8.
  - 7.3.7 Time Limits: Time limits shall be established as part of the agenda for testimony on all proposed changes at the beginning of each hearing session. Each person requesting to testify on a change shall be given equal time. In the interest of time and fairness to all hearing participants, the Moderator shall have limited authority to modify time limitations on debate. The Moderator shall have the authority to adjust time limits as necessary in order to complete the hearing agenda.
    - **7.3.7.1 Time Keeping:** Keeping of time for testimony by an individual shall be by an automatic timing device. Remaining time shall be evident to the person testifying. Interruptions during testimony shall not be tolerated. The Moderator shall maintain appropriate decorum during all testimony.
  - **7.3.8 Discussion and Voting:** Discussion and voting on proposals being individually considered shall be in accordance with the following procedures:
    - **7.3.8.1 Allowable Final Action Motions:** The only allowable motions for final action are Approval as Submitted, Approval as Modified by one or more modifications published in the Final Action Agenda, and Disapproval.

- 7.3.8.2 Initial Motion: The Code Development Committee action shall be the initial motion considered, unless there was a successful assembly action in accordance with Section 5.7.3. If there was a successful assembly action, it shall be the initial motion considered. If the assembly action motion fails, the code development committee action shall become the next motion considered.
- 7.3.8.3 Motions for Modifications: Whenever a motion under consideration is for Approval as Submitted or Approval as Modified, a subsequent motion and second for a modification published in the Final Action Agenda may be made (see Section 6.4.3). Each subsequent motion for modification, if any, shall be individually discussed and voted before returning to the main motion. A two-thirds majority based on the number of votes cast by eligible voters shall be required for a successful motion on all modifications.
- 7.3.8.4 Voting: After dispensing with all motions for modifications, if any, and upon completion of discussion on the main motion, the Moderator shall then ask for the vote on the main motion. If the motion fails to receive the majority required in Section 7.5, the Moderator shall ask for a new motion.
- **7.3.8.5 Subsequent Motion:** If the initial motion is unsuccessful, a motion for one of the other allowable final actions shall be made (see Section 7.3.8.1) and dispensed with until a successful final action is achieved. If a successful final action is not achieved, Section 7.5.1 shall apply.
- **7.3.9 Proponent testimony:** The Proponent of a public comment is permitted to waive an initial statement. The Proponent of the public comment shall be permitted to have the amount of time that would have been allocated during the initial testimony period plus the amount of time that would be allocated for rebuttal. Where a public comment is submitted by multiple proponents, this provision shall permit only one proponent of the joint submittal to waive an initial statement.
- **7.3.10 Points of Order:** Any person participating in the public hearing may challenge a procedural ruling of the Moderator. A majority vote of the eligible voters as determined in Section 5.7.4 shall determine the decision.
- 7.4 Eligible voters: ICC Governmental Member Representatives and Honorary Members in attendance at the Final Action Hearing shall have one vote per eligible attendee on all International Codes. Applications, whether new or updated, for governmental member voting representative status must be received by the Code Council ten days prior to the commencement of the first day of the Final Action Hearing in order for any designated representative to be eligible to vote.
- **7.5 Majorities for Final Action:** The required voting majority based on the number of votes cast of eligible voters shall be in accordance with the following table:

Public Hearing Action (see note)	Desired Final Action			
,	AS	AM	D	
AS	Simple Majority	<sup>2</sup> / <sub>3</sub> Majority	Simple Majority	
АМ	<sup>2</sup> / <sub>3</sub> Majority	Simple Majority to sustain the Public Hearing Action or; 2/3 Majority on additional modifications and 2/3 on overall AM	Simple Majority	
D	<sup>2</sup> / <sub>3</sub> Majority	<sup>2</sup> / <sub>3</sub> Majority	Simple Majority	

**Note:** The Public Hearing Action includes the committee action and successful assembly action.

- **7.5.1 Failure to Achieve Majority Vote:** In the event that a code change proposal does not receive any of the required majorities for final action in Section 7.5, final action on the code change proposal in question shall be disapproval.
- **7.6 Publication:** The Final action on all proposed code changes shall be published as soon as practicable after the determination of final action. The exact wording of any resulting text modifications shall be made available to any interested party.

## 8.0 Appeals

**8.1 Right to Appeal:** Any person may appeal an action or inaction in accordance with CP-1.

# **TABLE OF CONTENTS**

# CODE CHANGE PROPOSALS FOR FINAL ACTION MAY 14 – 23, 2010 IN DALLAS, TX

CODE	PAGE
International Building Code Fire Safety	2
General	
Means of Egress	
Structural	135
International Existing Building Code	212
International Fire Code	232
International Fuel Gas Code	290
International Mechanical Code	301
International Plumbing Code	340
International Residential Code	
Building	381
Plumbing	
Mechanical	424
International Wildland-Urban Interface Code	433
CODE CHANGE PROPOSALS FOR FINAL ACTION O NOVEMER 1, 2010 IN CHARLOTTE, NO	
ICC Administrative Code Provisions	437
International Energy Conservation Code	449
International Property Maintenance Code	505
International Residential Code	
Energy	512
International Zoning Code	515

## **CODE CHANGE PROPOSALS FOR FINAL ACTION:**

# MAY 14 - 23, 2010 DALLAS, TEXAS

The following group of code change proposals will be considered for Final Action during the Final Action Hearings at the **Sheraton Dallas Hotel in Dallas, TX**, **May 14 – 23, 2010**.

The deadline for public comments is **February 8, 2010**.

Code changes that will be placed on the agenda for *individual consideration* include:

- Proposed changes that receive a public comment by February 8, 2010. (See Section 6.0 of CP#28-05.)
- 2. Proposed changes that received a successful Assembly Action. (See Section 5.7 of CP#28-05.)

All other code changes will be ratified in a vote on the Final Action Consent Agenda, which will be placed before the assembly during each separate portion of the Final Action Hearings with a single motion for final action in accordance with the results of the public hearing in Baltimore. (See Section 7.3.4 of CP28.)

- International Building Code<sup>®</sup>
  - Fire Safety (FS)
  - General (G)
  - Means of Egress (E)
  - Structural (S)
- International Existing Building Code<sup>®</sup> (EB)
- International Fire Code<sup>®</sup> (F)
- International Fuel Gas Code<sup>®</sup> (FG)
- International Mechanical Code<sup>®</sup> (M)
- International Plumbing Code<sup>®</sup> (P)
- International Residential Code<sup>®</sup>
  - Building (RB)
  - Mechanical (RM)
  - Plumbing (RP)
- International Wildland-Urban Interface Code® (IWUIC)

# 2009/2010 INTERNATIONAL BUILDING CODE Fire Safety Code Development Committee

#### Daniel Nichols, PE - Chair

Fire Protection Engineer State of New York Division of Code Enforcement Albany, NY

#### Gene Boecker, AIA - Vice Chair

Project Manager Code Consultants Inc. St. Louis, MO

#### Anthony Apfelbeck, CBO

Rep: International Association of Fire Chiefs Fire Marshal/Building Official City of Altamonte Springs Florida Altamonte Springs, FL

#### Kenneth Bush

Rep: National Association of State Fire Marshals Senior Fire Protection Engineer Maryland Office of State Fire Marshal Easton, MD

#### Douglas Evans, PE

Fire Protection Engineer Clark County Dept. of Dev. Services - Bldg Div. Las Vegas, NV

#### W. Jay Hall, CBO

Codes Specialist Virginia Masonry Association Mechanicsville, VA

#### **Marcelo Hirschler**

GBH International Mill Valley, CA

#### Howard Hopper, PE

Manager, Regulatory Services Underwriters Laboratories San Jose, CA

### Steve Mills, CBO

Director of Building and Codes City of Hendersonville Hendersonville, TN

#### **Lorin Neyer**

Regional Compliance Officer California Office of Statewide Health Planning & Dev. - CA Manteca, CA

#### Tim Pate, CBO

Senior Plans Analyst City and County of Broomfield Building Department Broomfield, CO

## Michael Pokorny, PE

Fire Protection Engineer Montgomery County Department of Permitting Service Rockville, MD

#### Michael Shannon, PE, CBO

Development Services Engineer City of San Antonio, Development Services Department San Antonio, TX

#### Jerry Tepe, FAIA

Architect JRT-AIA-Architect Hopkinton, NH

## Michael Whalen

Code Specialist New Jersey Department of Community Affairs Trenton, NJ

#### **Staff Secretariat:**

**Ed Wirtschoreck, LA**Manager, Standards
International Code Council

# INTERNATIONAL BUILDING CODE FIRE SAFETY COMMITTEE HEARING RESULTS

## FS1-09/10

Committee Action: Disapproved

**Committee Reason:** Although non-fireresistance rated construction is addressed in Chapter 7, the bulk of the Chapter deals with fireresistance rated construction and smoke migration protection. Therefore, the change in title is not warranted. Further, using the term horizontal assemblies in the scope, by definition, refers to fireresistance rated assemblies, which currently does not include non-fireresistance rated assemblies. This could lead to confusion.

Assembly Action: None

FS2-09/10

Committee Action: Approved as Submitted

Committee Rea son: This proposal clarifies the current intent of the code by requiring compliance with all applicable code requirements for fire assemblies that serve multiple purposes.

Assembly Action: None

FS3-09/10

Committee Action: Disapproved

**Committee Rea son:** Using the term "building elements" limits the scope of the definition, based on the definition of building elements. Further, the term "linear opening" is specific and descriptive and should remain in the definition. Also, the term "linear" is consistent with terminology used in the referenced standards dealing with joints. Lastly, the term "void" is too broad.

Assembly Action: None

FS4-09/10

Committee Action: Approved as Submitted

**Committee Reason:** The committee agreed that passive and active fire protection should not be used together, specific to ASTM E119 and UL263 testing. Further, code officials should not be attempting to determine if a proposed test completely meets the requirements of test methods ASTM E119 or UL263. Lastly, adhoc tests that combine active and passive systems are not prohibited and can be reviewed and approved by the code official as alternative methods under Section 104.11 of the code.

Assembly Action: None

FS5-09/10

Committee Action: Disapproved

**Committee Reason:** The committee agreed that Chapter 26 sufficiently deals with the requirements for foam plastic materials. Further, neither the proposed text nor the proposed test standard (NFPA 259) contains pass fail criteria. Therefore there is no guidance on what to do with the test results. Lastly, these requirements are in the wrong location as foam plastic materials are combustible materials.

## FS6-09/10

Committee Action: Disapproved

Committee Reason: The committee felt that this was not needed as it was redundant with the action they took on FS4-09/10.

Assembly Action: None

## FS7-09/10

## Committee Action: Approved as Modified

#### Modify the proposal as follows:

**703.6 Marking and identification.** Fire walls, fire barriers, fire partitions, smoke barriers, and smoke partitions or any other wall required to have protected openings or penetrations shall be effectively and permanently identified with signs or stenciling. Such identification shall:

- 1. Be located in accessible concealed floor floor-ceiling or attic spaces;
- Be located with in 15 feet (4572 mm) of the end of each wall and at intervals not exceeding 30 feet (9144mm) measured horizontally along the wall or partition; and
- Included lettering not less than 3 inches (76 mm) in height with a minimum 3/8 inch (9.5 mm) stroke
  in a contrasting color incorporating the suggested wording. "FIRE AND/OR SMOKE BARRIER—
  PROTECT ALL OPENINGS" or other wording.

**Exception:** Walls in Group R-2 occupancies that do not have a removable decorative ceiling allowing access to the concealed space.

**Committee Rea son:** The committee agreed that the closer spacing and larger letter height would aid in enforcement of these provisions. The modification provides for consistent letter sizing, which again will aid in enforcement of these provisions.

Assembly Action: None

## FS8-09/10

Committee Action: Disapproved

**Committee Re ason:** The committee felt that the proposal was unclear in that penetrations through rated assemblies required by Table 601 may require protection depending on the details of the assembly. For example, penetrations through a cavity-type wall (studs and sheathing) may need to be protected in order to keep products of combustion out of the wall cavity.

Assembly Action: None

# FS9-09/10

Committee Action: Disapproved

**Committee Rea son:** The committee felt that these provisions were confusing and should be located in charging text rather than in an exception. Further, it would be more appropriate for the provisions to be located where the code addresses heavy timber construction.

Assembly Action: None

# FS10-09/10

#### Committee Action: Approved as Submitted

**Committee Reason:** The committee agreed that change will accommodate the 6'-4" width of a pair of 36" doors in a hollow metal frame, which is consistent with common construction practice.

## FS11-09/10

Committee Action: Disapproved

**Committee Rea son:** The committee felt that this proposal did not clarify the requirements for allowable projections. Further, the committee was concerned about the use of the term fire separation distance in that it seemed to conflict with the code-defined term.

Assembly Action: None

## FS12-09/10

Committee Action: Disapproved

**Committee Re ason:** This proposal seems to allow for projections where the fire separation distance is 24 inches with no substantiation. Further, the committee was concerned about the use of the term fire separation distance in that it seemed to conflict with the code-defined term.

Assembly Action: None

## FS13-09/10

Committee Action: Approved as Modified

#### Modify the proposal as follows:

**705.2.3 Combustible projections.** Combustible projections located where openings are not permitted or where protection of openings is required or where a combination of protected and unprotected openings are permitted required shall be of at least 1-hour fire-resistance-rated construction, Type IV construction, fire-retardant-treated wood or as required by Section 1406.3.

**Exception:** Type VB construction shall be allowed for combustible projections in R-3 occupancies with afire separation distance greater than or equal to 5 ft (1524 mm).

**Committee Reason:** The committee agreed that the proposal provides for coordination with Section 705.3 and Section 705.2.3 by including projections located where a combination of protected and unprotected openings are permitted. Further, the revisions to the exception clarify that the intent of the exception is not to allow a combustible projection within 24 inches of a lot line. Lastly, the modification provides for consistent code terminology.

Assembly Action: None

## FS14-09/10

Committee Action: Disapproved

**Committee Rea son:** The IBC should not be revised to match the IRC because the provisions in the IBC recognize a sprinklered building. Further, this provides consistency with the committee's action on FS13-09/10.

Assembly Action: None

# FS15-09/10

Committee Action: Approved as Submitted

**Committee Rea son:** The committee agreed that projection requirements should also be considered for buildings on the same lot that are not considered as one building.

## FS16-09/10

Committee Action: Disapproved

**Committee Rea son:** There was no justification provided to show the fire resistance characteristics of fire blocking as compared to gypsum board. Further, the terms "fire resistive" and "fire rating" are not consistent with terms currently used in the code.

Assembly Action: None

FS17-09/10

Committee Action: Disapproved

**Committee Reason:** The committee felt that referencing only Table 601 could lead to confusion, in that Table 602 should also be considered and may result in a higher fire resistance rating.

Assembly Action: None

FS18-09/10

Committee Action: Disapproved

**Committee Reason:** The committee felt more substantiation was required to justify this sprinkler trade-off and to clarify why in some cases an NFPA 13R or NFPA 13D system are considered appropriate protection to allow the trade-off.

Assembly Action: None

FS19-09/10

Committee Action: Disapproved

Committee Re ason: The proposed requirement for proportional spacing of openings is too subjective and unenforceable.

Assembly Action: None

FS20-09/10

Committee Action: Disapproved

**Committee Reason:** The proposal is impractical to enforce based on verification of the conditions of an existing building. Further, the language is confusing in that it could be interpreted to be more restrictive for buildings on the same lot than for buildings on separate adjacent lots.

Assembly Action: None

FS21-09/10

Committee Action: Disapproved

**Committee Reason:** The proposal is impractical to enforce based on verification of the conditions of an existing building. Further, the language is confusing in that it could be interpreted to be more restrictive for buildings on the same lot than for buildings on separate adjacent lots. Also, Section 705.8.6.1 appears to reduce the distance between buildings from 30 feet to 15 feet without technical justification.

## FS22-09/10

Committee Action: Disapproved

**Committee Reason:** Errors in the proposal cause too much confusion and could lead to misinterpretation. These include multiple incorrect section references and typographical errors related to proposed text.

Assembly Action: None

## FS23-09/10

**Note:** The following analysis was not in the Code Change monograph but was published on the ICC website at <a href="http://www.iccsafe.org/cs/codes/Documents/2009-10cycle/ProposedChanges/Standards-Analysis.pdf">http://www.iccsafe.org/cs/codes/Documents/2009-10cycle/ProposedChanges/Standards-Analysis.pdf</a> :

Analysis: The standard was not received by ICC staff.

Committee Action: Disapproved

**Committee Reason:** Disapproval was based on the proponents request for disapproval. Further, the proposed standard NFPA 221-09 has not been submitted.

Assembly Action: None

## FS24-09/10

Committee Action: Disapproved

**Committee Reason:** The committee felt that current language is clear and describes appropriate performance requirements for fire walls. Further, there are apparent differences between the proposed requirements and NFPA 221, which may be of concern. Lastly, reference to Section 705 in Section 706.2.3 would trigger weather resistance and exterior finishes requirements, which do not appear to be applicable.

Assembly Action: None

# FS25-09/10

Committee Action: Disapproved

**Committee Reason:** "Sources of ignition" is too subjective and should be defined to determine appropriate limitations. Further, there was no data submitted to show that sources of ignition within a wall have been a problem. Lastly, the term "potential sources" is too broad and therefore unenforceable.

Assembly Action: None

# FS26-09/10

Committee Action: Disapproved

**Committee Reason:** The committee felt that the reorganization did not clarify the requirements and preferred the current text in which the requirements for horizontal continuity and exterior wall intersection requirements remain separate.

Assembly Action: None

## FS27-09/10

#### Committee Action: Approved as Submitted

**Committee Reason:** The relationship of a fire wall to adjacent roofs that are sloping towards the fire wall is currently not addressed in the code and this proposal clearly describes this condition and provides reasonable fire wall continuity requirements.

## FS28-09/10

Committee Action: Disapproved

**Committee Reason:** There was no technical justification to support the 20 wall length allowance. Further, the proposed language could be interpreted to allow 100 percent openings in a fire wall that is 20 feet or less in length.

Assembly Action: None

## FS29-09/10

**PART I- IBC FIRE SAFETY** 

Committee Action: Disapproved

**Committee Reason:** The disapproval is based on the request for disapproval from the proponent based on previous code change activity.

Assembly Action: None

**PART II- IFC** 

Committee Action: Approved as Modified

Replace the proposal as follows:

**901.4.3 Fire areas.** Where buildings, or portions thereof, are divided into *fire areas* so as not to exceed the limits established for requiring a *fire protection system* in accordance with this chapter, such fire areas shall be separated by *fire barriers* or *horizontal assemblies*, or *both*, constructed in accordance with the *International Building Code* having a *fire-resistance rating* of not less than that determined in accordance with the *International Building Code* Section 707.3.9.

**Committee Reason:** The committee agreed that adding these fire area provisions in the *International Fire Code* would appropriately coordinate the IBC and the IFC.

Assembly Action: None

FS30-09/10

Withdrawn by Proponent

FS31-09/10

Committee Action: Approved as Submitted

**Committee Reason:** The committee agreed that high merchandise display in Group M occupancies is a fire safety concern, which warrants the 3 hour separation regardless of the display area or the presence of automatic sprinklers.

Assembly Action: None

FS32-09/10

Committee Action: Disapproved

Committee Reason: The committee felt that the term "to construct" was not clearer than the current language and therefore the additional language was not needed.

Assembly Action: None

FS33-09/10

Committee Action: Approved as Submitted

**Committee Reason:** The committee agreed that the same requirement to protect the joint of a fire barrier and the underside of the floor should also applies to the joint of a fire barrier and an exterior wall.

## FS34-09/10

Committee Action: Disapproved

**Committee Re ason:** Renumbering Chapter Section 708 to 714 would not be appropriate based on other committee actions where coordinating changes were disapproved.

Assembly Action: None

## FS35-09/10

Committee Action: Disapproved

**Committee Reason:** The committee felt that these requirements did not belong in the requirements for shafts and that this particular concern was already covered in the portion of the code dealing with joint requirements.

Assembly Action: None

## FS36-09/10

Committee Action: Disapproved

**Committee Reason:** The committee was concerned about the phrase "...and their supporting construction..." in that they were not clear on how this related to penetration protection.

Assembly Action: None

## FS37-09/10

**Note:** The following analysis was not in the Code Change monograph but was published on the ICC website at <a href="http://www.iccsafe.org/cs/codes/Documents/2009-10cycle/ProposedChanges/Standards-Analysis.pdf">http://www.iccsafe.org/cs/codes/Documents/2009-10cycle/ProposedChanges/Standards-Analysis.pdf</a> :

**Analysis:** Review of the proposed new standards indicated that, in the opinion of ICC staff, the standard did comply with ICC standards criteria.

Committee Action: Approved as Submitted

**Committee Reason:** The committee agreed that referencing NFPA 82-09 for refuse and laundry chutes in Group I2 occupancies was appropriate.

Assembly Action: None

# FS38-09/10

Committee Action: Approved as Submitted

**Committee Reason:** The committee agreed that the fire resistance and opening protectives required for the shaft that encloses the refuse or laundry chute also be provided as the minimum protection for the termination room.

Assembly Action: None

# FS39-09/10

Committee Action: Approved as Modified

Modify the proposal as follows:

708.3 Materials. The shaft enclosure shall be of materials permitted by the building type of construction.

708.3.1 Shaft enclosure at rubbish and laundry chutes. The shaft enclosure containing a rubbish or laundry chute shall include the following provisions:

**708.3.1.1 Single sided construction.** The chute shaft enclosure shall be of a listed construction that can be fully assembled in accordance with its approved design, including all required drywall taping when required by the design, from one side after the chute has been installed, regardless of the presence of bearing walls supporting floor framing.

708.3.1.2 Identical floor and wall ratings. A chute shaft enclosure shall provide the required fire protection rating over its entire length. Fire ratings shall not be lower at floor, ceiling or roof framing intersections.

**708.3.1.3** Extend shaft enclosure to roof. The shaft enclosure shall extend to the underside of the roof. Structural framing members supporting the roof shall be outside of the chute shaft enclosure and shall not be permitted inside the shaft enclosure.

**708.13.1 Rubbish and laundry chute enclosures.** A shaft enclosure containing a rubbish or laundry chute shall not be used for any other purpose and shall be enclosed in accordance with Section <del>708.3.1 and for the shaft for t</del>

**708.13.3 Rubbish and laundry chute access rooms.** Access openings Openings into access rooms for rubbish and laundry chutes shall be located in rooms or compartments enclosed by not less than 1-hour *fire barriers* constructed in accordance with Section 707 or *horizontal assemblies* constructed in accordance with Section 712, or both. Openings into the access rooms shall be protected by opening protectives having a *fire protection rating* of not less than 3/4 hour. Doors shall be self- or automatic-closing upon the detection of smoke in accordance with Section 715.4.8.3.

**715.4.1 Side-hinged or pivoted swinging doors.** *Fire door* assemblies with side-hinged and pivoted swinging doors shall be tested in accordance with NFPA 252 or UL 10C. After 5 minutes into the NFPA 252 test, the neutral pressure level in the furnace shall be established at 40 inches (1016mm) or less above the sill.

**Exception:** Side-hinged rubbish and laundry chute intake doors shall be tested to UL-10B and shall otherwise comply with the provisions of Section 715.4.8 and 715.4.8.1.1.

(Portions of the proposal not shown remain unchanged)

**Committee Rea son:** The committee agreed that rubbish and laundry chute access doors should remain latched and closed in the event of failure of the self-closing mechanism (tension spring). The modification removed any changes to the identified sections based on the committees previous actions to include referenced to NFPA 82 (FS37-09/10)

Assembly Action: None

# FS40-09/10

Committee Action: Disapproved

**Committee Reason:** The committee felt that reducing the elevator lobby threshold from 3 stories to 2 stories was not technically justified. Also the code currently allows a two story unprotected opening to be directly adjacent to what is proposed to be an enclosed elevator lobby, so it is unclear what is being achieved with this proposal.

Assembly Action: None

# FS41-09/10

Committee Action: Disapproved

**Committee Reason:** The committee felt that by definition a basement is a story and therefore the language is redundant. Further, the definition of story does not include mezzanines and therefore this language is not needed.

Assembly Action: None

# FS42-09/10

Committee Action: Disapproved

**Committee Reason:** The committee felt that current code language clearly establishes the requirements for elevator shaft doors and that the proposed language was unnecessary.

Assembly Action: None

# FS43-09/10

Withdrawn by Proponent

## FS44-09/10

Committee Action: Disapproved

Committee Reason: The committee did not agree that the proposed language was a coordination issue with Section 3007.4 and that the requirements for testing fire doors in fire partitions currently in the code were sufficient.

Assembly Action: None

## FS45-09/10

Committee Action: Approved as Modified

#### Modify the proposal as follows:

**708.14.1 Elevator lobby.** An enclosed elevator lobby shall be provided at each floor where an elevator shaft enclosure connects more than three *stories*. The lobby enclosure shall separate the elevator shaft enclosure doors from each floor by *fire partitions*. In addition to the requirements in Section 709 for *fire partitions*, doors protecting openings in the elevator lobby enclosure walls shall also comply with Section 715.4.3 as required for *corridor* walls and penetrations of the elevator lobby enclosure by ducts and air transfer openings shall be protected as required for *corridors* in accordance with Section 716.5.4.1. Elevator lobbies shall have at least one *means of egress* complying with Chapter 10 and other provisions within this code. Access to an exit through an <u>enclosed</u> elevator lobby shall be permitted provided that access to at least one other required exit does not require passing through the elevator lobby.

#### **Exceptions:**

(Exceptions to remain unchanged)

**Committee Re ason:** The committee agreed that the proposed language clarified the intent of the code by allowing egress through an elevator lobby as long as one other required exit was available without having to egress through the lobby.

Assembly Action: None

# FS46-09/10

Committee Action: Approved as Submitted

Committee Reason: The committee agreed that "level of exit discharge" was more appropriate terminology as it is a defined term in the code.

Assembly Action: None

# FS47-09/10

Committee Action: Approved as Submitted

**Committee Rea son:** The committee agreed that it was appropriate to reference the maximum air leakage requirements in Section 715.4.3.1 as being applicable to the additional hoistway doors discussed in exception 3 as an alternative to the elevator lobby enclosure.

Assembly Action: None

# FS48-09/10

Committee Action: Approved as Submitted

Committee Reason: The committee agreed replacing bottom seal with "horizontal of vertical seal" is more appropriate in that it reflects current testing practices.

## FS49-09/10

#### **Committee Action:**

#### **Approved as Submitted**

Committee Rea son: The committee agreed that it is common practice for many elevators within highrise buildings serve only the lower floors and as such should not require enclosed elevator lobbies.

**Assembly Action:** 

None

## FS50-09/10

**Committee Action:** 

Disapproved

**Committee Reason:** Based on the committees action taken on FS45-09/10. Also, the proposed wording seems confusing when compared to the proponents intent.

**Assembly Action:** 

None

# FS51-09/10

**Committee Action:** 

**Disapproved** 

**Committee Reason:** The committee agreed that the deletion hoistway pressurization option was not warranted based on the feasibility of designing a pressurization system as currently provided for in the code.

**Assembly Action:** 

None

## FS52-09/10

**Committee Action:** 

**Disapproved** 

**Committee Re ason:** Based on the proponents request for disapproval. Also, the committee felt the substantiation was lacking and in some cases contradictory to what the proposal was trying to do. Further, not permitting stair pressurization in this case conflicts with other requirements in the code where stair pressurization is required for highrise buildings.

**Assembly Action:** 

None

# FS53-09/10

Committee Action:

**Disapproved** 

**Committee Reason:** The committee felt that this proposal was not technically justified as being a problem in current practice. Further, requiring these exterior doors to open during the operation of the pressurization system could be a health and safety risk to the occupants of the building.

**Assembly Action:** 

None

# FS54-09/10

**Committee Action:** 

**Disapproved** 

**Committee Reason:** The wording is confusing in that it is not clear if the sprinkler system is required for the building or only the B occupancy. Further, sprinkler systems can fail and redundant safety features in a highrise building are needed.

**Assembly Action:** 

None

## FS55-09/10

Committee Action: Disapproved

**Committee Reason:** The committee felt that the reorganization of the elevator lobby requirements was too difficult to follow and the committee could not verify all previous requirements were accounted for. Placing the exceptions in 708.14 is confusing in that one could interpret that once you comply with one of the exceptions all of 708.14 is no longer applicable.

Assembly Action: None

## FS56-09/10

#### Committee Action:

#### **Approved as Submitted**

**Committee Reason:** The committee agreed that the proposal was a good reorganization of the requirements for vertical openings. The committee did recognize that there were also some minor technical changes and felt that these were appropriate and reasonable.

Note: The following modification was considered editorial:

**712.1.4 Penetrations.** Penetrations by pipe, tube, conduit, wire, cable and vents shall be protected in accordance with Section <u>714</u> <u>712.4</u>.

(Portions of the proposal not shown remain unchanged)

Assembly Action: None

## FS57-09/10

#### **Committee Action:**

#### **Approved as Submitted**

**Committee R eason:** The committee agreed that this proposal clarifies the requirement for fireblocking or draftstopping the combustible concealed space between the ceiling and the underside of the deck above in those cases where the fire partitions are not required to be continuous to the underside of the sheathing, deck, or slab above.

Assembly Action: None

# FS58-09/10

#### **Committee Action:**

### Disapproved

**Committee Rea son:** The committee felt that the proposed revisions did not accomplish the proponent's objective. The concern with the proposed language is the migration of smoke over the smoke barrier. The current language is preferred.

Assembly Action:

None

# FS59-09/10

## **Committee Action:**

## **Approved as Submitted**

Committee Rea son: The committee agreed that smoke barriers enclosing areas of refuge need not be continuous to the exterior walls.

**Assembly Action:** 

None

# FS60-09/10

#### **Committee Action:**

#### Approved as Submitted

**Committee Reason:** The committee agreed that smoke barriers enclosing fire service access elevator lobbies and occupant evacuation elevator lobbies need not be continuous to the exterior walls.

**Assembly Action:** 

None

## FS61-09/10

#### **Committee Action:**

#### Approved as Modified

#### Modify the proposal as follows:

**710.4 Continuity.** Smoke barriers shall form an effective membrane continuous from outside wall to outside wall and from the top of the foundation or floor/ceiling assembly below to the underside of the floor or roof sheathing, deck or slab above, including continuity through concealed spaces, such as those found above suspended ceilings, and interstitial structural and mechanical spaces. The supporting construction shall be protected to afford the required *fire-resistance rating* of the wall or floor supported in buildings of other than Type IIB, IIIB or VB construction.

#### **Exceptions:**

- Smoke-barrier walls are not required in interstitial spaces where such spaces are designed and constructed with ceilings that provide resistance to the passage of fire and smoke equivalent to that provided by the smoke-barrier walls.
- Smoke barriers used for elevator lobbies in accordance with Section 405.4.3, 3007.4.2 or 3008.11.2 are not required to need not extend from outside wall to outside wall.
- Smoke barriers used for areas of refuge in accordance with Section 1007.6.2 are not required to need not extend from outside wall to outside wall.

**Committee Reason:** Consistent with their actions on FS59-09/10 and FS60-09/10 the committee agreed that smoke barriers enclosing specific elevator lobbies and areas of refuge need not be continuous to the exterior walls. The committee also indicated that they preferred this proposal over FS59-09/10 and FS60-09/10. The modification added language consistent with the format of the code.

Assembly Action: None

## FS62-09/10

Committee Action: Disapproved

**Committee Reason:** The committee thought the language was incorrect in that it did not recognize that an area of refuge could be located anywhere on a floor. Further, other stairway or elevator shaft walls may not meet smoke barrier requirements.

Assembly Action: None

## FS63-09/10

#### **Committee Action:**

#### Approved as Submitted

**Committee Reason:** The committee agreed that this was a good reorganization of the opening requirements for smoke partitions. The committee did recognize the technical change in Section 711.7 and indicated that it was appropriate.

Assembly Action: None

# FS64-09/10

#### Committee Action:

Disapproved

**Committee Reason:** The proposed wording is confusing in that most of the proposal tells the code user what is not required. The code is typically written to indicate what is required.

## FS65-09/10

Committee Action: Disapproved

**Committee Reason:** The committee felt that the proposed change would conflict with Section 712.1 where you would need to go to Table 601 to determine the requirements for fireresistance. Further, Section 102.1 of the code differentiates between general and specific requirements sufficiently so coordination with 420 is not required and in fact might cause confusion instead of clarity.

Assembly Action: None

## FS66-09/10

Committee Action: Disapproved

**Committee Rea son:** Disapproval was to avoid conflict with previously approved proposal FS56-09/10. Additionally, the term horizontal assembly is used throughout the code and each individual instance should be scrutinized against the intent of this proposal.

Assembly Action: None

FS67-09/10

Committee Action: Disapproved

Committee Reason: Disapproval was based on the proponent's request.

Assembly Action: None

FS68-09/10

Committee Action: Disapproved

**Committee Reason:** The different methods of protecting the power cables should be described in the proposal for clarity. The proposal assumes that the power cables are metal clad and insulated, which may not always be the case. Lastly, the allowable voltage of the power cables should be indicated.

Assembly Action: None

FS69-09/10

Committee Action: Approved as Submitted

**Committee Reason:** The committee agreed that protection of floor drains, tub drains or shower drains provided by a membrane of a horizontal assembly was appropriate.

Assembly Action: None

FS70-09/10

Committee Action: Disapproved

**Committee Reason:** The committee felt that there was no technical justification for the T-rating requirement to be added for all through penetration firestop systems. The committee also felt that the exception to 713.4.1.1.2 has been well established and should not be removed.

Assembly Action: None

FS71-09/10

Committee Action: Disapproved

**Committee Reason:** The committee felt that the T-rating for the items described in item 4 of 713.3.2 was appropriate and was cost effective to achieve during the testing of the boxes and therefore should remain as a requirement.

## FS72-09/10

Committee Action: Disapproved

**Committee Reason:** The committee felt that there was a concern over the availability of approved contractors to provide these installations nation-wide. Further, the term "approved agency" puts the responsibility on the code official to approve these agencies, which in many cases they are not qualified to do.

Assembly Action: None

FS73-09/10

Committee Action: Disapproved

**Committee Rea son:** As with FS72-09/10, the committee felt that there should be a limitation for smaller buildings. Also, there was a concern over the availability of approved contractors to provide these installations nation-wide. Further, the term "approved agency" puts the responsibility on the code official to approve these agencies, which in many cases they are not qualified to do.

Assembly Action: None

FS74-09/10

Committee Action: Disapproved

**Committee Reason:** The committee felt some of the terms, such as "impractical" and "impossible" were too subjective and difficult to determine. Further, the phrase "calculations performed in an approve manner" is difficult to determine and perhaps unenforceable. Lastly, Section 104.11 already allows for alternative methods.

Assembly Action: None

FS75-09/10

Committee Action: Disapproved

**Committee Reason:** The committee felt that the ceiling membrane should be continuous and uninterrupted; however if this proposal were to be considered it should be limited to nonfireresistance rated partitions or fire partitions.

Assembly Action: None

FS76-09/10

Committee Action: Disapproved

**Committee Reason:** Disapproval was requested by the proponent based on the committee's action on FS56-09/10.

Assembly Action: None

FS77-09/10

Committee Action: Approved as Modified

Modify the proposal as follows:

**L RATING.** The air leakage rate rating of a through-penetration firestop system when tested in accordance with UL 1479, or a fire-resistant joint system when tested in accordance with UL 1479 or UL 2079, respectively.

(Portions of the proposal not shown remain unchanged)

**Committee Reason:** The committee agreed that using the listed L rating for determining air leakage rate was appropriate. The modification aligns the definition of L rating with the industry recognized definition.

## FS78-09/10

Committee Action: Disapproved

**Committee Rea son:** The committee felt that duplicating common requirements for vertical and horizontal assemblies was unnecessary. Further, vertical openings are more appropriately addressed in FS56-09/10 previously recommended for approval by this committee.

Assembly Action: None

FS79-09/10

Committee Action: Disapproved

Committee Reason: To be consistent with the committees action on FS78-09/10 and as requested by the proponent.

Assembly Action: None

FS80-09/10

Committee Action: Disapproved

**Committee Reason:** The committee felt that since Section 705.9 already requires this for exterior walls that the current language should remain, and revising it to say interior walls may even cause confusion.

Assembly Action: None

FS81-09/10

Committee Action: Disapproved

**Committee Reason:** The committee felt that the exception was in the wrong place and would be better located in the continuity provisions. Also, the committee felt there should be some referenced to an acceptable material to used to fill the void in question.

Assembly Action: None

FS82-09/10

Committee Action: Approved as Submitted

Committee Reason: The committee agreed that this proposal clarified the requirements for curtain walls.

Assembly Action: None

FS83-09/10

Committee Action: Disapproved

**Committee Reason:** The committee felt the phrase "calculations performed in an approve manner" is difficult to determine and perhaps unenforceable. Further, Section 104.11 already allows for alternative methods.

Assembly Action: None

FS84-09/10

Committee Action: Approved as Submitted

**Committee Reason:** The committee agreed that installation of joint systems should be in accordance with the listing, similar to that currently required for through penetration systems.

### FS85-09/10

Committee Action: Disapproved

**Committee Reason:** The committee felt that there should be a limitation for smaller buildings. Also, there was a concern over the availability of approved contractors to provide these installations nation-wide. Further, the term "approved agency" puts the responsibility on the code official to approve these agencies, which in many cases they are not qualified to do.

Assembly Action: None

## FS86-09/10

Committee Action: Disapproved

**Committee Re ason:** As with FS85-09/10, the committee felt there was a concern over the availability of approved contractors to provide these installations nation-wide. Further, the term "approved agency" puts the responsibility on the code official to approve these agencies, which in many cases they are not qualified to do.

Assembly Action: None

FS87-09/10

Committee Action: Approved as Submitted

**Committee Reason:** The committee agreed that since the criteria for F rating includes passage of heat and hot gasses that this change was editorial and ultimately easier to enforce.

Assembly Action: None

FS88-09/10

Committee Action: Approved as Modified

Modify the proposal as follows:

**714.4 Exterior curtain wall/floor intersection.** Where fire resistance-rated floor or floor/ceiling assemblies are required, voids created at the intersection of the exterior curtain wall assemblies and such floor assemblies shall be sealed with an *approved* system to prevent the interior spread of fire. Such systems shall be securely installed and tested in accordance with ASTME 2307 to prevent the passage of flame for the time period at least equal to the *fire-resistance rating* of the floor assembly and prevent the passage of heat and hot gases sufficient to ignite cotton waste. Height and fire-resistance requirements for curtain wall spandrels shall comply with Section 705.8.5.

**Exception**: Voids created at the intersection of the exterior curtain wall assemblies and such floor assemblies where the vision glass extends down to the finished floor level shall be permitted to be sealed with an approved material to prevent the interior spread of fire. Such material shall be securely installed and capable cable of preventing the passage of flame and hot gases sufficient to ignite cotton waste where subjected to ASTM E119 time-temperature fire conditions under a minimum positive pressure differential of 0.01 inch (0.254 mm) of water column (2.5 Pa) for the time period at least equal to the fire-resistance rating of the floor assembly.

**Committee Rea son:** The committee agreed that this proposal appropriately allows for assemblies that are commonly used in current building practice to be approved based on ASTM E119 time-temperature exposure conditions. The modification recognizes that the glass could extend up or down. Changing cable to capable was considered editorial.

Assembly Action: None

FS89-09/10 Withdrawn by Proponent

·

FS90-09/10

Committee Action: Disapproved

**Committee Rea son:** The committee felt that these changes should be done in the development of the referenced standard rather than in the code. Further, the limit of 30 minutes in Section 714.4.2 may not be appropriate for situations where the floor fireresistance rating is greater than this.

## FS91-09/10

Committee Action: Disapproved

**Committee Reason:** The committee felt that the term "perimeter fire barrier" was not needed and could cause confusion rather than clarity.

Assembly Action: None

## FS92-09/10

Committee Action: Disapproved

**Committee Rea son:** The committee concluded that since there have been no safety issues brought forth regarding joints between dissimilar materials and assemblies, this proposed language was not necessary.

Assembly Action: None

## FS93-09/10

Committee Action: Disapproved

**Committee Reason:** Based on previous committee actions the proponent requested disapproval. Further, the committee suggested that this subject matter be brought in front of the ICC-ES Technical Committee under their process.

Assembly Action: None

## FS94-09/10

Committee Action: Disapproved

**Committee Reason:** The committee felt that the proposed provisions would conflict with the atrium provisions in Chapter 4 of the code related to the atrium enclosure wall requirements.

Assembly Action: None

# FS95-09/10

Committee Action: Disapproved

**Committee Re ason:** The committee felt that listing and testing requirements for the electronic controls in horizontal sliding doors was not technically justified. Further, these requirements appear to be in the wrong location. Lastly, the committee had several unanswered questions as the proponent was not present for testimony.

Assembly Action: None

# FS96-09/10

Committee Action: Disapproved

**Committee Reason:** The committee felt that these provisions were not necessary to enforce the code. Elevator manufacturers have indicated that they can not achieve smoke and draft control requirements, therefore the option is to provide an enclosed elevator lobby, which are clearly provided for in the code.

## FS97-09/10

Committee Action: Disapproved

**Committee Rea son:** The committee felt that the proposed wording was confusing with respect to door requirements and door vision panel requirements. Further, NFPA 257 is the appropriate standard and should not be eliminated.

Assembly Action: None

FS98-09/10

Committee Action: Disapproved

**Committee Reason:** The committee felt that NFPA 257 is the appropriate standard and should remain. Further, the 24 inch measurement in Section 715.4.3.2.1 is unclear and arbitrary.

Assembly Action: None

FS99-09/10

Committee Action: Disapproved

**Committee Reason:** The committee preferred the language in FS107-09/10. Further, the language is unclear with respect to door requirements and door vision panel requirements.

Assembly Action: None

FS100-09/10

Committee Action: Approved as Submitted

**Committee Reason:** The committee agreed that the presence of sprinklers in the building should not eliminate the life safety and fire spread hazard posed by unrestricted transmission of radiant heat flux through large sizes of fire protection rated glazing panels especially when those doors are protecting exit enclosures or passageways.

Assembly Action: None

FS101-09/10

PART I- IBC FIRE SAFETY

Committee Action: Approved as Submitted

**Committee Reason:** The committee agreed that the proposed glazing marking is appropriate and consistent with Section 2403.1.

Assembly Action: None

PART II- IBC STRUCTURAL

Committee Action: Approved as Submitted

Committee Reason: To be consistent with the committee's action on FS101-09/10 Part I.

Assembly Action: None

FS102-09/10

Committee Action: Approved as Submitted

**Committee Reason:** The term "assemblies" appropriately includes the frame, which makes the requirements more conservative. Further, this is consistent with the committee's actions on FS107-09/10.

## FS103-09/10

#### **Committee Action:**

#### **Approved as Submitted**

**Committee Reason:** The committee agreed that these deletions were appropriate and that wired glass needs to meet all the requirements of other glazing materials used in this application. Also, the committee suggested editorially changing the title to Section 715.5.4 to "Glass & Glazing"

Note: The following modification was considered editorial:

**715.5.4** Glass and Glazing Nenwired glass. Glazing in *fire window assemblies* shall be fire-protection-rated glazing installed in accordance with and complying with the size limitations set forth in NFPA 80.

(Portions of the proposal not shown remain unchanged)

Assembly Action:

None

## FS104-09/10

**Committee Action:** 

Disapproved

Committee Reason: The committee felt that there was no substantiation provided to show that the 1-½ hour protection was not appropriate for openings within exterior walls with a rating greater than 1 hour.

**Assembly Action:** 

None

## FS105-09/10

**Committee Action:** 

Disapproved

**Committee Reason:** The committee felt that there was no substantiation provided to show that there is a life safety problem with radiant heat transfer to justify the minimum 36-inch height above the floor surface.

**Assembly Action:** 

None

## FS106-09/10

**Committee Action:** 

Disapproved

**Committee Reason:** Disapproval was to be consistent with the committee's actions on FS97-09/10 and FS99-09/10; the language is unclear with respect to door requirements and door vision panel requirements.

**Assembly Action:** 

None

# FS107-09/10

**Committee Action:** 

Approved as Submitted

**Committee Reason:** The committee agreed with the reorganization of the glazing provisions and the clarity of the fire rated glazing marking provisions. The revised provisions will give the code official all they need to determine if glazing is being used in the right locations.

**Assembly Action:** 

None

# FS108-09/10

**Committee Action:** 

Disapproved

Committee Reason: Disapproval was based on the proponent's request.

**Assembly Action:** 

## FS109-09/10

#### **Committee Action:**

#### **Approved as Submitted**

Committee Reason: The committee felt that this proposal was appropriate because the definition of labeled required the approved agency to maintain periodic inspections of the product.

**Assembly Action:** 

None

### FS110-09/10

#### **Committee Action:**

#### **Approved as Submitted**

**Committee Rea son:** The committee agreed that this proposal provides consistency in the working for the smoke damper ratings, and clarity of the two acceptable leakage-rating classes.

**Assembly Action:** 

None

## FS111-09/10

**Committee Action:** 

Disapproved

**Committee Reason:** Introduces additional hazards in exception #2 by changing the limit from Groups B and R to multi-story buildings without justification.

Assembly Action:

None

## FS112-09/10

**Committee Action:** 

Disapproved

Committee Reason: The proposal does not belong in this exception nor does it address the proponent's intent.

**Assembly Action:** 

None

# FS113-09/10

**Committee Action:** 

Disapproved

**Committee Reason:** The committee felt that the sprinkler threshold was confusing as written with respect to the area to be sprinklered throughout; the Group B area or the entire building. Further, perhaps this proposal would be better located under current exception #2. Lastly, the language "air.....moves" and "prevent recalculation" is confusing as it seems to contradict.

**Assembly Action:** 

None

# FS114-09/10

The following is errata that were not posted to the ICC website.

**716.5.4 (IMC 607.5.3) Fire partitions.** Ducts and air transfer openings that penetrate *fire partitions* shall be protected with *listed fire dampers* installed in accordance with their listing.

**Exceptions:** In occupancies other than Group H, *fire dampers* are not required where any of the following apply:

- Corridor walls in buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 or 903.3.1.2 and the duct is protected as a through penetration in accordance with Section 713.
- 2. Tenant partitions in *covered mall buildings* where the walls are not required by provisions elsewhere in the code to extend to the underside of the floor or roof sheathing, slab or deck above.
- The duct system is constructed of approved materials in accordance with the International Mechanical Code and the duct penetrating the wall complies with all of the following

#### requirements:

- 3.1. The duct shall not exceed 100 square inches (0.06 m2).
- 3.2. The duct shall be constructed of steel a minimum of 0.0217 inch (0.55 mm) in thickness.
- 3.3. The duct shall not have openings that communicate the *corridor* with adjacent spaces or rooms.
- 3.4. The duct shall be installed above a ceiling.
- 3.5. The duct shall not terminate at a wall register in the fire-resistance-rated wall.
- 3.6. A minimum 12-inch-long (305 mm) by 0.060-inch-thick (1.52 mm) steel sleeve shall be centered in each duct opening. The sleeve shall be secured to both sides of the wall and all four sides of the sleeve with minimum 11/2-inch by 11/2-inch by 0.060-inch (38mmby 38mmby 1.52 mm) steel retaining angles. The retaining angles shall be secured to the sleeve and the wall with No. 10 (M5) screws. The annular space between the steel sleeve and the wall opening shall be filled with mineral wool batting on all sides.
- 4. Such walls are penetrated by ducted HVAC systems, have a required fire-resistance rating of 1 hour or less, and are in buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 or 903.3.1.2. For the purposes of this exception, a ducted HVAC system shall be a duct system for conveying supply, return or exhaust air as part of the structure's HVAC system. Such a duct system shall be constructed of sheet steel not less than 26 gage thickness and shall be continuous from the air-handling appliance or equipment to the air outlet and inlet terminals.

**Reason:** Currently the code is less restrictive for penetrations of a fire barrier than a fire partition. This proposal adds an additional exception for fire partitions. This proposal appropriately duplicates provisions of Section 716.5.2 Exception 3 as an exception 4 for fire partitions because it is logical to allow the exception for a wall type where the code places lesser restrictions on its use. This exception does not limit the size of a duct penetration as Exception 3 does currently. If this exception is acceptable for fire barriers, it should be acceptable for fire partitions.

#### **Committee Action:**

#### **Approved as Submitted**

**Committee Re ason:** This proposal appropriately duplicates provisions of Section 716.5.2 exception 3 as an exception 4 for fire partitions to allow for a wall type with lesser restrictions on its use.

Assembly Action: None

## FS115-09/10

Committee Action: Disapproved

**Committee Reason:** The committee felt that this would allow the duct to pass through an occupied area, which would provide no protection from combustible materials.

Assembly Action: None

# FS116-09/10

Committee Action: Disapproved

**Committee Reason:** The committee felt that until the consensus standard is complete and available, Section 104.11 should continue to be used as the basis to approve these types of systems.

Assembly Action: None

## FS117-09/10

Committee Action: Disapproved

**Committee Rea son:** Errors such as improper Section references in Section 716.2 and improper section renumbering were the committees reasons for disapproval.

## FS118-09/10

# PART I- IBC FIRE SAFETY Committee Action:

#### **Approved as Modified**

Modify the proposal as follows:

717.2.1 Fireblocking materials. Fireblocking shall consist of the following materials:

- 1. Two-inch (51 mm) nominal lumber.
- 2. Two thicknesses of 1-inch (25 mm) nominal lumber with broken lap joints.
- One thickness of 0.719-inch (18.3 mm) wood structural panels with joints backed by 0.719-inch (18.3 mm) wood structural panels.
- One thickness of 0.75-inch (19.1 mm) particleboard with joints backed by 0.75-inch (19 mm) particleboard.
- 5. One-half-inch (12.7 mm) gypsum board.
- 6. One-fourth-inch (6.4 mm) cement-based millboard.
- Batts or blankets of mineral wool, mineral fiber or other approved materials installed in such a manner as to be securely retained in place.
- 8. Spray-applied cellulose insulation installed as tested for the specific application

**Committee Re ason:** The committee agreed that cellulose insulation used as fireblocking has been substantiated as another valid option and which allows for current construction practices. The modification allows for more types of cellulose insulation to be used as fireblocking material.

Assembly Action: None

# PART II - IRC Committee Action:

Approved as Modified

Modify proposal as follows:

**R302.11.1 Fireblocking materials.** Except as provided in Section R302.11, Item 4, fireblocking shall consist of the following materials:

- 1. Two-inch (51 mm) nominal lumber.
- 2. Two thicknesses of 1-inch (25 mm) nominal lumber with broken lap joints.
- One thickness of 23/32-inch (18.3 mm) wood structural panels with joints backed by 23/32-inch (18.3 mm) wood structural panels.
- 4. One thickness of %-inch (19.1 mm) particleboard with joints backed by %-inch (19 mm) particleboard.
- 5. One-half-inch (12.7 mm) gypsum board.
- 6. One-quarter-inch (6.4 mm) cement-based millboard.
- Batts or blankets of mineral wool or glass fiber or other approved materials installed in such a manner as to be securely retained in place.
- 8. Spray-applied Cellulose insulation installed as tested for the specific application.

**Committee Reason:** This change will increase the list of products that can be used for fire blocking and will permit more options. The modification removes the limitation to spray-applied cellulose.

Assembly Action: None

## FS119-09/10

#### **Committee Action:**

#### Approved as Submitted

Committee Reason: NFPA is an appropriate severe fire exposure test to qualify exterior wall coverings for use without fire blocking.

Assembly Action: None

## FS120-09/10

#### **Committee Action:**

#### Approved as Submitted

**Committee Reason:** The committee felt that this proposal clarifies a current interpretation problem by requiring automatic sprinklers specifically where the draft stopping is being omitted.

## FS121-09/10

**Committee Action:** 

**Approved as Submitted** 

**Committee Reason:** The committee felt that this proposal clarifies a current interpretation problem by requiring automatic sprinklers specifically where the draft stopping is being omitted.

**Assembly Action:** 

None

## FS122-09/10

**Committee Action:** 

Disapproved

**Committee Reason:** The committee agreed that Chapter 26, Section 2603 already requires this and therefore this proposal is redundant.

Assembly Action:

None

## FS123-09/10

**Committee Action:** 

Disapproved

**Committee Reason:** The committee's disapproval was based on the following reasons: This level of protection is not required by the code; this material and application poses no threat to life-safety and regulating it achieves nothing; this proposal would require a Class A finish on a material that is used in a space where other interior finishes are required to only be Class C; the code already requires this material to meet Section 719.7, so this is redundant text or should be handled as an exception if it were not required; and lastly, the ability to enforce this after the building occupancy is a concern.

**Assembly Action:** 

None

## FS124-09/10

PART I- IBC GENERAL Committee Action:

Disapproved

**Committee Re ason:** The dictionary term for insulation is sufficient and a code definition is not warranted. Further, the term "usually" is subjective and could lead to enforcement problems. Lastly, the definition of thermal insulation is incomplete as it can be used to reduce unwanted heat gain also.

**Assembly Action:** 

None

**PART II- IPC** 

**Committee Action:** 

Disapproved

Committee Reason: Based on the committee's action on FS124-09/10 Part I.

Assembly Action:

None

PART III - IRC

**Committee Action:** 

Disapproved

**Committee Reason:** The second sentence is commentary. The definition is too broad; pipe insulation could be used on a round duct. The proponent should get with the industry and work out an appropriate definition.

**Assembly Action:** 

None

# FS125-09/10

**Committee Action:** 

Approved as Submitted

Committee Reason: The committee agreed that these were editorial corrections to the table.

**Assembly Action:** 

## FS126-09/10

#### **Committee Action:**

### **Approved as Submitted**

Committee Reason: The committee agreed that the revised language was consistent with terminology use in the 2005 edition of the NDS.

**Assembly Action:** 

None

## FS127-09/10

#### **Committee Action:**

Disapproved

**Committee Reason:** Disapproval was based on lack of supporting data (test report) to verify this assembly. Approved design can contain many details and specifications and the committee could not verify these without a test report that included a description.

Assembly Action:

None

## FS128-09/10

#### **Committee Action:**

Disapproved

**Committee Reason:** The committee felt that the requirements were being decreased without justification and therefore the proposal was more than editorial.

**Assembly Action:** 

None

## FS129-09/10

#### **Committee Action:**

Disapproved

**Committee Reason:** Lack of substantiation to address the fire retardant relationship between the asbestos and the building paper.

Assembly Action:

None

## FS130-09/10

#### **Committee Action:**

Disapproved

**Committee Reason:** Disapproval was based on the proponent's request and the committee's previous actions on FS5-09/10.

**Assembly Action:** 

None

# FS131-09/10

#### **Committee Action:**

**Approved as Submitted** 

**Committee Reason:** The committee agreed that the critical spacing is not greater than 16 inches and therefore a spacing of les than 16 inches will be appropriate.

**Assembly Action:** 

None

# FS132-09/10

#### **Committee Action:**

Approved as Submitted

**Committee Rea son:** The committee agreed that this proposal is a correlative change between Section 721.6.2.3 and 705.5 based on previous code change activity, specifically FS16-07/08.

**Assembly Action:** 

## FS133-09/10

# PART I- IBC FIRE SAFETY Committee Action:

Disapproved

**Committee Rea son:** the committee felt that this proposal could prohibit the use of a product for new construction that may meet the code for such a use. Further, requirements for change of occupancy belongs in Chapter 34 or the International Existing Building Code for existing buildings.

Assembly Action: None

**PART II- IBC STRUCTURAL** 

Committee Action: Disapproved

Committee Reason: Based on the committee's action on FS133-09/10 Part I.

Assembly Action: None

FS134-09/10

Committee Action: Disapproved

Committee Reason: The committee felt the wording was confusing in that the packaging could be tested and labeled rather than the material.

Assembly Action: None

## FS135-09/10

## Committee Action: Approved as Submitted

**Committee Reason:** The committee felt that this proposal clarified the intent of the section with respect to the issue of thin finish materials and the construction used to fur them from the face of the wall.

Note: The following modification was considered editorial:

**803.11.2.1 Hangers and assembly members.** The hangers and assembly members of such dropped ceilings that are below the horizontal fire-resistance-rated fire-resistive floor or roof assemblies shall be of noncombustible materials. The construction of each set-out wall and horizontal fire-resistance-rated fire-resistive floor or roof assembly shall be of fire-resistance-rated construction as required elsewhere in this code.

**Exception:** In Types III and V construction, *fire-retardant-treated wood* shall be permitted for use as hangers and assembly members of dropped ceilings.

(Portions of the proposal not shown remain unchanged)

Assembly Action: None

# FS136-09/10

# PART I- IBC FIRE SAFETY

**Committee Action:** 

Approved as Submitted

**Committee Re ason:** The committee agreed that NFPA 286 was also an appropriate test method for polypropylene based on its similarity to polyethylene with respect to fire exposure.

Assembly Action: None

PART II- IFC

Committee Action: Approved as Submitted

Committee Reason: Based on the committee's action on FS136-09/10 Part I.

## FS137-09/10

**Note:** The following analysis was not in the Code Change monograph but was published on the ICC website at <a href="http://www.iccsafe.org/cs/codes/Documents/2009-10cycle/ProposedChanges/Standards-Analysis.pdf">http://www.iccsafe.org/cs/codes/Documents/2009-10cycle/ProposedChanges/Standards-Analysis.pdf</a> :

**Analysis:** Review of the proposed new standard indicated that, in the opinion of ICC staff, the standard did comply with ICC standards criteria.

**Committee Action:** 

**Approved as Submitted** 

**Committee Reason:** The committee agreed that ASTM D2859 is an equivalent test to 16 CFR and should be included as an alternate test method for interior floor finish materials.

Assembly Action:

None

## FS138-09/10

**Committee Action:** 

Approved as Submitted

**Committee Reason:** The committee felt that the proposal eliminated potential problems with the current code language and created code requirement that are more easily understood and enforced.

**Assembly Action:** 

None

## FS139-09/10

**Committee Action:** 

**Disapproved** 

**Committee Rea son:** The committee felt that Chapter 4 requirements should perhaps be removed if these requirements were to move to Chapter 8, however the committee was not convinced that Chapter 8 was appropriate as it deals only with interior finishes. Chapter 4 might be more appropriate as it deals with amusement structures. Lastly, the terms structure and compartment need to be defined in this context.

**Assembly Action:** 

None

# FS140-09/10

**PART I- IBC FIRE SAFETY** 

**Committee Action:** 

Disapproved

**Committee Reason:** The committee felt that the proposed revisions to add "durable and continuous" was too ambiguous and that it would be too much for the code official to determine and verify.

**Assembly Action:** 

None

**PART II - IRC** 

**Committee Action:** 

Disapproved

**Committee Reason:** The committee feels that the term "durable and continuous" are too subjective and will create enforcement issues. The proponent should rework this and bring it back.

**Assembly Action:** 

None

# FS141-09/10

**Committee Action:** 

Disapproved

**Committee Reason:** The committee felt that deleting defined terms from the code is not appropriate or justified in this case.

**Assembly Action:** 

## FS142-09/10

Committee Action: Disapproved

Committee Reason: The committee was concerned that there was no area limitations imposed on architectural trim or exterior wall veneers.

Assembly Action: None

## FS143-09/10

**Note:** The following analysis was not in the Code Change monograph but was published on the ICC website at <a href="http://www.iccsafe.org/cs/codes/Documents/2009-10cycle/ProposedChanges/Standards-Analysis.pdf">http://www.iccsafe.org/cs/codes/Documents/2009-10cycle/ProposedChanges/Standards-Analysis.pdf</a> :

**Analysis:** Review of the proposed new standards indicated that, in the opinion of ICC staff, the standard did comply with ICC standards criteria.

Committee Action: Disapproved

**Committee Rea son:** The committee was concerned that NFPA 289 was not appropriate for polypropylene materials. Further, no fire data to substantiate the fire hazard was provided.

Assembly Action: None

## FS144-09/10

**Note:** The following analysis was not in the Code Change monograph but was published on the ICC website at <a href="http://www.iccsafe.org/cs/codes/Documents/2009-10cycle/ProposedChanges/Standards-Analysis.pdf">http://www.iccsafe.org/cs/codes/Documents/2009-10cycle/ProposedChanges/Standards-Analysis.pdf</a> :

**Analysis:** Review of the proposed new standard indicated that, in the opinion of ICC staff, the standard did comply with ICC standards criteria.

# PART I- IBC FIRE SAFETY Committee Action:

Approved as modified

#### Modify the proposal as follows:

**Polypropylene Siding.** A shaped material, made principally from polypropylene <u>homopolymer</u>, <u>or copolymer</u>, <u>which in some cases may contain fillers and/or reinforcements</u>, that is used to clad exterior walls <u>of buildings</u> <del>covering</del>.

**1405.13 Polypropylene Siding.** Polypropylene siding conforming to the requirements of this section and complying with ASTM D7254 shall be <u>limited to permitted on</u> exterior walls of <u>Type VB construction</u> <u>buildings</u> located in areas where the wind speed specified in Chapter 16 does not exceed 100 miles per hours (45m/s) and the building height is less than or equal to 40 feet (12 192 mm) in Exposure C. Where construction is located in areas where the basic wind speed exceed 100 mile per hour (45 m/s), or building heights are in excess of 40 feet (12 192 mm), tests or calculations indicating compliance with Chapter 16 shall be submitted. Polypropylene siding shall be secured to the building so as to provide weather protection for the exterior walls of the building.

(Portions of the proposal not shown remain unchanged)

**Committee Rea son:** The committee agreed that ASTM D7254 was the appropriate material standard and appropriate installation requirements were provided. The modification created further consistency with the referenced standard and the current ICC ES Acceptance Criteria.

#### **Assembly Action:**

**PART II - IRC** 

Committee Action: Disapproved

**Committee Reason:** Based on the committee's previous action on RB148-09/10. Also, this material is not permitted in the IBC.

## FS145-09/10

Committee Action: Disapproved

**Committee Reason:** The committee was concerned about the disposition of the referenced standard, ANSI 137. Further, the committee felt the proposal should be limited to porcelain tiles only and suggests the proponet bring the change back for final action with the approved standard and the suggested revisions.

Assembly Action: None

## FS146-09/10

Committee Action: Approved as Submitted

**Committee Reason:** The committee agreed that the proposal clarified that cast artificial stone with minimum thickness of 1-1/2 inches is an anchored veneer rather than an adhered veneer.

Assembly Action: None

## FS147-09/10

PART I- IBC FIRE SAFETY Committee Action:

**Approved as Submitted** 

**Committee Reason:** The committee agreed that there is no difference in performance between plywood, OSB, or composite panels where the use of a Class III vapor retarder is concerned and therefore the term "wood structural panel" is appropriate.

Assembly Action: None

PART II - IRC

Committee Action: Approved as Submitted

Committee Reason: This change appropriately groups wood structural panels into a single category.

Assembly Action: None

# FS148-09/10

This code change was heard by the IBC Structural Code Development Committee.

Committee Action: Approved as Submitted

**Committee Reason:** Testing of anchored masonry veneer has shown that the horizontal reinforcement has no beneficial effect. This code change removes this unnecessary requirement from the code.

Assembly Action: None

## FS149-09/10

This code change was heard by the IBC Structural Code Development Committee.

Committee Action: Approved as Modified

Modify the proposal as follows:

**1405.7 Stone veneer.** Stone veneer units not exceeding 10 inches (254 mm) in thickness shall be anchored directly to masonry, concrete or to stud construction by one of the following methods:

- 1. (No change to current text)
- With wood stud backing, a 2-inch by 2-inch (51 by 51 mm) 0.0625-inch (1.59 mm) corrosion-resistant wire mesh with two layers of water-resistive barrier in accordance with Section 1404.2 shall be applied directly to wood studs spaced a maximum of 16 inches (406 mm) o.c. On studs, the mesh shall be attached with 2-inch-long (51 mm) corrosion-resistant steel wire furring nails at 4 inches (102

- mm) o.c. providing a minimum 1.125-inch (29 mm) penetration into each stud and with 8d common nails at 8 inches (203 mm) o.c. into top and bottom plates or with equivalent wire ties. There shall be not less than a 0.1055-inch (2.68 mm) corrosion-resistant wire, or approved equal, looped through the mesh for every 2 square feet (0.2 m2) of stone veneer. This tie shall be a loop having legs not less than 15 inches (381 mm) in length, so bent that it will lie in the stone veneer mortar joint. The last 2 inches (51 mm) of each wire leg shall have a right-angle bend. One-inch (25 mm) minimum thickness of cement grout shall be placed between the backing and the stone veneer.
- 3. With cold-formed steel stud backing, a 2-inch by 2-inch (51 by 51 mm) 0.0625-inch (1.59 mm) eorresion-resistant-zinc-coated or non-metallic coated wire mesh with two layers of water-resistive barrier in accordance with Section 1404.2 shall be applied directly to steel studs spaced a maximum of 16 inches (406 mm) o.c. The mesh shall be attached with 2-inch-long (51 mm)-corrosion-resistant #8 self-drilling, tapping screws at 4 inches (102 mm) o.c. providing a minimum 0.5-inch (12.7 mm) penetration into each stud, and at 8 inches (203 mm) o.c. into top and bottom tracks or with equivalent wire ties. All screws shall extend through the steel connection a minimum of three exposed threads. There shall be not less than a 0.1055-inch (2.68 mm) eorresion-resistant-zinc-coated or non-metallic coated wire, or approved equal, looped through the mesh for every 2 square feet (0.2 m2) of stone veneer. This tie shall be a loop having legs not less than 15 inches (381 mm) in length, so bent that it will lie in the stone veneer mortar joint. The last 2 inches (51 mm) of each wire leg shall have a right-angle bend. One-inch (25 mm) minimum thickness of cement grout shall be placed between the backing and the stone veneer. The cold-formed steel framing members shall have a minimum uncoated bare steel thickness of 0.04283 inches (1.0879 mm).

**Committee Reason:** This proposal provides a reasonable extension of stone veneer to steel studs in Section 1405.7, item 3. It also clarifies that current item 2 is specifically applicable for anchoring to wood studs. The modification substitutes wording in item 3 that is more in line with common steel industry terminology. The addition of appropriate steel stud requirements exposes problems with the current wood stud requirement (item 2) that should be addressed by a public comment.

Assembly Action: None

## FS150-09/10

# PART I- IBC FIRE SAFETY Committee Action:

Disapproved

**Committee Rea son:** The committee felt that the proposal was confusing because of the circular code references. Reference back to 1405.10 does not get the code user forward to the subsection of 1405.10.2.

Assembly Action: None

PART II - IRC Committee Action:

**Approved as Submitted** 

**Committee Reason:** This change provides a prescriptive method for flashing or weep screeds for adhered masonry veneer. The committee suggests the proponent improve the language to clarify where the flashing should start, above or below the plate.

Assembly Action: None

# FS151-09/10

PART I- IBC FIRE SAFETY Committee Action:

Disapproved

**Committee Rea son:** The committee felt that the proposal was confusing because of the circular code references. Reference back to 1405.10 does not get the code user forward to the subsection of 1405.10.2.

Assembly Action: None

PART II- IRC B/E Committee Action:

Disapproved

**Committee Reason:** The committee feels this is a good start but the list needs to be reworked so that the application is clear. The list should appear as numbered items as is done in other sections of the code. The proponent should rework this and bring it back.

## FS152-09/10

**Committee Action:** 

Approved as Submitted

Committee Reason: The committee agreed that the proposal was consistent with the scope of the referenced standard (ASTM F2006)

**Assembly Action:** 

None

FS153-09/10

Withdrawn by Proponent

FS154-09/10

**Committee Action:** 

**Approved as Submitted** 

Committee Rea son: The committee agreed that the proposed relocation would result in more consistent enforcement of these requirements.

**Assembly Action:** 

None

## FS155-09/10

PART I- IBC FIRE SAFETY

**Committee Action:** 

Disapproved

**Committee Reason:** The committee felt the proposal was not coordinated with the definition of fire separation distance, was too broad in its application and was already cover in the projection requirements of the code.

**Assembly Action:** 

None

PART II- IRC B/E Committee Action:

Disapproved

**Committee Reason:** This is intended for a specific type of housing but the language addresses more than intended. This change would create permit issues with respect to replacement. This will make compliance difficult. Also, the content of the deck could ignite even though the exception is used.

**Assembly Action:** 

None

## FS156-09/10

This code change was heard by the IBC Structural Code Development Committee.

PART I- IBC FIRE SAFETY

**Committee Action:** 

Disapproved

**Committee Reason:** The proponent requested disapproval at this time so that the proposal requirements for foam plastic sheathing can be better coordinated with the energy code. This includes the treatment of positive and negative wind pressures, performance of the lateral force system as well as fastener requirements.

**Assembly Action:** 

None

PART II- IRC B/E

The following is errata that were not posted to the ICC website.

Add to Table R703.3.1 fourth row title "EPS" and values in first column "95 125 130", add to Table R703.4 reference to footnote "aa" to 'Foam plastic sheathing into stud' column heading, delete added words to Table R703.4 footnote 'j', add strike out Section R703.5.1, add strike out and correct cross-reference Section R703.11.2.1.

# TABLE R703.3.1 REQUIREMENTS FOR FOAM PLASTIC SHEATHING IN EXTERIOR WALL COVERING ASSEMBLIES<sup>1,2</sup>

<u>Foam</u>	Foam Sheathing Thickness (in) <sup>3</sup>	Maximum Wind Speed (mph) – Exposure B <sup>4</sup>									
Plastic		Walls with Interior	or Finish⁵	Walls without Interior Finish							
Sheathing Material <sup>3</sup>		16"oc framing 24	l" <u>oc framing</u> 16	3" <u>oc framing</u> 24	l" <u>oc framing</u>						
Siding Offset from Foam Sheathing per Section R703.3.2.2											
<u>EPS</u>	3 <u>4"</u> 1 <u>"</u> ≥1-1/2"	95 125 130	NP 85 130	<u>NP</u> 105 130	NP NP 105						

# TABLE R703.4 WEATHER-RESISTANT SIDING ATTACHMENT AND MINIMUM THICKNESS

			WATER	TYPE OF SUPPORTS FOR THE SIDING MATERIAL AND FASTENERS <sup>b,c,d</sup>					
SIDING MATERIAL	NOMINAL THICKNESS <sup>a</sup> (inches)	JOINT TREATMENT	RESISTIVE BARRIER REQUIRED	Wood or wood structural panel sheathing	Fiberboard sheathing into stud	Gypsum sheathing into stud	Foam plastic sheathing into stud <sup>aa</sup>	Direct to studs	Number or spacing of fasteners <sup>bb</sup>

Wood board sidings applied vertically shall be nailed to horizontal nailing strips or blocking set 24 inches on center. Nails shall penetrate 1 1/2 inches into studs, studs and wood sheathing combined or blocking. <u>For application over foam sheathing, refer to Section R703.3.2.2.</u> combined or blocking.

**R703.5.1 Application.** Wood shakes or shingles shall be applied either single-course or double-course over nominal 1/2-inch (13 mm) wood-based sheathing or to furring strips over nominal 1/2-inch (13 mm) nonwood sheathing.

**Exception:** Wood shakes or shingles over foam plastic sheathing, shall be applied to wood furring strips in accordance with Section R703.3.2.2.

A permeable water-resistive barrier shall be provided in accordance with Section R703.2 ever all sheathing, with horizontal overlaps in the membrane of not less than 2 inches (51mm) and vertical overlaps of not less than 6 inches (152 mm). Where furring strips are used, they shall be 1 inch by 3 inches or 1 inch by 4 inches (25mmby 76 mm or 25mm by 102 mm), and shall be fastened horizontally to the studs with 7d or 8d box nails. For application over foam plastic sheathing, furring strips shall be fastened in accordance with Section R703.3.2.2 and Furring strips shall be spaced a distance on center equal to the actual weather exposure of the shakes or shingles, not to exceed the maximum exposure specified in Table R703.5.2. The spacing between adjacent shingles to allow for expansion shall not exceed 1/4 inch (6 mm), and between adjacent shakes, it shall not exceed 1/2 inch (13 mm). The offset spacing between joints in adjacent courses shall be a minimum of 11/2 inches (38 mm).

R703.11.2.1 Basic wind speed not exceeding 90 miles per hour and Exposure Category B. Where the basic wind speed does not exceed 90 miles per hour (40 m/s), the Exposure Category is B and gypsum wall board or equivalent is installed on the side of the wall opposite the foam plastic sheathing, the minimum siding fastener penetration into wood framing shall be 11/4 inches (32 mm) using minimum 0.120-inch diameter nail (shank) with a minimum 0.313-inch diameter head, 16 inches on center. The foam plastic sheathing minimum thickness shall comply with Section R703.3.1 and shall not exceed a maximum thickness of 1.5 inches (38mm) for a 0.120-inch diameter nail or 2.0 inches (51 mm) for a 0.135-inch diameter nail. shall be 1/2-inch-thick (12.7 mm) (nominal) extruded polystyrene per ASTM C578, 1/2-inch-thick (12.7 mm) (nominal) polyisocyanurate per ASTM C1280, or 1-inch-thick (25 mm)(nominal) expanded polystyrene per ASTM C578. Vinyl siding shall be permitted to be installed on furring strips in accordance with Section R703.2.2 using the siding manufacturer's installation instructions when foam plastic sheathing thickness complies with Section R703.3.1.

(Portions of proposal not shown, remain the unchanged)

#### Committee Action:

#### **Approved as Submitted**

**Committee Reason:** This is a needed addition to the code and will provide an efficient method to provide energy savings. The committee is concerned that this needs improvement but this is a good start. The proponent should work with industry and bring the needed improvement back to the Final Action.

## FS157-09/10

#### **Committee Action:**

#### **Approved as Submitted**

**Committee Re ason:** The committee agreed that the proposed revisions to Section 1406 will clarify the application and interpretation of this section resulting in ease of use and enforcement. Further, the proposal brings in code-defined terms where appropriate.

**Assembly Action:** 

None

## FS158-09/10

#### **Committee Action:**

Disapproved

**Committee Reason:** The committee felt that the current provisions are based on appropriate data and should remain. Further, data to substantiate the removal of these provisions has not been provided. Lastly, the committee felt there was no relation between Section 1406.2.1.2 and Section 705.5.

**Assembly Action:** 

None

## FS159-09/10

#### **Committee Action:**

**Approved as Submitted** 

**Committee Rea son:** The committee agreed that the readability of Section 1406.2.4 is improved and that systems tested to NFPA 285 as required by Section 717 should not be limited to the 1-5/8 inch limitation.

**Assembly Action:** 

None

## FS160-09/10

**Note:** The following analysis was not in the Code Change monograph but was published on the ICC website at <a href="http://www.iccsafe.org/cs/codes/Documents/2009-10cycle/ProposedChanges/Standards-Analysis.pdf">http://www.iccsafe.org/cs/codes/Documents/2009-10cycle/ProposedChanges/Standards-Analysis.pdf</a> :

**Analysis:** Review of the proposed new standards indicated that, in the opinion of ICC staff, the standard did comply with ICC standards criteria.

# PART I- IBC FIRE SAFETY Committee Action:

**Approved as Submitted** 

Committee Reason: The committee agreed that NFPA 275 was appropriate to qualify materials for use as thermal barriers.

**Assembly Action:** 

None

# PART II- IRC B/E Committee Action:

**Approved as Submitted** 

**Committee Reason:** This change is a good improvement to the code. The new standard eliminates the need for the test procedure in the code. Also, the three UL Standards are referenced in the new standard thereby eliminates the need for the code text to refer to them.

Assembly Action:

None

# FS161-09/10

**Note:** The following analysis was not in the Code Change monograph but was published on the ICC website at <a href="http://www.iccsafe.org/cs/codes/Documents/2009-10cycle/ProposedChanges/Standards-Analysis.pdf">http://www.iccsafe.org/cs/codes/Documents/2009-10cycle/ProposedChanges/Standards-Analysis.pdf</a> :

Analysis: The standard was not received by ICC staff.

#### **Committee Action:**

**Disapproved** 

**Committee Reason:** Disapproval was based on previous committee action on FS160-09/10 Part I and the proponent's request for disapproval.

**Assembly Action:** 

## FS162-09/10

#### **Committee Action:**

#### **Approved as Submitted**

Committee R eason: The committee agreed that testing MCM systems in accordance with NFPA 286 as appropriate and would yield conservative results.

Note: The following modification was considered editorial:

**1407.10.3 Thermal barrier not required.** The thermal barrier specified for MCM in Section 1407.10.2 is not required where:

- The MCM system is specifically approved based on tests conducted in accordance with NFPA 286
   and (with the acceptance criteria of Section 803.1.2.1), UL 1040 or UL 1715. Such testing shall be
   performed with the MCM in the maximum thickness intended for use. The MCM system shall include
   seams, joints and other typical details used in the installation and shall be tested in the manner
   intended for use.
- The MCM is used as elements of balconies and similar projections, architectural trim or embellishments.

**Assembly Action:** 

None

## FS163-09/10

#### **Committee Action:**

#### Approved as Modified

Modify the proposal as follows:

1407.11.3.3 Specifications. MCM shall be required to comply with all of the following:

- MCM shall have a self-ignition temperature of 650°F (343°C) or greater when tested in accordance with ASTM D 1929.
- MCM shall have a smoke-developed index of not more than 450 when tested in the maximum
  thickness intended for use in accordance with ASMT E-84 or UL-723 or a maximum average smoke
  density rating not greater than 75 when tested in the maximum thickness intended for use in
  accordance with ASTM-D-2843.
- 23. MCM shall conform to one of the following combustibility classifications when tested in accordance with ASTM D 635:

**Class CC1:** Materials that have a burning extent of 1 inch (25 mm) or less when tested at a nominal thickness of 0.060 inch (1.5 mm) or in the thickness intended for use.

Class CC2: Materials that have a burning rate of 2 ½ inches per minute (1.06 mm/s) or less when tested at a nominal thickness of 0.060 inch (1.5 mm) or in the thickness intended for use.

1407.11.4.2 Specifications. MCM shall be required to comply with all of the following:

- MCM shall have a self-ignition temperature of 650°F (343°C) or greater when tested in accordance with ASTM D 1929.
- 2. MCM shall have a smoke-developed index of not more than 450 when tested in the maximum thicknesses intended for use in accordance with ASMT E 84 or UL 723 or a maximum average smoke density rating not greater than 75 when tested in the maximum thicknesses intended for use in accordance with ASTM D 2843.
- 23. MCM shall conform to one of the following combustibility classifications when tested in accordance with ASTM D 635:

**Class CC1:** Materials that have a burning extent of 1 inch (25 mm) or less when tested at a nominal thickness of 0.060 inch (1.5 mm), or in the thickness intended for use.

Class CC2: Materials that have a burning rate of 2 ½ inches per minute (1.06 mm/s) or less when tested at a nominal thickness of 0.060 inch (1.5 mm), or in the thickness intended for use.

(Portions of the proposal not shown remain unchanged)

**Committee Reason:** The committee agreed that metal composite materials (MCM) should be used consistently with light transmitting plastics based on similar fire hazards. The modification eliminates confusion with the fact that MCM panels are currently required to meet ASTM E84.

**Assembly Action:** 

## FS164-09/10

#### **Committee Action:**

#### **Approved as Submitted**

**Committee Reason:** The committee agreed that these were appropriate technical requirements for the new finish material and that suggested improvements related to referencing equivalent testing standards can be proposed in the public comment period for Final Action consideration.

**Assembly Action:** 

None

FS165-09/10

Withdrawn by Proponent

## FS166-09/10

**Committee Action:** 

Disapproved

Committee Reason: The committee felt that Section 2603.3 already has this requirement and therefore this proposal is redundant.

**Assembly Action:** 

None

## FS167-09/10

**Committee Action:** 

Disapproved

Committee Reason: The committee felt that the current language was clearer than the proposal.

**Assembly Action:** 

None

## FS168-09/10

## **PART I- IBC FIRE SAFETY**

**Committee Action:** 

**Approved as Submitted** 

**Committee Reason:** The committee agreed that in current construction practices there are more conditions where there is direct communication between crawl spaces and attics and the interior of the building. As such, providing this as a limitation for allowing foam plastics to be protected only by an ignition barrier is appropriate.

**Assembly Action:** 

None

PART II- IRC B/E

**Committee Action:** 

Approved as Submitted

**Committee Reason:** This change clarifies this section more and adds an additional layer of safety as stated in the proponent's published reason.

**Assembly Action:** 

None

# FS169-09/10

PART I- IBC FIRE SAFETY

**Committee Action:** 

Disapproved

**Committee Reason:** The committee felt that using inorganic coated glass mat as an ignition barrier was not justified. Further, the appropriateness of the testing threshold is unknown.

**Assembly Action:** 

# PART II- IRC B/E Committee Action:

#### Disapproved

**Committee Reason:** There was not sufficient test data submitted. A specific standard needs to be referenced for this product. The committee feels that there needs to be a standard for ignition barrier, rather than continue to add to the list of products. ICC-ES is working toward this and this should be brought back later.

Assembly Action:

None

## FS170-09/10

**Committee Action:** 

Disapproved

Committee Reason: Based on a lack of technical justification and the proponent's request for disapproval.

**Assembly Action:** 

None

## FS171-09/10

# PART I- IBC FIRE SAFETY Committee Action:

**Approved as Modified** 

Modify the proposal as follows:

**2603.4.1.14 Floors.** The thermal barrier specified in Section 2603.4 is not required to be installed on the walking surface of a structural floor system that contains foam plastic insulation when the foam plastic is covered by a minimum nominal ½-inch (12.7 mm) thick wood structural panel or <u>approved</u> equivalent. The thermal barrier specified in Section 2603.4 is required on the underside of the structural floor system that contains foam plastic insulation when the underside of the structural floor system is exposed to the interior of the building.

**Excepti** on: Foam plastic used as part of an interior floor finish.

**Committee Reason:** The committee agreed that this proposal reflects current construction practices and did not pose a significant hazard. The modification adds code-consistent language to verify that the equivalent is approved by the code official.

**Assembly Action:** 

None

# PART II- IRC B/E Committee Action:

**Approved as Submitted** 

**Committee Reason:** This change provides a viable means to require adequate barriers for foam plastic in floors that is consistent with the protection for attics and crawl spaces. This recognizes the use of SIPS panels for floors which is already in the IRC.

**Assembly Action:** 

None

# FS172-09/10

**Committee Action:** 

Disapproved

Committee Rea son: The committee felt that using small scale testing to predict large scale results is not appropriate to qualify alternate foam plastic materials.

**Assembly Action:** 

None

# FS173-09/10

**Committee Action:** 

Approved as Submitted

Committee Reason: The committee agreed that this proposal was reasonable and reflects standard labeling practices.

**Assembly Action:** 

## FS174-09/10

**Committee Action:** 

Approved as Submitted

Committee Reason: The committee felt that these requirements are appropriate to qualify a foam plastic for use in plenums.

**Assembly Action:** 

None

## FS175-09/10

**Committee Action:** 

Disapproved

Committee Reason: Based on the committee's previous action on FS174-09/10 and the proponent's request for disapproval.

**Assembly Action:** 

None

## FS176-09/10

**PART I- IBC FIRE SAFETY** 

**Committee Action:** 

Disapproved

Committee Reason: Based on apparent conflicts with the *International Energy Conservation Code* and the proponent's request for disapproval.

**Assembly Action:** 

None

PART II- IRC B/E Committee Action:

Disapproved

**Committee Reason:** Based on the proponent's request for disapproval. The proponent will work with industry and incorporate the out of order modification and bring this back to the Final Action.

**Assembly Action:** 

None

## FS177-09/10

**Committee Action:** 

Disapproved

Committee Reason: The committee felt there was insufficient data to support this allowance and that if this was to be placed in the code it should be in a separate exception.

Assembly Action:

None

# FS178-09/10

**Committee Action:** 

Approved as Submitted

**Committee Reason:** The committee agreed that it was appropriate to include smoke developed requirements for interior finishes qualified under the special approval requirements to provide a comparable level of safety to the provisions of Chapter 8.

**Assembly Action:** 

None

# FS179-09/10

**Committee Action:** 

Approved as Submitted

**Committee Reason:** The committee agreed that this change clarifies and coordinates the relationship between testing performed in accordance with NFPA 285 and testing performed for special approval.

**Assembly Action:** 

## FS180-09/10

This code change was heard by the IBC Structural Code Development Committee.

Committee Action: Disapproved

Committee Rea son: As worded, the proposal would require guards or screens at all skylights and that is considered unnecessary. The requirement should also apply to skylights that are not glass, yet the proposed text specifically refers to the glass below the guard. In addition the area of the screen over which the 200 pound force should be applied in not specified. A consensus test standard is being worked on currently that should resolve this.

Assembly Action: None

## FS181-09/10

Committee Action: Disapproved

Committee Reason: The committee felt there was a lack of data to indicate that a plastic skylight with metal edge protection is a fire exposure problem.

Assembly Action: None

## FS182-09/10

#### Committee Action: Approved as Modified

#### Modify the proposal as follows:

**2610.2 Mounting.** The light-transmitting plastic shall be mounted above the plane of the roof on a curb constructed in accordance with the requirements for the type of construction classification, but at least 4 inches (102 mm) above the plane of the roof. Edges of the light-transmitting plastic skylights or domes shall be protected by metal or other approved noncombustible material, or the light transmitting plastic dome or skylight shall be shown to be able to resist ignition where exposed at the edge to a flame from a Class B brand as described in ASTM E 108 or UL 790. The Class B brand test shall be conducted on a skylight that is elevated to a height <u>as specified in by</u> the manufacturer's installation instructions, but not less than 4 inches (102 mm).

#### **Exceptions:**

(Exception remain unchanged)

**Committee R eason:** The committee felt that the proposal appropriately ties the testing with the actual installation requirements specific to a given skylight. The modifications clarify the intent by specifically mentioning the installation instructions.

Assembly Action: None

## FS183-09/10

#### Committee Action: Approved as Submitted

**Committee Reason:** To allow for approval was to allow for skylights with larger aspect ratios, the committee agreed that basing the rise required on the maximum span is excessive and referring to the maximum width, while retaining the minimum of 3 inches, is appropriate.

Assembly Action: None

# FS184-09/10

#### Committee Action: Approved as Submitted

**Committee Reason:** The committee agreed that foam plastic cores are used with FRP composite panels and as such the code requirements of Chapter 26 are applicable and should be referenced.

## FS185-09/10

#### **Committee Action:**

#### **Approved as Modified**

Modify the proposal as follows:

**2612.6 Exterior use.** Fiber reinforced polymer shall be permitted to be installed on the *exterior walls* of buildings of <u>any type of Types IV and V</u> construction when such polymers meet the requirements of Section 2603.5. Fireblocking shall be installed in accordance with Section 717.

(Portions of the proposal not shown remain unchanged)

**Committee Reason:** The committee agreed that this change was simply a clarification of the current technical requirements. The modification put the language back to reference any type of construction as there was insufficient technical justification to limit the installation of fiber reinforced polymer to Types IV and V construction.

**Assembly Action:** 

None

## FS186-09/10

#### **Committee Action:**

#### **Approved as Submitted**

**Committee Reason:** The committee felt that the proposal provided a good compromise to address the basic fuel loading concerns of FRP used on the exterior walls of building s any type of construction.

**Assembly Action:** 

None

## FS187-09/10

#### Committee Action:

**Disapproved** 

**Committee Reason:** Disapproval was based on a lack of technical justification to remove the established FRP requirements. Further, the committee prefers the language in code change proposal FS186-09/10.

**Assembly Action:** 

None

# FS188-09/10

**Note:** The following analysis was not in the Code Change monograph but was published on the ICC website at <a href="http://www.iccsafe.org/cs/codes/Documents/2009-10cycle/ProposedChanges/Standards-Analysis.pdf">http://www.iccsafe.org/cs/codes/Documents/2009-10cycle/ProposedChanges/Standards-Analysis.pdf</a> :

**Analysis:** Review of the proposed new standard indicated that, in the opinion of ICC staff, the standard not comply with ICC standards criteria.

#### **Committee Action:**

#### **Approved as Submitted**

**Committee Reason:** The committee agreed that ASTM E2599 was an appropriate standard for preparation and mounting of reflective plastic core insulation for testing in accordance with ASTM E84 or UL 723.

**Assembly Action:** 

None

# FS189-09/10

#### This code change was heard by the IBC Structural Code Development Committee.

**Note:** The following analysis was not in the Code Change monograph but was published on the ICC website at <a href="http://www.iccsafe.org/cs/codes/Documents/2009-10cycle/ProposedChanges/Standards-Analysis.pdf">http://www.iccsafe.org/cs/codes/Documents/2009-10cycle/ProposedChanges/Standards-Analysis.pdf</a> :

**Analysis:** Review of proposed new standards ASTM D 7032 and D 7031 indicated that, in the opinion of ICC Staff, the standard complies with ICC standards criteria, Section 3.6. Review of proposed new standard ASTM D 2017 indicated that, in the opinion of ICC Staff, the standard did not comply with ICC standards criteria, Section 3.6.2(1). Review of proposed new document AC 174 indicated that, in the opinion of ICC Staff, the standard did not comply with ICC standards criteria. Acceptance criteria are developed for use solely by ICC-ES for purposes of issuing ICC-ES evaluation reports. Acceptance criteria are not for use outside of the ICC-ES system. ICC-ES Acceptance Criteria are not intended to be code-referenced documents.

Committee Action: Disapproved

**Committee Re ason:** Wood plastic composite materials are currently qualified by evaluation reports and including them in the code is not appropriate at this time. It is important to be able to verify design capacities.

Assembly Action: None

## FS190-09/10

Committee Action: Disapproved

**Committee Reason:** The committee was not clear on how the proposal was an improvement over the existing text and the proponent was not present to answer the committees questions.

Assembly Action: None

## FS191-09/10

This code change was contained in the errata posted on the ICC website. Please go to <a href="http://www.iccsafe.org/cs/codes/Pages/09-10ProposedChanges.aspx">http://www.iccsafe.org/cs/codes/Pages/09-10ProposedChanges.aspx</a>.

#### Committee Action: Approved as Submitted

**Committee Reason:** The committee agreed that recycling chutes are becoming common practice in building construction and result in similar hazards as those associated with refuse and laundry chutes.

Assembly Action: None

## FS192-09/10

This code change was contained in the errata posted on the ICC website. Please go to http://www.iccsafe.org/cs/codes/Pages/09-10ProposedChanges.aspx.

#### Committee Action: Approved as Submitted

**Committee Reason:** The committee agreed that this proposal clarifies that the fireblocking and draftstopping addressed in the exception #5 is in the attic, not the floor fireblocking and draftstopping.

Assembly Action: None

# FS193-09/10

This code change was contained in the errata posted on the ICC website. Please go to <a href="http://www.iccsafe.org/cs/codes/Pages/09-10ProposedChanges.aspx">http://www.iccsafe.org/cs/codes/Pages/09-10ProposedChanges.aspx</a>.

#### Committee Action: Approved as Submitted

**Committee Reason:** The committee agreed that this proposal appropriately clarifies the intent and application of the requirements for smoke and draft control doors.

Assembly Action: None

## FS194-09/10

This code change was contained in the errata posted on the ICC website. Please go to <a href="http://www.iccsafe.org/cs/codes/Pages/09-10ProposedChanges.aspx">http://www.iccsafe.org/cs/codes/Pages/09-10ProposedChanges.aspx</a>.

#### Committee Action: Disapproved

Committee Reason: Disapproval was based on the lack of technical justification for the lesser thickness of sub-duct in exception 2.1.

## FS195-09/10

This code change was contained in the errata posted on the ICC website. Please go to <a href="http://www.iccsafe.org/cs/codes/Pages/09-10ProposedChanges.aspx">http://www.iccsafe.org/cs/codes/Pages/09-10ProposedChanges.aspx</a>.

# PART I- IBC FIRE SAFETY Committee Action:

Disapproved

**Committee Reason:** The committee felt these sections should remain as the definition of smoke compartment indicates that smoke compartments are enclosed by smoke barriers on all sides, including the top and bottom. Also, this action is consistent with the committee's action on FS196-09/10.

Assembly Action:

None

# PART II- IBC GENERAL Committee Action:

**Disapproved** 

**Committee Reason:** The committee felt these sections should remain as the definition of smoke compartment indicates that smoke compartments are enclosed by smoke barriers on all sides, including the top and bottom. Also, this action is consistent with the committee's action on FS196-09/10.

Assembly Action:

None

## FS196-09/10

This code change was contained in the errata posted on the ICC website. Please go to http://www.iccsafe.org/cs/codes/Pages/09-10ProposedChanges.aspx.

Committee Action:

Disapproved

**Committee Rea son:** The reference to 407.4 is not appropriate as this section eventually requires enclosed elevator lobbies; further correlation is required. Further, the proposal seems redundant with exception #4. Lastly, removing the lobby enclosure for these buildings would inhibit the ability to defend a fire in place.

**Assembly Action:** 

None

# FS197-09/10

This code change was contained in the errata posted on the ICC website. Please go to <a href="http://www.iccsafe.org/cs/codes/Pages/09-10ProposedChanges.aspx">http://www.iccsafe.org/cs/codes/Pages/09-10ProposedChanges.aspx</a>.

**Committee Action:** 

Disapproved

**Committee Reason:** The committee felt that the average total heat release (3 MJ/m²) and the heat flux of 50 kW/m² were too low and required further justification. Also test method ASTM E1354, which tests for low combustibility, is inappropriate to determine equivalence to the ASTM E136 test method for noncombustibility.

**Assembly Action:** 

# 2009/2010 INTERNATIONAL BUILDING CODE General Code Development Committee

#### Dan Weed, CBO - Chair

Rep: City of Central Plans Analyst/Instructor Colorado Code Consulting Thornton, CO

# Mark Stim ac, RA, CB O - Vice Chair

Director of Building and Zoning City of Troy Troy, MI

#### **Don Davies**

Chief Plans Examiner Salt Lake City Corporation Salt Lake City, UT

#### **Christina Jamison**

Rep: International Assoc. of Fire Chiefs Division Chief/Fire Marshal San Ramon Valley Fire Protection District San Ramon, CA

#### Vickie Lovell

President InterCode Incorporated Delray Beach, FL

#### Homer Maiel, PE, CBO

Senior Engineer City of San Jose, Building Division San Jose, CA

#### **Anthony Merlino**

Construction Official Village of Ridgewood Ridgewood, NJ

#### John Morgan, MCP

Building Commissioner City of Frontenac Frontenac, MO

#### **Agustin Mujica**

Rep: National Assoc. of Home Builders Co-Owner & Vice President of Operations Levitt Homes Corporation San Juan, PR

#### **Sharon Myers**

Master Plans Examiner State of Ohio Reynoldsburg, OH

#### **Gregory Nicholls, AIA**

Chief Building Official City of Mason Mason, OH

#### **Carroll Pruitt, FAIA**

President/CEO Pruitt Consulting, Inc. Keller, TX

#### Sarah Rice, CBO

SRice Consulting Cincinnati, OH

#### Carol Sue Rouw, AIA, LEED, AP

Senior Project Manager/Architect Treanor Architects St. Louis, MO

#### **Scott Satula**

Rep: ICC Upper Great Plains Region III Director of Inspection Services Village of Greendale Greendale, WI

#### Staff Secretariat: Kermit Robinson, CBO

Senior Technical Staff International Code Council

# INTERNATIONAL BUILDING CODE GENERAL COMMITTEE HEARING RESULTS

## G1-09/10

Committee Action: Disapproved

**Committee Rea son:** The committee supported the concept of moving the definition to Chapter 2 because it is a definition that applies throughout the code, however it was felt that the wording of the definition needed to be refined. Referrals to code sections within definitions are inappropriate and only used in Chapter 2 when the definition itself is located in a different section. The committee felt that the language of the exception to Section 419.1 needed further refinement.

Assembly Action: None

## G2-09/10

This code c hange was heard by the IBC Fire Safety Code Dev elopment Committee.

PART I- IBC STRUCTURAL

Committee Action:

Disapproved

**Committee Reason:** It is not necessary or advisable to relocate the definition of patio cover into the body of the code. The proposed definition lacks clarity and it is preferable to keep the current definition of patio cover in Appendix I.

Assembly Action: None

PART II – IRC – B/E Committee Action:

Disapproved

**Committee Reason:** The committee feels that the definition is too broad and could apply to other structures such as a tent. The height issue should be a planning and zoning issue and not part of the code.

Assembly Action: None

G3-09/10

**Committee Action:** 

**Approved as Submitted** 

**Committee Reason:** This proposal corrects the oversight that roof construction should be treated the same a floor construction within the context of secondary members.

Assembly Action: None

G4-09/10

**Committee Action:** 

**Disapproved** 

**Committee Reason:** This definition would result in a major shift in the scoping of the IBC and IRC. No correlating change had been proposed for the IRC. The committee concluded that this change would have a cost impact on construction.

## G5-09/10

# PART I- IBC GENERAL Committee Action:

### **Approved as Modified**

Modify the proposal as follows:

**VAPOR PERMEABLE MEMBRANE.** A material or covering The property of having a moisture vapor permeance rating of 5 40 perms (2.9 5.7 x 10<sup>-10</sup> kg/Pa•s•m2) or greater, when tested in accordance with the desiccant method using Procedure A of ASTME 96. A vapor permeable material permits the passage of moisture vapor.

**Committee Reason:** The modification changes the term into an adjective that can be a descriptor of either a material or an assembly of materials. The modification also retains the existing permeance rating of 5 perms that is in the 2009 codes and is the consensus rating of various industries affected.

Assembly Action: None

PART II – IRC – B/E Committee Action:

**Approved as Modified** 

Modify the proposal as follows:

**VAPOR PERME ABLE MEMBRANE.** A material or covering Having a moisture vapor permeance rating of <u>5</u> 10 perms ( <u>2.9</u> 5.7 x 10<sup>-10</sup> kg/Pa●s●m²) or greater, when tested in accordance with the desiccant method using Procedure A of ASTME 96. A vapor permeable material permits the passage of moisture vapor.

**Committee Reason:** This proposal changes the definition from material specific to an adjective that makes it clear the break point between vapor permeable and otherwise. The modification restores the perm rating and removes the term "material". The proposed perm rating would have created inconsistencies within the code.

Assembly Action:

None

# G6-09/10

#### **Committee Action:**

Disapproved

**Committee Reason:** This would eliminate the evaluation of the actual variety of activities that occur in a fire station, and also the protections that would result based on a mixed occupancy application. Under the current code the sleeping areas are considered an R-occupancy and thus will be sprinkler protected. Changing fire stations to be solely a B occupancy would remove that protection from the firefighters and the protection of the community investment in the facility. These facilities are frequently used in disaster response. Any loss would significantly hamper response time.

**Assembly Action:** 

None

# G7-09/10

**Committee Action:** 

Disapproved

**Committee Re ason:** The term limited combustible is not used in the International Building Code. Where such term is included in a referenced standard, the definition in the referenced standard should be used.

**Assembly Action:** 

None

# G8-09/10

**Committee Action:** 

**Disapproved** 

**Committee Reason:** The committee disapproved this proposal because there was no clear analysis of the implications of changing the time period under which a structure is considered temporary. Such a change would need to be correlated through the rest of the codes as well as its application to other structures rather than just modular structures. If a change in the length of time were to be

considered, it should be stated in days as compared to months because a month is an extended period and would not be consistently applied.

Assembly Action: None

G9-09/10

Committee Action: Disapproved

**Committee Reason:** The committee did not believe that the proposed definition of non-combustible reflected all of the various uses of the term in the code. Installing this definition could unintentionally affect application of other provisions.

Assembly Action: None

G10-09/10

Committee Action: Disapproved

**Committee Reason:** The committee disapproved the code change because of concerns that a larger assembly space in a school that was used for non-school activities would not get an appropriate classification of an A occupancies. The replacing of the phrase 'accessory to' with the phrase 'associated with' was felt to be more subjective. The committee also expressed concern about losing the direct reference to Chapter 11.

Assembly Action: None

G11-09/10

Committee Action: Disapproved

**Committee Reason:** The committee was concerned that the change could allow the a private school associated with a religious institution to be classified as an A occupancy rather than the appropriate E occupancy for all schools.

Assembly Action: None

G12-09/10

Withdrawn by Proponent

G13-09/10

Committee Action: Disapproved

**Committee Reason:** The committee concluded that the proposed language was confusing and too broad in its application. In larger apartment complexes such spaces often have large gatherings. Changing the occupancy of such spaces from Group A to Group R would take away various code protections for assembly spaces such as panic hardware. The existing exception allowing a 750 sq. ft. assembly space to be classified the same as the primary occupancy is an appropriate threshold.

Assembly Action: None

G14-09/10

Committee Action: Approved as Modified

Modify the proposal as follows:

**303.1 (IFC [B] 202) Assembly Group A.** Assembly Group A occupancy includes, among others, the use of a building or structure, or a portion thereof, for the gathering of persons for purposes such as civic, social or religious functions; recreation, food or drink consumption or awaiting transportation.

A-2 Assembly uses intended for food for food and/or drink consumption including, but not limited to:

Banquet halls
Casinos (gaming areas)

Night clubs Restaurants Taverns and bars

**Committee Reason:** The committee approved the change with the modification because reliance on a dictionary definition of casinos would include more activities than just the gaming areas. The modification is consistent with the proponents intent and is needed so that one didn't think that the guest rooms, offices, retail shops and theaters often included in a large casino were to be classified as a Group A-2 occupancy. The change is consistent with current practice in many jurisdictions with casino facilities.

Assembly Action: None

## G15-09/10

#### **Committee Action:**

### **Approved as Submitted**

**Committee Reason:** The changes clarify the regulations of the ambulatory care facilities. It will also result in the IBC requirements being more consistent with CMS standards than they are currently.

Assembly Action: None

## G16-09/10

#### **Committee Action:**

### Disapproved

**Committee Reason:** The change would leave a gap in the code for facilities where 1 to 5 people are receiving care but they are not located in a dwelling unit. The proposal appeared to not provide an occupancy classification for this size of facilities.

**Assembly Action:** 

None

## G17-09/10

#### **Committee Action:**

## Disapproved

**Committee Reason:** The code change as written does not solve what has become a very complex and legally contentious issue. There was no correlating change for the IRC which would be the code under which most of the buildings addressed by the proposal would be regulated. A modification proposed would have changed the proposal to being simply a definition that would not have then been a term used in the code.

Assembly Action:

None

# G18-09/10

#### **Committee Action:**

#### Disapproved

**Committee Reason:** The term 'commercial kitchen' may be appropriate to add to the list of Group F-1 occupancies, but there is such a wide range of activities that could be considered a commercial kitchen, the committee felt that a definition of the term would be needed to go along with the listing.

**Assembly Action:** 

None

# G19-09/10

#### **Committee Action:**

#### Disapproved

**Committee Re ason:** The committee acknowledged that repair garages have a long history as a Group S occupancy and moving them to the Group F occupancy is not justified. The change would result in a reduction in allowable area for such facilities. In addition, there was a concern that the movement of Sec. 903.2.9.1 to be new section 903.2.4.2 was incomplete because it still contained references to the Group S-1 occupancy.

**Assembly Action:** 

### G20-09/10

#### **Committee Action:**

#### Approved as Modified

Modify the proposal as follows:

**308.2 Definitions.** The following words and terms shall, for the purposes of this section and as used elsewhere in this code, have the meanings shown herein.

**DETOXIFICATION F ACILITIES.** Facilities that <u>provided provide</u> treatment for substance abuse serving care recipients who are incapable of self-preservation or who are harmful to themselves or others.

**HOSPITALS AND PSYCHIATRIC HOSPITALS.** Facilities that <u>provides provide</u> care or treatment for the medical, psychiatric, obstetrical, or surgical treatment of <u>inpatients</u> care recipients that are incapable of self-preservation.

**[F] 903.2.8 (IFC 903.2.8) Gro up R.** An automatic sprinkler system installed in accordance with Section 903.3 shall be provided throughout all buildings with a Group R *fire area*.

An *automatic sprinkler system* installed in accordance with 903.3.1.3 shall be permitted in congregate residences with 16 or fewer residents. An automatic sprinkler system installed in accordance with 903.3.1.3 shall be permitted in care facilities with 5 or fewer individuals <u>in</u> a single family dwelling.

(Portions of proposal not shown remain unchanged)

**Committee Reason:** The change reflects a collaborative effort to refine and clarify the various care occupancies. The committee remains concerned about the definition of foster care and its relationship to various state laws. In addition there was concern regarding undefined terms introduced by the change, specifically "Initial stage Alzheimer's" and 'long term care'. The committee acknowledged that this is not the same as the various state regulations, but provided a better framework for states to coordinate their regulations. On balance, the change improves the code and the committee hopes to see public comments to clarify the definitions.

**Assembly Action:** 

None

## G21-09/10

#### **Committee Action:**

Disapproved

**Committee Reason:** The committee acknowledged the proponent's effort to provide clarity to these regulations, but felt that the restructuring of the Group I-1, I-2 and R-4 occupancies to be unclear. There was concern that the resulting reductions in Table 503 were not justified. They found the additional provisions proposed in Section 420 to be confusing as to how they would be applied. The proposed smoke compartments are small and did not seem coordinated with other portions of the proposal.

Assembly Action:

None

# G22-09/10

#### **Committee Action:**

Disapproved

**Committee Reason:** The committee felt it was inappropriate to move assisted living to the Group I-2 category. The evacuation levels would be hard to evaluate. By changing assisted living from Group I-1 to I-2 the individual sleeping rooms would no longer be provided with smoke detectors.

**Assembly Action:** 

None

# G23-09/10

#### **Committee Action:**

Disapproved

**Committee Reason:** The changes in this proposal will not blend with the approved changes in G20-09/10. It doesn't sufficiently address the issues identified with respect to care occupancies.

Assembly Action:

### G24-09/10

#### **Committee Action:**

### Disapproved

Committee Reason: The IRC has its own sprinkler requirements and the IBC should not be used to specify sprinkler requirements in buildings subject to the IRC. In addition it would set up a conflict between the sprinkler systems allowed by the IRC and those that would be required under this

**Assembly Action:** 

None

## G25-09/10

#### **Committee Action:**

### Disapproved

Committee Reason: The committee disapproved the change because it did not clearly address how to treat multiple mercantile spaces each with an occupant load of less than 50, but located in the same building. Would the occupant load of these spaces be aggregated? The application of other code provisions were also unclear to the committee including the determination of toilet facilities. This could result in sprinklers not being required in a mercantile space that would be required under Group M. Occupants of a Group B tend to be familiar with the spaces they are using, which can not be said for occupants in a mercantile area.

**Assembly Action:** 

None

## G26-09/10

#### **Committee Action:**

### Disapproved

Committee Reason: The committee preferred G27-09/10. While the extended lists may be helpful, there was a concern that the overlaps were not clear. Finally the committee felt that the redundant use of transient and non-transient was helpful and some of those were eliminated by this proposal.

**Assembly Action:** 

None

# G27-09/10

#### **Committee Action:**

### Approved as Submitted

Committee Reason: Committee approved the change because it provided a clear format for these provisions and shows that the extensive listing shown in G26-09/10 is not needed.

**Assembly Action:** 

None

# G28-09/10

### **PART I- IBC GENERAL Committee Action:**

Disapproved

Committee Reason: The proposal would set up a potential conflict with the already defined term of 'sleeping unit' and therefore the application of Chapter 11 would be unclear. There would also be a need to address this use in Chapter 29 regarding plumbing fixture requirements.

**Assembly Action:** 

None

# PART II - IRC - B/E

**Committee Action:** 

Disapproved

Committee Reason: The committee feels this is a good change but it needs more work. The term "to be constructed" implies new construction and renovations need to be addressed. Also, some of the distinctions would be better suited in the Zoning Code rather than the IRC.

**Assembly Action:** 

Approved as Modified

#### Modify the proposal as follows:

**R101.2 Sc ope.** The provisions of the *International Residential Code for One- and Two-family Dwellings* shall apply to the construction, *alteration*, movement, enlargement, replacement, repair, equipment, use and occupancy, location, removal and demolition of detached one- and two-family dwellings and townhouses not more than three stories above *grade plane* in height with a separate means of egress and their *accessory structures*.

#### Exceptions:

- Live/work units complying with the requirements of Section 419 of the International Building Code shall be permitted to be built as one- and two-family dwellings or townhouses. Fire suppression required by Section 419.5 of the International Building Code when constructed under the International Residential Code for One- and Two-family Dwellings shall conform to Section P2904 903.3.1.3 of the International Building Code.
- Owner occupied lodging houses with five or fewer guest rooms shall be permitted to be constructed in accordance with the *International Residential Code for One- and Two-family Dwellings*.

(Portions of proposal not shown remain unchanged)

**Reason for modification:** The modification adds the term "owner occupied" and would aid the misinterpretation about accessibility. The modification also will assure these units will be sprinklered.

## G29-09/10

Committee Action: Disapproved

**Committee R eason:** The proposal would base occupancy category on ownership pattern. Such distinctions are inappropriate for the building code regulations.

Assembly Action: None

G30-09/10

Committee Action: Disapproved

**Committee Reason:** The committee preferred the change found in G27-09/10. This change did not provide sufficient clarity to the issue.

Assembly Action: None

G31-09/10

Committee Action: Disapproved

**Committee Reason:** The committee acknowledged the effort to clarify the application of the covered mall provisions to the open mall concept. The proposal needs additional refinements. Of specific concern is the lack of clarity regarding balconies and bridges and the extent to which they could 'cover" the open mall; the relationship of the perimeter line to the anchor buildings and to the required open area around the open mall building; the relationship of the perimeter line with exit discharge as it would appear to permit exit access to dead end where a perimeter line adjoined an anchor building.

Assembly Action: None

G32-09/10

Committee Action: Disapproved

**Committee Reason:** The committee felt that the proposal was confusing and may not be properly correlated with Table 503. The provisions need to be clarified with respect to the anchor buildings and their relationship to the covered (or open) mall building.

## G33-09/10

#### **Committee Action:**

#### Disapproved

Committee Reason: The proposal could create large warehouse spaces in covered mall buildings, and such space would be inappropriate. Where they were access by the exit passageways, there would be an increase of movement of goods and materials in the passageways running a higher risk that the path of egress travel would be blocked. Such spaces would not have the same relationship with the mercantile space as would a storage area at the back of a retail space would have. In the latter there would likely be more staff activity where potential problems could be more readily observed.

**Assembly Action:** 

None

## G34-09/10

#### **Committee Action:**

### Disapproved

Committee Rea son: The proposal presents a radical departure from years of determining the allowable size of buildings based on both height and area. Without area limits, any building would become an unlimited area building and the code would no longer require 60 foot wide open areas surrounding such buildings – thus eliminating the access for firefighting operations. Work in the past cycles by the CTC and others attempted to resolved height and area issues. For each such change the committee requested to see technical justification for changing the requirements in Table 503 and related sections. Like many of those past proposals, this proposal is without technical substantiation. The very brief reason does not provide any examples of the impact of eliminating area limits from the code.

**Assembly Action:** 

None

## G35-09/10

#### **Committee Action:**

### **Approved as Submitted**

**Committee Rea son:** The change clarifies the provisions. The committee found that the current requirement that increased the requirements applicable to a detached parking garage located near a covered mall building to be unjustified.

Assembly Action:

None

# G36-09/10

#### **Committee Action:**

Disapproved

**Committee Rea son:** The proposed fire barrier requirement is excessive. The concept of the proposal is flawed because you won't have an unsprinklered condition because mall buildings are required to be sprinkler protected whether they are a covered or open mall building.

**Assembly Action:** 

None

# G37-09/10

#### **Committee Action:**

Disapproved

**Committee Rea son:** The committee felt that the existing code language was sufficiently clear regarding atriums in mall buildings. If there is a need for a distinction regarding various atrium facilities in a covered mall building, revised language should clarify why the distinction is necessary and the analysis needed to determine the distinction.

Assembly Action:

G38-09/10

Committee Action: Approved as Submitted

Committee Reason: The change provides consistency with Section 402.12.1.

Assembly Action: None

G39-09/10

Committee Action: Disapproved

**Committee Rea son:** The committee did not find that there was a good correlation between the concept of compartmentation and the proponent's stated goal that this additional level of protection would work toward preventing collapse of building involved in catastrophic events. They found the 10,000 square foot number to be arbitrary and not technically substantiated.

Assembly Action: None

## G40-09/10

This code c hange was heard by the IBC Struc tural Code Development Committee.

Committee Action: Disapproved

Committee Rea son: The proposal would require the enclosure walls to resist more than the structure, floors and the stair framing are capable of withstanding. In the event of a blast it is preferable that the walls blow out rather than the floor collapse. The determination of this proposed pressure remains unclear and seems to be arbitrary – whether it be the 2 psi as originally proposed or the 1.3 psi offered as a modification. The ability of current enclosure wall systems to resist the proposed loading is questionable and there was not enough information provided on what types of enclosure construction could satisfy this requirement. The provision should also provide some direction to designers and building officials. There are questions on the testing of 8 feet high wall panels and the extrapolation of the results to greater height walls. Before taking this step, the committee would prefer to see the ASCE/SEI blast document that is being developed.

In addition, there appears to be a lack of an appropriate systems engineering approach to solving the problem. Instead there is some feeling of a preconceived notion of a solution to some vaguely specified problem. There's concern that we may spend the time and money strengthening stair enclosures, yet the next blast event could result in the same problem or create new problems that are worse than the one that we're attempting to solve. The reason airplanes are not designed for blasts is that there is no agreement on the size of the blast, yet that is what this proposal tries to do inside the building. There's some concern that all this requirement would do is give a terrorist the information needed to size a bomb so that it will take out a stair enclosure.

Assembly Action: None

## G41-09/10

This code c hange was heard by the IBC Fire Safety Code Dev elopment Committee.

Committee Action: Disapproved

**Committee Re ason:** The committee's disapproval is based on the lack of substantiating data to show that bond strength failure is not an issue for SFRM. Further, this action provides for consistency with the committees action on G42-09/10.

### G42-09/10

This code c hange was heard by the IBC Fire Safety Code Dev elopment Committee.

Committee Action: Disapproved

**Committee Re ason:** The committee's disapproval is based on the lack of substantiating data to show that the proposed reduced bond strength for SFRM would be appropriate. Also, no justification was provided to show that there was a significant cost increase between providing SFRM with a bond strength of 430 psf and SFRM with a bond strength of 250 psf.

Assembly Action: None

G43-09/10

Committee Action: Approved as Submitted

**Committee Reason:** The change relocates the requirements to the appropriate location in the code and removes redundant language.

Assembly Action: None

## G44-09/10

**Note:** The following analysis was not in the Code Change monograph but was published on the ICC website at <a href="http://www.iccsafe.org/cs/codes/Documents/2009-10cycle/ProposedChanges/Standards-Analysis.pdf">http://www.iccsafe.org/cs/codes/Documents/2009-10cycle/ProposedChanges/Standards-Analysis.pdf</a>:

**Analysis:** Review of the proposed new standard indicated that, in the opinion of ICC staff, the standard did comply with ICC standards criteria.

Both parts of this co de change proposal were heard by the IBC Ge neral Code Development Committee.

# PART I- IBC GENERAL Committee Action:

Disapproved

Committee R eason: The committee disapproved the proposal for a variety of reasons. The application to all high-rise buildings regardless of height was judged excessive. Providing surveillance every 5 floors did not provide very much situational awareness as intended by the proposal. Because there were so many exceptions for elevator lobbies, the effectiveness in those areas was uncertain. The occupant evacuation elevator requirements would provide communications in elevator lobbies, this system should be connected to the proposed system. There would be costs to installing such systems, especially as it relates to providing emergency power connections. The proponent should have provided more detailed cost impact information. Reference to the standard, while appropriate, was clear that the facial recognition was not required under the IBC provisions, but not for the reference contained in the IFC.

Assembly Action: None

**PART II- IFC** 

Committee Action: Disapproved

Committee Reason: Consistent with the action taken to disapprove Part I.

Assembly Action: None

G45-09/10

Committee Action: Approved as Submitted

**Committee Reason:** The proposal provides clarification regarding standby power requirements for high-rise buildings and the elevators in the buildings.

### G46-09/10

This code c hange proposal was heard by the IBC Me ans of Egress Code Development Committee.

#### **Committee Action:**

Disapproved

Committee Reason: The purpose of the third stairway is to allow for the fire service to take one stairway out of service for fire department activities. The third stairway is in excess to the required means of egress. Therefore, allowing for the option of occupant evacuation elevators in place of the third stairway will not reduce the required means of egress. The occupant evacuation elevator is future technology that is supported by NIST and the World Trade Center report. The tradeoff is an incentive to get effective technology into high rise buildings that will significantly reduce the time needed for evacuation of high rise buildings. This is especially important when a full building evacuation is deemed necessary. It is a significant improvement for persons with disability to allow for self-evacuation with the general population as well as to allow for them to evacuate with their mobility devices.

**Assembly Action:** 

None

### G47-09/10

This code c hange proposal was he ard by the IBC Me ans of Egress Code Development Committee.

**Committee Action:** 

Disapproved

**Committee Reason:** The same stairway enclosure should have the same level of protection all the way up and down. It is not clear how many levels would be permitted below the level of exit discharge, or how the proposed separation would address the exit discharge for the stairway coming up from the basement levels and possibly through the smokeproof enclosure.

**Assembly Action:** 

None

# G48-09/10

This code c hange proposal was heard by the IBC Me ans of Egress Code Development Committee.

**Committee Action:** 

**Disapproved** 

**Committee Reason:** The option of three elevators in G49-09/10 is preferred to one or two elevators with a higher capacity car as proposed in this item. If the trade-off is capacity vs. number of elevators the fire service would prefer more elevators to allow for different elevators to be used for different purposes. Whether fire service elevators need to be also sized for stretchers can be addressed in G157-09/10.

**Assembly Action:** 

None

# G49-09/10

**Committee Action:** 

Approved as Submitted

This code c hange proposal was he ard by the IBC Me ans of Egress Code Development Committee.

**Committee Rea son:** Redundancy in the number of elevators available for fire department use is critical for effective fire fighting operations in buildings tall enough to need Fire Service Access elevators. Elevators size can be addressed in G157-09/10. While there are some issues of additional cost, small foot-print buildings are addressed in the additional language of "or all elevators, whichever is less."

Assembly Action:

### G50-09/10

Committee Action:

Disapproved

**Committee R eason:** The committee liked the proposed reformatting of the provisions because it provided clarity to the existing requirements, however the change included some technical flaws. Therefore the committee felt that G51-09/10 better addressed the issue.

**Assembly Action:** 

None

# G51-09/10

**Committee Action:** 

**Approved as Submitted** 

**Committee Reason:** The proposal provides a clear answer to the question of whether doors are allowed in the glass wall forming the separation between an atrium and adjoining spaces.

Assembly Action:

None

# G52-09/10

This code c hange proposal was he ard by the IBC Me ans of Egress Code Development Committee.

**Committee Action:** 

Disapproved

**Committee Reason:** The proposal sets no limit on the number of stories or travel distance. In tall buildings the atrium could potentially fill up with smoke enough that some upper floors would have the use of the exit stairway jeopardized. It is not clear how this revision will coordinate with the committee's approval of E5-09/10 for open exit access stairways and open exit stairways.

**Assembly Action:** 

None

# G53-09/10

**Committee Action:** 

Approved as Modified

Modify the proposal as follows:

**SECTION 406** 

MOTOR-VEHICLE RELATED OCCUPANCIES

**406.1 General**. Motor vehicle related occupancies shall comply with Sections 406.1 through 406.8 and the International Fire Code, International Mechanical Code and International Fuel Gas Code.

(Portions of proposal not shown remain unchanged)

**Committee Re ason:** The committee approved the change because it provides a clearer organization of the motor vehicle related sections found in Section 406. The committee modified the proposal to delete the references to other codes as unnecessary.

Assembly Action:

None

# G54-09/10

**Committee Action:** 

Disapproved

**Committee Rea son:** The organization issues were resolved by approval of Item G53-09/10. The committee was uncertain that the revised definitions contained in this proposal were necessary or provided clear application to the rest of the section. In addition there was concern regarding adding a vehicle weight limit to the definition of a parking garage. The committee was concerned regarding its enforceability or that it was even necessary.

**Assembly Action:** 

### G55-09/10

#### **Committee Action:**

#### **Approved as Submitted**

**Committee Reason:** The change clarifies that doors are to be 20 minute rated. The existing link to Section 715 does not provide that information.

**Assembly Action:** 

None

### G56-09/10

# PART I- IBC GENERAL Committee Action:

#### Approved as Modified

Replace the proposal with the following: The modi fication completely replaces the ori ginal proposal and contains a single revision to Item 1 of Section 406.1.4.

406.1.4 Separation. Separations shall comply with the following:

- 1. The private garage shall be separated from the dwelling unit and its attic area by means of a minimum 1/2-inch (12.7 mm) gypsum board applied to the garage side. Garages beneath habitable rooms shall be separated from all habitable rooms above by not less than a 5/8-inch (15.9 mm) Type X gypsum board or equivalent and ½-inch (12.7 mm) gypsum board applied to structures supporting the separation from habitable rooms above the garage. Door openings between a private garage and the dwelling unit shall be equipped with either solid wood doors or solid or honeycomb core steel doors not less than 1 3/8 inches (34.9 mm) thick, or doors in compliance with Section 715.4.3. Openings from a private garage directly into a room used for sleeping purposes shall not be permitted. Doors shall be self-closing and self-latching.
- 2. and 3. (no change to current text)

**Committee Rea son:** The change brings consistency with the IRC provisions and clarifies the protection needed for supporting construction.

#### **Assembly Action:**

#### PART II - IRC B/E

**Committee Action:** 

Disapproved

**Committee Reason:** The committee feels that the current text is adequate and this change is not needed. There is no justification to require all ceilings to be 5/8 inch Type X Gypsum.

Assembly Action:

None

# G57-09/10

**Committee Action:** 

Disapproved

**Committee R eason:** The committee disapproved the code change based on concerns that the reduced height would allow a significant increase in fuel load in a confined spaces. The proposal is unclear whether the height exception is intended for the equipment or the space in which the equipment is located.

**Assembly Action:** 

None

# G58-09/10

**Committee Action:** 

**Disapproved** 

**Committee Reason:** The committee disapproved the code change because they do not agree with the proponent that a parking garage can meet the intent of being an open parking garage with openings on just one side.

**Assembly Action:** 

### G59-09/10

Committee Action: Disapproved

**Committee Rea son:** The committee disapproved the proposal because the open parking garage standards have been working for many years and the proponent did not provide sufficient justification to make the change. There was no clear basis for the proposed 6 foot dimension. Finally the committee found the proposed text unclear.

Assembly Action: None

G60-09/10

Committee Action: Disapproved

**Committee Reason:** The committee found the text confusing and it would seem to require a below grade area that would have to be wider at the bottom than at the top of the opening at grade. There was debate whether the 1 - 1/2 factor was appropriate.

Assembly Action: None

G61-09/10

Committee Action: Disapproved

**Committee Reason:** The committee felt that the values for height and area provided in Table 406.3.5 are sufficient for open parking garages and that additions allowed by Sections 504 and 506 would be an inappropriate expansion in the allowable size of open parking garages.

Assembly Action: None

G62-09/10

Committee Action:

**Approved as Submitted** 

**Committee Reason:** The committee believes that the proposal provides a fair approach which will provide consistent ventilation for each level of a parking garages regardless of the floor to ceiling height of a particular design or the demands imposed on the design by different construction types. The 7 foot dimension correlates to the minimum required ceiling height in parking garages.

Assembly Action: None

G63-09/10

Withdrawn by Proponent

G64-09/10

Both parts of this code change proposal were heard by the General Code Development Committee.

PART I- IBC GENERAL Committee Action:

Disapproved

Committee Reason: The committee felt that standards for automated garages eventually need to be in the code, however this proposal needs further refinement. Among the issues identified by the committee that need to be clarified are: How would sprinklers be provided; Should there be different criteria if these are in open versus enclosed garages; Egress and accessibility need to be addressed; While there may be limited occupant load, the occupancy is still a storage facility for cars, therefore a Group S occupancy. Clear provisions on structural requirements would need to be added.

Assembly Action: None

**PART II- IFC** 

Committee Action: Disapproved

**Committee Rea son:** The committee questioned the selection of the 6500 pound limit for the vehicles. Many common vehicles exceed that weight. The committee also felt there was not sufficient justification provided for listing these as a Class I commodity based on the fuel load present. Proponent should reconsider the classification.

Assembly Action: None

### G65-09/10

#### **Committee Action:**

#### Approved as Modified

Modify the proposal as follows:

**1008.1.9.6 (IFC [B] 1008.1.9.6) Special I ocking arran gements in Group I-2.** Approved special egress locks shall be permitted in a Group I-2 occupancy where the clinical needs of persons receiving care require such locking. Special egress locks shall be permitted in such occupancies where the building is equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 or an approved automatic smoke or heat detection system installed in accordance with Section 907, provided that the doors are installed <u>and operated</u> in accordance with Items 1 through 7 below.

- The doors unlock upon actuation of the automatic sprinkler system or automatic fire detection system.
- 2. The doors unlock upon loss of power controlling the lock or lock mechanism.
- 3. The door locks shall have the capability of being unlocked by a signal from the fire command center, a nursing station or other approved location.
- A building occupant shall not be required to pass through more than one door equipped with a special egress lock before entering an exit.
- The procedures for the operation(s) of the unlocking system shall be described and approved as part of the emergency planning and preparedness required by Chapter 4 of the *International Fire Code*.
- All clinical staff shall have the keys, codes or other means necessary to operate the locking devices.
- 7. Emergency lighting shall be provided at the door.

**Exception**: Items 1 through 4 shall not apply to doors to areas where persons which because of clinical needs require restraint or containment as part of the function of psychiatric treatment areas.

(Portions of proposal not shown remain unchanged)

**Committee Reason:** The committee has asked the proponents to develop a comprehensive set of revisions to address this occupancy and such is what they provided by this proposal. Smoke compartments have been clarified as has the limitations on egress. Terminology has be refined and is more consistent with terminology used by health care providers. The modification was simply to have the charging paragraph reflect that the 7 items addressed both installation and operation requirements.

Assembly Action: None

# G66-09/10

#### **Committee Action:**

Disapproved

**Committee Rea son:** This proposal was technically linked to G23-09/10 which was disapproved. The proponent requested disapproval.

**Assembly Action:** 

None

# G67-09/10

This code c hange proposal was heard by the IBC Me ans of Egress Code Development Committee.

#### **Committee Action:**

Approved as Submitted

**Committee Rea son:** The revisions coordinate and clarify the stage area egress requirements currently in Sections 410 and 1015.6. Terminology has been revised to reflect the current style of theater design.

**Assembly Action:** 

### G68-09/10

#### **Committee Action:**

#### Approved as Submitted

**Committee Reason:** The term is no longer used in the industry and except for a title is not used in the text of the IBC. Unused terms should not be defined in the code.

**Assembly Action:** 

None

### G69-09/10

#### **Committee Action:**

Disapproved

**Committee Reason:** The committee was concerned that the stage floor many not be the best place for these manual means to operate the ventilator. If there is a fire, there is a good chance that it is on the stage and access to these manual operators would be lost. The committee expressed some confusion over the phrase 'manual emergency opening'.

Assembly Action:

None

### G70-09/10

This code change was heard by the IFC Code Development Committee.

Committee Action:

Disapproved

**Committee Reason:** The proposal was disapproved as it was felt it would eliminate sprinklers in critical areas such as gridirons.

Assembly Action:

None

### G71-09/10

This code change was heard by the IFC Code Development Committee.

**Committee Action:** 

Approved as Submitted

**Committee Reason:** The proposal was approved as it coordinates with NFPA 409 in intent by not needing to include ancillary uses such as offices within the fire area. This is allowed with the use of a one-hour fire barrier instead of a 2 hour fire wall.

**Assembly Action:** 

None

# G72-09/10

This code change was heard by the IFC Code Development Committee.

**Committee Action:** 

Approved as Modified

Modify the proposal as follows:

**[F] 414 .5.3 Sta ndby or emer gency p ower.** Where mechanical ventilation, treatment systems, temperature control, alarm, detection or other electrically operated systems are required by the *International Mechanical Code*, the *International Fire Code* or this code, such systems shall be provided with an emergency or standby power system in accordance with this code or the ICC Electrical Code.

Exceptions: (Exceptions not shown remain unchanged.)

(Portions of the proposal not shown remain unchanged)

**Committee Rea son:** The committee approved the proposal as it correlates the requirements for explosion control with the IFC. Section 911.1 of the IFC would require explosion control both if the hazard exists regardless of amounts of hazardous materials or when hazardous materials listed in Table 911.1 exceed the maximum allowable quantities in Table 2703.1.1(1) of the IFC. The IBC

currently only addresses explosion control when the MAQ's have been exceeded. The modification simply deletes the reference to the IMC in Section 414.5.3 as the IFC already contains the proper link to the requirements in the IMC.

Assembly Action:

None

# G73-09/10

Both parts of this cod e chang e proposal were heard b y the IFC Code Development Committee.

Part I - IBC

**Committee Action:** 

**Approved as Submitted** 

**Committee Reason:** The committee agreed with the proponents reason statement and felt that the deletion of a problematic IBC table in favor of the IFC will add needed clarity to the Group H code provisions.

**Assembly Action:** 

None

Part II - IFC

**Committee Action:** 

**Approved as Submitted** 

**Committee Reason:** The committee agreed with the proponents reason statement and approved the proposal for consistency with the action taken on Part I.

**Assembly Action:** 

None

### G74-09/10

**Committee Action:** 

**Approved as Submitted** 

**Committee Reason:** The committee agreed with the proponent's reason statement and felt that the proposal provides an improvement in clarity within the detached building provisions and special Group H-2 and H-3 provisions. It also provides correlation with IBC Section 508.1.

**Assembly Action:** 

None

### G75-09/10

**Committee Action:** 

Approved as Modified

Modify the proposal as follows:

**[F] 415.8.5.2.2 Liquid storage rooms.** Liquid storage rooms shall be constructed in accordance with the following requirements:

 Shelving, racks and wainscoting in such areas shall be of noncombustible construction or wood of not less than 1 inch (25 mm) nominal thickness of or fire-retardant-treated wood complying with Section 2303.2

Committee Reason: The code change provides another alternative for construction of racks in these storage rooms. The committee expressed initial concern that there was no thickness specified for the FRTW, but then acknowledged that the structural needs of the rack construction and the loads it would be supporting will provide adequate dimensions. The modification clarifies the intent to provide another material option and not to limit the wood to FRTW. These spaces are sprinkler protected which relieves concerns of adding more combustible materials.

**Assembly Action:** 

## G76-09/10

#### Committee Action: Disapproved

**Committee Reason:** The committee found that the reorganization was not completely clear and did include some revised standards. Concern was expressed that the change would allow the non-residential use to occur on any floor of the live/work unit and not be limited to the first (or main) floor of the dwelling unit.

Assembly Action: None

### G77-09/10

#### Committee Action: Disapproved

**Committee Reason:** A limit to uses unusually classified as Group B or Group M occupancies is too restrictive for the intent of the live/work concept. This could, for example, prohibit an art studio in the live/work space. The code specifies that live/work units are Group R-2. To now say that the non-residential uses are limited to specific occupancies would conflict with the designation of the live/work unit as a Group R-2.

Assembly Action: None

# G78-09/10

#### Committee Action: Disapproved

**Committee Reason:** Establishing a 49 occupant load was not technically justified by the proponent. This change would also conflict with the means of egress provisions in Section 419 which provides a reference to Chapter 10 for egress issues not provided for in Section 419. The 1500 sq. ft. limit will impose a limit on the live/work non-residential uses. They will generally not be containing a large occupant load.

Assembly Action: None

# G79-09/10

This code c hange proposal was he ard by the IBC Me ans of Egress Code Development Committee.

#### Committee Action: Approved as Submitted

**Committee Reason:** The general allowances for the Group R-2 are too liberal for the work areas in a live/work unit. The requirements for means of egress and accessibility should be based on the function of the space.

Assembly Action: None

### G80-09/10

#### Committee Action: Disapproved

**Committee Reason:** The intent of the live/work provisions is small business oriented. The proposal is too far reaching for the limited size of live/work units. A valid concern is that the toilets required for the work area can be accessed from the work area.

Assembly Action: None

# G81-09/10

#### Committee Action: Disapproved

**Committee Reason:** The committee disapproved the proposed change because it appeared by be addressing concerns of property protection and not life safety of the occupants of such buildings. Fire statistics cited were concentrating on buildings under construction, not those completed with required

systems in place and occupied by residents. The committee concluded that the safeguards are adequate to continue to allow Group R occupancies to be located in buildings of combustible construction.

Assembly Action: None

# G82-09/10

#### Committee Action: Disapproved

**Committee Rea son:** The proponents did not provide technical substantiation that the proposal would address a reoccurring hazard. The lack of a definition of tenant or tenant space would result in inconsistent enforcement. It would appear to prevent small tenant spaces around the periphery of a large grocery store or 'big box' retail store without a fire rated separation.

Assembly Action: None

### G83-09/10

**Note:** The following analysis was not in the Code Change monograph but was published on the ICC website at <a href="http://www.iccsafe.org/cs/codes/Documents/2009-10cycle/ProposedChanges/Standards-Analysis.pdf">http://www.iccsafe.org/cs/codes/Documents/2009-10cycle/ProposedChanges/Standards-Analysis.pdf</a>:

**Analysis:** Review of the proposed new standard indicated that, in the opinion of ICC staff, the standard did comply with ICC standards criteria. The standard is currently referenced in the IMC code change referenced the 2004 edition, however the 2009 was reviewed anticipating a modification request from the proponent.

Committee Action: Disapproved

**Committee Reason:** Without the modification that was offered by the proponent, the change would conflict with provisions approved by the Fire Safety Committee for inclusion in Chapter 7. The provisions regarding electrical interlocks are unclear regarding where the interlocks are to be provided.

Assembly Action: None

# G84-09/10

#### Committee Action: Disapproved

**Committee Reason:** The committee concluded that this requirement did not belong in the building code. The assessment would not result in any building code requirements. It would impose costs and significant liability vulnerabilities on architects and designers. These analyses would be beyond the expertise of most building officials. The requirement to return the assessment would violate many state laws regarding the retention of building permit documentation. Vulnerability is undefined and as a result the application of the provision could cast a wide net. Approved agency is a defined term in Chapter 17 and it is not the intent of the use of that phrase in this proposal.

Assembly Action: None

# G85-09/10

#### Committee Action: Disapproved

**Committee R eason:** The committee disapproved the proposal, preferring the existing format of footnotes which quantify and limit the application of Table 503. The phrasing of Section 503.1 was awkward and unclear. Section 503.1.5 is misleading regarding the interaction of Table 503 and Section 509.1

Assembly Action: None

# G86-09/10

#### Committee Action: Disapproved

**Committee Reason:** The proposal is written too broadly and would have a greater impact than the issues discussed by the proponent. At the same time the proposal doesn't really resolve the issues raised. Chapter 9 requires floors below an assembly occupancy to be sprinkler protected, such would

not be guaranteed by this proposal. Reference to the means of egress requirements is redundant. This might be more acceptable if it specifically addressed the height and area issues and didn't try to redefine an occupancy.

Assembly Action: None

G87-09/10

Committee Action: Disapproved

**Committee Reason:** The committee felt this proposal was the opposite extreme from G86-09/10 and was too restrictive. The committee would like to see something in the middle ground between the two code changes.

Assembly Action: None

G88-09/10

Committee Action: Disapproved

**Committee Rea son:** Although the code technically allows an unlimited height building, the area limits for a total building will usually result in a building not having an excessive height. The committee did not feel that the fire statistics provided by the proponents included sufficient technical justification for this change. It was unclear if the intent was to still allow increases for sprinkler protection.

Assembly Action: None

G89-09/10

Committee Action: Disapproved

**Committee Reason:** The proponent did not provide technical information justifying the reduction of allowable height for these occupancies. The information that was provided was about property loss, not threats to life safety of the occupants.

Assembly Action: None

G90-09/10

Committee Action: Disapproved

**Committee Reason:** Committee felt the added reference was not needed because designers and building officials would find the aircraft use special provisions without the assist of this footnote. Committee members expressed concern of starting another laundry list of references.

Assembly Action: None

G91-09/10

Committee Action: Disapproved

**Committee Reason:** Fire statistics do not support the reduction of the allowance. There is no data that the fire loss experience is different for three story versus four story building. The NFPA 13R systems are adequate. While there are fires in attics, they rarely result in loss of the building.

Assembly Action: None

G92-09/10

Committee Action: Disapproved

**Committee R eason:** The proponent provided no new data or information to provide technical justification for this change. The committee felt that the issues of height and area have been more than adequately reviewed both during the original drafting of the code and through the subsequent

studies of the CTC. This proposal provided no information that distinguished it from past proposals that were disapproved in the past code development cycles.

Assembly Action: None

### G93-09/10

#### **Committee Action:**

#### Approved as Modified

#### Modify the proposal as follows:

**505.2.1 Area limitation.** The aggregate area of a mezzanine or mezzanines within a room shall not exceed one-third of the floor area of that room or space in which they are located. The enclosed portion of a room shall not be included in a determination of the floor area of the room in which the mezzanine is located. In determining the allowable mezzanine area, the area of the mezzanine shall not be included in the floor area of the room. Where a room contains both a mezzanine and an equipment platform the aggregate area of the two raised floor levels shall not exceed two thirds of the floor area of that room or space in which they are located with neither occupying more than one-third of the floor area of the room.

**505.3.1** A rea limitations. The aggregate area of all equipment platforms within a room shall not exceed two thirds of the area of the room in which they are located. Where an equipment platform is located in the same room as a mezzanine, the area of the mezzanine shall be determined by Section 505.2.1 and the combined aggregate area of the equipment platforms and mezzanines shall not exceed two-thirds of the room in which they are located.

**Exception.** Where a room contains both a mezzanine and an equipment platform the aggregate area of the two raised floor levels shall not exceed two thirds of the floor area of that room or space in which they are located.

(Portions of proposal not shown remain unchanged)

**Committee Rea son:** The reorganization provided in the proposal clarifies the application of the section as well as clearly distinguishes the mezzanine and equipment platform standards and the limits imposed when both occur in the same space. The modifications removed language which was found to be redundant of other language in the section, and therefore unneeded.

**Assembly Action:** 

None

# G94-09/10

Withdrawn by Proponent

### G95-09/10

This code c hange proposal was heard by the IBC Me ans of Egress Code Development Committee.

**Committee Action:** 

**Approved as Submitted** 

**Committee Reason:** The deletion removes redundant language and allows all mezzanines to use the general means of egress requirements found in Chapter 10.

Assembly Action:

None

# G96-09/10

#### **Committee Action:**

#### Approved as Submitted

**Committee R eason:** The committee approved the change because it provides clarity to the measurement of open areas and public ways in two key areas of the code. It reflects the application of these provisions that the measurement includes all adjoining yards/open areas as well as public

ways. Measurement differs from fire separation distance, It clarifies the measurement of open space next to building facades for calculation of allowable area increases in Section 506.2.1 and for measurement of open area surrounding unlimited area buildings in Section 507. This amendment is compatible with those contained in G97-09/10 and G98-09/10.

**Assembly Action:** 

### G97-09/10

#### **Committee Action:**

#### Approved as Submitted

**Committee Rea son:** The change, with those of G96 and G98 -09/10 bring clarification to the measure of W for determining allowable area increases. This revision clarifies the application to multiple building sites.

**Assembly Action:** 

None

# G98-09/10

#### **Committee Action:**

#### Approved as Submitted

**Committee Reason:** Providing a formula makes the code clear and easier to apply. This change was approved by the committee because the formula provides a 'definition' for the term weighted average and clearly shows the code user how to calculate it. This change with G96 and G97-09/10 work together to clarify Section 506.2.1.

**Assembly Action:** 

None

### G99-09/10

#### **Committee Action:**

Disapproved

**Committee Reason:** The committee felt that while the code often has provisions different than, and superseding of, referenced standards, the departure from the NFPA standard contained in this proposal would be better reviewed by NFPA in the context of revising the sprinkler standard. While the proposal concentrated on the make-up of the roof sheathing, the committee noted the presence of other combustible materials in attics, especially structural framing supporting the roof, that would be unprotected.

**Assembly Action:** 

None

# G100-09/10

#### **Committee Action:**

Disapproved

Committee Reason: Although the committee thought the concept included in the proposal may be an appropriate option to add to the code, it found the language of the proposal unclear and misleading. The committee expressed concern that the resulting building would potentially have first stories approaching unlimited area scale without any provision to improve firefighter access surrounding the building. Significantly smaller upper stories could also be set back a significant distance from the walls of lower story, again providing a challenging firefighter access issue. There appeared to be a potential that under a mixed occupancy scenario that an even larger building than intended could be achieved.

**Assembly Action:** 

None

# G101-09/10

#### **Committee Action:**

Disapproved

**Committee Reason:** The committee understood the concept of the proposal, but felt it needed to be more specific as to the accessory occupancies of concern or how they be applicable in the various unlimited area building scenarios. The use of the term 'listed' is not as the term is defined. The committee speculated that because 10% of an unlimited area building could be quite a large area whether a limit to the tabular value of Table 503 might not be appropriate.

**Assembly Action:** 

### G102-09/10

#### **Committee Action:**

#### Approved as Submitted

**Committee Reason:** The change was approved because it provides clarity regarding the relationship between the occupancies allowed in a Section 507.3 building and the construction type or types associated with the group of occupancies.

Assembly Action:

None

# G103-09/10

**Committee Action:** 

Disapproved

Committee Reason: The committee concluded that retaining this exception was not in conflict with the general limitations of Chapter 9 of the IBC and IFC because it was a specific provision that would take precedence over the general. The concerns expressed by supporters of the code change that these facilities get used for activities other than those listed were felt to be enforcement issues and should not be the basis of a code change. The listed activities are clearly those which have very limited fuel load on the sporting surface. The committee acknowledged that an amendment that would clarify that the exception applies to just the sporting area and not surrounding support functions such as spectator seating, locker or dressing facilities or concession areas would be appropriate.

**Assembly Action:** 

None

### G104-09/10

**Committee Action:** 

Disapproved

**Committee Reason:** The committee found the format of the proposal very appealing in the clarity it would bring to these provisions, however it appeared that the reformat includes a technical change in the relationship of the hazardous material area located at the building perimeter and the measurement of that perimeter.

**Assembly Action:** 

None

# G105-09/10

**Committee Action:** 

Disapproved

**Committee Reason:** The proponent did not provide sufficient technical support to justify reducing the allowed Type IIIA allowed unlimited area building to the unrated Type IIIB. This could result in a significant increase in combustible materials in the building construction that would not be protected by one hour assemblies.

**Assembly Action:** 

None

# G106-09/10

**Committee Action:** 

Disapproved

**Committee Rea son:** The committee disapproved this change because there was not justification that allowing motion picture theaters of unlimited size in a combustible building construction type where they are now only allows in non-combustible construction types.

**Assembly Action:** 

None

# G107-09/10

**Committee Action:** 

Approved as Submitted

**Committee Reason:** The committee found the code change appropriate because it clarifies that the activities and facilities listed in Table 508.2.5 present a special hazard regardless whether the building is a single occupancy or a mixed occupancy. The change would make sure that these standards are met regardless of the approach taken to address mixed occupancies. These things are uses or building support facilities and not occupancies unto themselves. The committee expressed

concern that divorcing these provisions form the accessory use provisions would allow these features to exceed the 10% area limitation of accessory occupancy. While this part of the provision could be refined by public comment, the committee was comfortable that the term incidental was sufficiently clear that were such features/uses to become the primary or only use of a building, that it would judged to be not 'incidental'.

Assembly Action: None

# G108-09/10

Committee Action: Disapproved

**Committee Rea son:** The committee disapproved this change based on the preferred action contained in G107-09/10. There was also specific discomfort with the phrasing 'under all circumstances' and that the change would not clarify the interaction with other mixed use options but actually be more confusing.

Assembly Action: None

# G109-09/10

Committee Action: Disapproved

**Committee Reason:** While the intent of the proponent was to clarify the section, the committee felt that it did the opposite. Specifically the committee found the first sentence of new Section 508.2 could be read to imply that an accessory occupancy could be a total building, not a small area of a larger building. They found that the wording of Section 508.2.2 confused the determination of aggregate areas of accessory occupancies.

Assembly Action: None

# G110-09/10

Committee Action: Disapproved

**Committee Rea son:** The committee understood the issue addressed by the proposal but felt the language did not provide a clear solution. Further the committee felt the issue was one of plan review and fairness in leasing practices and not one of building or occupant safety, therefore it is inappropriate to resolve in the building code.

Assembly Action: None

# G111-09/10

Committee Action: Disapproved

**Committee Reason:** The committee disapproved the change because they did not find it solved the issue raised by the proponent, that of limiting accessory occupancy location in a building based on its tabular value in Table 503 rather than the tabular value of the primary occupancy of the building.

Assembly Action: None

# G112-09/10

Committee Action: Disapproved

**Committee Rea son:** The committee felt the proposal made inappropriate use of the table. In addition to a number of inconsistencies in the proposed occupancy categories, the committee felt that making a simple declaration of one occupancy would eliminate an appropriate evaluation of the specific activities occurring or the quantities of hazardous materials present.

### G113-09/10

#### **Committee Action:**

#### **Approved as Submitted**

**Committee Reason:** The committee approved this change to provide consistency in application of these provisions between Group I-2 and in Ambulatory care facilities. Both occupancies are treating patients who may not be able to respond to emergency situations. The protection of the waste and linen rooms will reduce potential hazards to the patients of ambulatory care facilities.

**Assembly Action:** 

None

# G114-09/10

**Committee Action:** 

Disapproved

**Committee Rea son:** The intent of the proposal that all parking garages present a hazard in combination with other occupancies is an implication that is not substantiated by fire statistics. Parking garages have a proven track record, especially open garages. The provision, if appropriate may be more appropriate located or referenced in Section 406 as well as having connection to Section 508.4.

**Assembly Action:** 

None

### G115-09/10

**Committee Action:** 

Disapproved

**Committee Rea son:** The term calculated is confusing. Many provisions of the code require calculation. The term separated occupancies is well understood in context of its opposing option - non-separated mixed occupancies.

Assembly Action:

None

# G116-09/10

**Committee Action:** 

Disapproved

**Committee Reason:** The added reference is not needed. The code is well understood that Section 402 takes precedence over the occupancy separation provisions of Section 508. The committee could not support commencing another 'list' of exceptions or references when they are not needed.

**Assembly Action:** 

None

# G117-09/10

**Committee Action:** 

Disapproved

**Committee Reason:** The committee disapproved the change because it did not feel that it clarified the application of the section. The language could be construed to require separation between different uses contained on the same list under a single type of occupancy such as between a restaurant and a tavern.

**Assembly Action:** 

<u>None</u>

# G118-09/10

**Errata:** Change the values in two cells as shown. The intent of the proponent is to replicate Table 302.3.2 from the 2003 IBC without change. The two cells were improperly transcribed by staff.

# TABLE 508.4 REQUIRED SEPARATION OF OCCUPANCIES (HOURS)

									, -				1110	<del></del>											
Use	Α-	A-	A-	A-	A-	B <sup>b</sup> E	ŧ F-		F-	H-	H-	H-	H-	H-	I-1 I-	-2 I	3	I-4	Mb	R-	R-	R-	S-	S-	U
	1	<b>2</b> e	3	4	5			1	2	1	2	3	4	5						1	2	3,	1	<b>2</b> <sup>c</sup>	
	•	_	٠,	_	3			•	_			3	_	٠,											
																						R-			
																						4			
A-1		2	2	2	2	2	2	3	2	NP	4	3	2	4	2	2	2	2	2	2	2	2	3	2	1
A-			2	2	2	2	2	3	2	NP	4	3	2	4	2	2	2	2	2	2	2	2	3	2	1
<b>2</b> <sup>e</sup>												_											_		
A-3				2	2	2	2	3	2	NP	4	3	2	4	2	2	2	2	2	2	2	2	3	2	1
A-4					2	2	2	3	2	NP	4	3	2	4	2	2	2	2	2	2	2	2	3	2	1
A-5						2	2	3	2	NP	4	3	2	4	2	2	2	2	2	2	2	2	3	2	1
B <sup>b</sup>							2	3	2	NP	2	1	1	1	2	2	2	2	2	2	2	2	3	2	1
E								3	2	NP	4	3	2	4 <u>3</u>	2	2	2	2	2	2	2	2	3	2	1
F-1									3	NP	2	1	1	1	3	3	3	3	3	3	3	3	3	3	3
F-2										NP	2	1	1	1	2	2	2	2	2	2	2	2	3	2	<del>2</del> 1
H-1											NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP
H-2												1	2	2	4	4	4	4	2	4	4	4	2	2	1
H-3													1	1	4	3	3	3	1	3	3	3	1	1	1
H-4														1	4	4	4	4	1	4	4	4	1	1	1
H-5															4	4	4	3	1	4	4	4	1	1	3
I-1																2	2	2	2	2	2	2	4	3	2
I-2																	2	2	2	2	2	2	3	2	1
I-3																		2	2	2	2	2	3	2	1
1-4																			2	2	2	2	3	2	1
M <sup>b</sup>																				2	2	2	3	2	1
R-1																					2	2	3	2	1
R-2																						2	3	2	1
R-																							3	2 <sup>d</sup>	1 <sup>d</sup>
3,																									
R-4																									
S-1																								3	3
S-																									1
<b>2</b> <sup>c</sup>																									
U																									

(Portions of proposal not shown remain unchanged)

#### **Committee Action:**

#### **Approved as Submitted**

Committee R eason: The committee approved the table as providing a better format for the information for occupancy separation requirements. It allows a simple reading of the table for the intersection each possible combination of occupancies. The values quickly force someone to consider the non-separated mix occupancy option. There was discomfort that the existing Table 508.4 combines in the same column and row occupancies that are distinctly different. It was acknowledged that the values contained in the table are still the subject of considerable debate but the format provides a clear route to consider different values. The committee intends that existing Table 508.4 be replaced by Table 302.3.2 from the 2003 Edition of the IBC, with no changes to the tabular values in the 2003 Table.

Assembly Action: None	Assembly Action:	None

### G119-09/10

#### **Committee Action:**

#### **Approved as Modified**

Modify the proposal as follows:

# TABLE 508.4 REQUIRED SEPARATION OF OCCUPANCIES (HOURS)

	A <sup>d</sup> , E		I-1,I-3, I-4		I-2		R		F-2, S-2 <sup>b</sup> , U		B, F-1,M, S-1		H-1		H-2		H-3, H-4, H-5	
OCCUPANCY	s	NS	s	NS	S	NS S	NS		S	NS	s	NS	s	NS	S	NS	s	NS
A <sup>d</sup> , E	N	N	1	2	2	NP	1	2	N	1	1	2	NP	NP	3	4	2	3ª
I-1, I-3, I-4			Ng	Ng	2	NP	1	NP	1	2	1	2	NP	NP	3	NP	2	NP
I-2					N	N	2	NP	2	NP	2	NP	NP	NP	3	NP	2	NP
R							Ng	Ng	1°	2 <sup>c</sup>	1	2	NP	NP	3	NP	2	NP
F-2, S-2 <sup>b</sup> , U									N	N	1	2	NP	NP	3	4	2	3ª
B, F-1, M, S-1											N	N	NP	NP	2	3	1	2ª
H-1													N	NP	NP	NP	NP	NP
H-2															N	NP	1	NP
H-3, H-4, H-5																	1 <sup>e,f</sup>	NP

- a. For Group H-5 occupancies, see Section 903.2.4.2.
- b. The required separation from areas used only for private or pleasure vehicles shall be reduced by 1 hour but to not less than one hour.
- c. See Section 406.1.4, <del>709.1, and 712.3.</del>
- d. Commercial kitchens need not be separated from the restaurant seating areas that they serve.
- e. Separation is not required between occupancies of the same classification.
- f. For H-5 occupancies, see Section 415.8.2.2.
- g. See Section 420.

**Committee Reason:** The intent of the proposal was to provide reference to the provisions regarding separations applying to dwelling units and sleeping units. The modification changed the reference to the code section that actually requires the separations not to the sections which tell the code user how to build the separations. Section 420 applies to dwelling units and sleeping units in Group R occupancies and Group I-1 occupancies, Therefore the new footnote 'g' is placed in the table at the intersection of the R occupancies columns and rows and the intersection of the columns and rows that include the Group I-1 occupancy.

Assembly Action: None

# G120-09/10

**Committee Action:** 

Approved as Modified

Modify the proposal as follows:

# TABLE 508.4 REQUIRED SEPARATION OF OCCUPANCIES (HOURS)

(Portions of table not shown are unchanged)

- a. For Group H-5 occupancies, see Section 903.2.4.2.
- The required separation from areas used only for private or pleasure vehicles shall be reduced by 1 hour.
- c. See Section 406.1.4.
- d. Commercial kitchens need not be separated from dining or seating areas that they serve.
- e. Separation is not required between occupancies of the same classification.
- f. For H-5 occupancies, see Section 415.8.2.2.

Committee Reason: The revision provides clarification that a separation is not needed between a 'commercial kitchen' and the associated dining and seating areas regardless if the activity is a restaurant of other use. Some of the committee felt the footnote wasn't needed at all because such kitchens are part of the occupancy and separation is not required. As there is not universal agreement on that interpretation, the change provides consistency regardless of the occupancy classifications assigned. The change also allows the exception clearly apply to such applications as school lunchrooms, places of religious worship and fire stations.

G121-09/10

Committee Action: Disapproved

Committee Reason: Disapproved based on the preferred action taken on G120-09/10.

Assembly Action: None

G122-09/10

Committee Action: Disapproved

**Committee Reason:** Deleting the footnote and adding provisions to only Group A-2 would leave in questions the application to kitchens serving schools, places of religious worship and fire houses. A definition of commercial kitchen would need to be provided; and would be helpful in clarifying this activity in this and other situations such as catering kitchens.

Assembly Action: None

G123-09/10

Committee Action: Disapproved

**Committee Reason:** The committee concluded that the issues were not one of building or occupant safety but of proper plan review. The listing of possible separation construction options was confusing. The was no technical substantiation provided for always requiring an actual separation.

Assembly Action: None

G124-09/10

Committee Action: Disapproved

Committee Reason: The committee preferred the changes approved under G118-09/10 and this change would be unnecessary.

Assembly Action: None

G125-09/10

Committee Action: Disapproved

Committee Rea son: The committee preferred the changes approved under G118-09/10 and this change would be unnecessary.

Assembly Action: None

G126-09/10

Committee Action: Disapproved

Committee Rea son: The committee preferred the changes approved under G118-09/10 and this change would be unnecessary.

G127-09/10

Committee Action: Disapproved

**Committee Rea son:** The committee preferred the changes approved under G118-09/10 and this change would be unnecessary.

Assembly Action: None

G128-09/10

Committee Action: Disapproved

**Committee Rea son:** The committee preferred the changes approved under G118-09/10 and this change would be unnecessary.

Assembly Action: None

G129-09/10

Committee Action: Disapproved

Committee Rea son: The committee preferred the changes approved under G118-09/10 and this change would be unnecessary.

Assembly Action: None

G130-09/10

Committee Action: Disapproved

**Committee Rea son:** The committee preferred the changes approved under G118-09/10 and this change would be unnecessary.

Assembly Action: None

G131-09/10

Committee Action: Disapproved

**Committee Reason:** The committee was uncomfortable that the apparent effect of the change would be to allow a 5 story shaft which would only be rated as a one hour enclosure for four stories.

Assembly Action: None

G132-09/10

Committee Action: Disapproved

**Committee Reason:** This is another version of G131-09/10 and was disapproved to be consistent with the previous action.

Assembly Action: None

G133-09/10

Committee Action: Approved as Submitted

**Committee Rea son:** The change was approved as it was a simple and appropriate editorial clarification to the provision.

Assembly Action: None

G134-09/10 Withdrawn by Proponent

G135-09/10

Committee Action: Disapproved

**Committee Reason:** While the committee understood the issue raised by the proponent, they were not convinced that the change actually clarified the application of the code. There was specific concern regarding the term 'outer perimeter' and how that might be interpreted differently in each jurisdiction.

Assembly Action: None

G136-09/10

Committee Action: Disapproved

**Committee Rea son:** At the proponent's request, the committee disapproved the code change acknowledging that it needed further study and refinement. Of particular concern that it would allow a lessening of structural stability of roof assemblies.

Assembly Action: None

G137-09/10

Committee Action: Disapproved

**Committee Rea son:** At the proponent's request, the committee disapproved the code change recognizing a need to further refine the text. Of particular concern was what unintended consequences could result from the broad language proposed. The committee reminded the proponent that exemption from permit does not justify exemption from code standards. Footnote 'i' represented an uncomfortable mix of technical and administrative code provisions.

Assembly Action: None

G138-09/10

Committee Action: Disapproved

**Committee Re ason:** No technical substantiation was provided to justify reducing the protection of Type IIIB construction.

Assembly Action: None

G139-09/10

Committee Action: Disapproved

**Committee Reason:** The proposal is not justified based on any technical information. The change would eliminate design options and would exclude building materials without ample justification. The term 'solid' could be read to prohibit any openings in a wall so regulated.

Assembly Action: None

G140-09/10

Committee Action: Disapproved

**Committee Rea son:** The proposal defeats the allowance for fire-retardant-treated wood in these assemblies especially the application of FRTW sheathing. Language addressing inner and outer faces was unclear to the committee as how it should be interpreted.

### G141-09/10

Committee Action: Disapproved

**Committee Reason:** The text of the proposal was dependent on the approval of a related change to Chapter 7. That proposal heard by the Fire Safety Code Development Committee was disapproved.

Assembly Action: None

G142-09/10

Committee Action: Disapproved

**Committee Re ason:** The proposal would allow too much combustible materials into noncombustible construction types. This change is more than just sheathing, but gets to the structural elements of a building. It is not appropriate to allow wood floors to be constructed in high-rise buildings where the concept is to defend people in place during a fire incident.

Assembly Action: None

G143-09/10

Committee Action: Disapproved

**Committee Reason:** The proponent did not provide technical justification to restrict use of standard wood for simply blocking purposes. It was questioned whether there were fire retardant products available for all typical blocking situations. There was no information presented of a loss history because blocking materials were wood other than FRTW.

Assembly Action: None

G144-09/10

Committee Action: Disapproved

**Committee Reason:** The committee found the concept embodied in the proposal intriguing but found the proposed text unclear and confusing. The technique may work for typical residential construction methods and designs but probably not for typical commercial buildings. Section 1203.2 requires that cross ventilation be provided in attic spaces. This proposed section hangs there with no connection from Section 1203.2.

Assembly Action: None

G145-09/10

PART I- IBC GENERAL Committee Action:

**Approved as Submitted** 

**Committee Reason:** The change resolves issues imposed by the current text. It puts the incentive in correct format to direct the code user to provide better ventilation. It also allows flat roof situations to be addressed where a 3 foot vertical distance between upper and lower vents can not be achieved. It also eliminates the ability to interpret the section to allow all ventilation openings on the ridge of a roof.

Assembly Action: None

PART II - IRC- B/E

Committee Action: Disapproved

**Committee Rea son:** The committee feels that the language of proposal RB158-09/10 more adequately addresses this issue.

### G146-09/10

# PART I- IBC GENERAL Committee Action:

### Disapproved

**Committee R eason:** The change would introduce highly discretionary language into the code without providing the building official ample guidance for its use. A more detailed exception addressing the variety of climatic conditions that might warrant the waiver of attic ventilation would be appropriate. The discussion regarding installation of photovoltaic equipment on roof tops seemed irrelevant to the proposal to allow a waiver of attic ventilation

Assembly Action: None

PART II – IRC-B/E Committee Action:

Disapproved

**Committee Reason:** This proposal would add language that would require the Building Official to decide the code requirements. This is a local issue and should be handled through local amendment to the code.

Assembly Action: None

### G147-09/10

# PART I- IBC GENERAL Committee Action:

### **Disapproved**

**Committee Rea son:** The committee felt this type of requirement was more appropriate for a jurisdiction's zoning regulations rather than the building code. The committee identified gaps in the ranges of standards in the proposal which would result in no requirement for specific situations.

Assembly Action: None

PART II – IRC-B/E Committee Action:

Disapproved

**Committee Re ason:** This proposal does not provide adequate prescriptive methods of measurement and will create enforcement problems. A standard should be referenced to achieve the results. This is a Zoning Code issue and is outside the scope of the IRC.

Assembly Action: None

# G148-09/10

#### **Committee Action:**

#### Approved as Modified

#### Modify the proposal as follows:

**1208.3 Room area.** Every dwelling unit shall have at least one room that shall have not less than 120 square feet (13.9 m2) of net floor area. Other habitable rooms shall have a net floor area of not less than 70 square feet (6.5 m2).

Exception: Kitchens in a one-and two-family dwelling dwellings.

Committee Rea son: The committee agreed with the proponent that there was no technical justification for a minimum area of and that for Accessible, Type A and Type B dwelling units, the A117.1 standard would provide ample space for access to kitchen spaces. The proponent originally intended a simple correlation with the IRC, but the committee expanded the proposal to include all dwelling unit kitchens regardless of occupancy category. There seemed no justification to waive the area for Group R-3 dwelling units and not Group R-2 dwelling units or Group R-4 congregate residences .

Assembly Action:

### G149-09/10

#### **Committee Action:**

#### **Approved as Submitted**

**Committee Reason:** The change provides important protection and surfacing around slop sinks. As most state and local health laws contain similar provisions, this change would provide coordination and result in installation before, rather than after, the health inspector's first inspection.

**Assembly Action:** 

None

# G150-09/10

#### **Committee Action:**

Disapproved

**Committee Reason:** The concept of the proposal was welcomed by some of the committee but they were concerned that the threshold numbers would not result in equal access to such stations for both fathers and mothers. The application to just assembly occupancies was too limited. Application to mercantile facilities, especially covered/open malls seemed essential. Other committee members were not convinced that as important as it is to provide these diaper changing stations, that it is an appropriate item for either building or plumbing codes.

**Assembly Action:** 

None

### G151-09/10

#### **Committee Action:**

Disapproved

**Committee Rea son:** The requirement is not needed because it is adequately addressed in the referenced NFPA 70. The proposed discretion for the building official and fire code official would result in inconsistent application of the system. The installation of a system to complete shut down a building would be expensive and difficult.

**Assembly Action:** 

None

# G152-09/10

**Note:** The following analysis was not in the Code Change monograph but was published on the ICC website at <a href="http://www.iccsafe.org/cs/codes/Documents/2009-10cycle/ProposedChanges/Standards-Analysis.pdf">http://www.iccsafe.org/cs/codes/Documents/2009-10cycle/ProposedChanges/Standards-Analysis.pdf</a>:

**Analysis:** Review of the proposed new standard indicated that, in the opinion of ICC staff, the standard did not comply with ICC standards criteria, Section 3.6.2.1. Mandatory language.

#### **Committee Action:**

**Disapproved** 

**Committee R eason:** At the request of the proponent, the committee disapproved the proposal because the proposed referenced standard does not comply with ICC standards for referenced documents. The committee also questioned whether this equipment needed to be regulated by the building code as it does not convey people from floor to floor but is used for material conveyance.

**Assembly Action:** 

None

# G153-09/10

All three parts of this code change proposal were heard by the Gener al Code Development Committee.

# PART I- IBC GENERAL Committee Action:

Disapproved

**Committee Reason:** The committee disapproved the proposal because they felt that the requirement is adequately covered by the standard and the requirement doesn't need to be repeated in the code. In addition, the proposed language is poorly crafted, and would seem to prohibit inspection by qualified inspectors employed by the jurisdiction. The proponent did not clarify why this language was necessary in the code.

Assembly Action: None

**PART II- IFC** 

Committee Action: Disapproved

Committee Reason: Disapproved for consistency with the action taken on Part I.

Assembly Action: None

**PART III- IPMC** 

Committee Action: Disapproved

Committee Reason: Disapproved for consistency with the action taken on Parts I and II.

Assembly Action: None

G154-09/10

Committee Action: Disapproved

**Committee Reason:** This language needs to be provided in the code and not force building officials or designers to consult the standard for 10 simple words.

Assembly Action: None

G155-09/10

Committee Action: Disapproved

**Committee Reason:** The lighting is only needed for the use of firefighters. It has no relationship to the use of any elevator for accessible means of egress or for occupant self evacuation.

Assembly Action: None

G156-09/10

Committee Action: Disapproved

**Committee Reason:** While the committee was supportive of the concept intended by the proposal, they disapproved the proposal as written. The proposal was unclear regarding what would be required, where the identification would be placed, how the designation would be made. Numbered elevators if posted on the frame of the hoistway door could be confused with floor numbers.

Assembly Action: None

G157-09/10

This code c hange proposal was he ard by the IBC Me ans of Egress Code Development Committee.

Committee Action: Disapproved

**Committee Reason:** G49-09/10 added redundancy to the number of cars required to be Fire Service Access elevators. While one of the Fire Service Access elevators should be the stretcher elevator required in Section 3002.4, there is no justification to require all Fire Service Access elevators to have such a jump in elevator size (i.e., 2500 pounds to 3500/4000 pounds). Buildings large enough or of a type that justifies additional elevators sized for stretchers can be determined on a case by case basis during development of the fire and safety evacuation plans between the building owners and fire departments.

### G158-09/10

This code c hange proposal was heard by the IBC Me ans of Egress Code Development Committee.

**Committee Action:** 

**Approved as Submitted** 

**Committee Reason:** This clarifies that the same exemptions for sprinklers installed in the elevator machine room and shaft and the installation for shunt trips permitted for Occupant Evacuation Elevators in Section 3008.6 should also be permitted in Fire Service Access Elevators.

**Assembly Action:** 

None

### G159-09/10

This code c hange proposal was he ard by the IBC Me ans of Egress Code Development Committee.

**Committee Action:** 

**Approved as Modified** 

Modify the proposal as follows:

**3007.2** Phase I Emerge ncy rec all opera tion. An independent, three-position, key-operated "Fire Recall" switch shall be provided at the designated level for each fire service access elevator or for each group of fire service access elevators in accordance with the requirements in ASME A17.1/CSA B44. In addition, actuation of any building fire alarm initiating device shall initiate Phase I emergency recall operation on all fire service access elevators in accordance with the requirements in ASME A17.1/CSA B44. All other elevators shall remain in normal service unless Phase I emergency recall operation is manually initiated by a separate, required three-position key-operated "Fire Recall" switch or automatically initiated by the associated elevator lobby, hoistway or and elevator machine room smoke detectors.

**Committee Rea son:** The modification to the proposal is to coordinate with what is required in ASME A17.1 and will require activation of the fire recall from all three locations listed. The proposal provides the fire service a standardized way to initiate the fire recall process.

**Assembly Action:** 

None

# G160-09/10

This code c hange proposal was he ard by the IBC Me ans of Egress Code Development Committee.

**Committee Action:** 

Disapproved

**Committee Rea son:** With the reference to Section 403.2.3, it is not clear if the requirement for hardened shaft would be applicable for all Fire Service Access elevators (starting at 120 feet), or just those in Seismic Category III and IV or only at buildings taller than 420 feet. The intent of the proponent is for all Fire Service Access elevators to be hardened at 120 feet regardless of seismic category. The correct placement for this requirement is in Section 402.3.2. Justification for the additional costs must be provided.

**Assembly Action:** 

None

# G161-09/10

This code c hange proposal was he ard by the IBC Me ans of Egress Code Development Committee.

**Committee Action:** 

**Disapproved** 

**Committee Rea son:** Sufficient justification was not provided for additional costs and problems in dealing with pressurization requirements in 120 foot tall buildings. G164-09/10 will address the issue of possible smoke infiltration when the fire department is running the fire hose from the stand pipe and out of the stairway door.

Assembly Action: None

### G162-09/10

This code c hange proposal was heard by the IBC Me ans of Egress Code Development Committee.

#### **Committee Action:**

#### Approved as Submitted

**Committee Rea son:** The performance language for this requirement will allow a wide variety of design options and provides protection for the hoistway from possible water infiltration. Water does cause problems for elevators during a fire event, so this protection is needed. The requirements do clarify that protection is not needed from sprinklers activated within the lobby since the elevators will go into fire department recall if there is smoke/fire in the elevator lobbies. This coordinates with G174-09/10.

**Assembly Action:** 

None

### G163-09/10

This code c hange proposal was he ard by the IBC Me ans of Egress Code Development Committee.

#### **Committee Action:**

#### Approved as Submitted

**Committee Reason:** The proposed revision clarifies that the intent of the exception is for the level of exit discharge used by the fire department rather than a 'street' level that might not be where the fire department wants to access the building.

**Assembly Action:** 

None

# G164-09/10

This code c hange proposal was heard by the IBC Me ans of Egress Code Development Committee.

#### **Committee Action:**

#### **Approved as Submitted**

**Committee Rea son:** The requirement would keep the integrity of the lobby for the Fire Service Access elevator even when the fire department is running the hose from the stand pipe out of the stairway door.

Assembly Action:

None

# G165-09/10

This code c hange proposal was heard by the IBC Me ans of Egress Code Development Committee.

**Committee Action:** 

**Disapproved** 

**Committee Reason:** The proposal was disapproved because no technical justification was provided for the increase for the fire-resistance rating for cable protection. Most of the wiring for elevators can be run inside the protected shaft.

Assembly Action:

### G166-09/10

This code c hange proposal was he ard by the IBC Me ans of Egress Code Development Committee.

#### **Committee Action:**

#### **Approved as Submitted**

**Committee Re ason:** The committee felt that this was an improvement over G165-09/10. This requires critical wiring for fire service operation to be protected, not all wiring. This will not decrease the safety of the elevator for the fire department service.

Assembly Action:

None

# G167-09/10

This code c hange proposal was he ard by the IBC Me ans of Egress Code Development Committee.

#### **Committee Action:**

Approved as Submitted

**Committee Re ason:** The proposal was approved because the 'fire hat' symbol is already used inside the elevator cab and therefore instantly recognizable by the fire service. This will aid in the quick identification of the Fire Service Access Elevators and will assist the fire service.

**Assembly Action:** 

None

### G168-09/10

This code c hange proposal was heard by the IBC Me ans of Egress Code Development Committee.

**Committee Action:** 

Disapproved

**Committee Reason:** Alternative methods are already permitted for unique situations so proposed Section 3008.1.1 is not needed. The requirements engineering analysis is redundant and is not needed.

**Assembly Action:** 

None

# G169-09/10

This code c hange proposal was heard by the IBC Me ans of Egress Code Development Committee.

**Committee Action:** 

Disapproved

**Committee Rea son:** The AMSE standard does not currently include specifics for Occupant Evacuation Elevators. Requiring the standard to have specific requirements before this option could be used would effectively prohibit Occupant Evacuation Elevators at this time. ASME should move forward to include specific information. The IBC needs to move forward to provide direction for this new technology. Involvement of the fire department and code official during construction and development of the fire and safety evacuation plans will address specific control issues on a case by case basis until the ASME standard is complete.

**Assembly Action:** 

None

# G170-09/10

This code c hange proposal was he ard by the IBC Me ans of Egress Code Development Committee.

**Committee Action:** 

Disapproved

**Committee Re ason:** This reference to Section 1003.7 could be perceived as the Fire Service Access Elevators and Occupant Evacuation Elevator being a trade off for means of egress requirements. These elevators are aids for means of egress, and not a replacement.

Assembly Action: None

### G171-09/10

This code c hange proposal was he ard by the IBC Me ans of Egress Code Development Committee.

**Committee Action:** 

Approved as Submitted

**Committee Reason:** This proposed text allows flexibility for individual recall in addition to bank recall. This will help fire department efficiency when using the Occupant Evacuation Elevators during evacuation events.

**Assembly Action:** 

None

# G172-09/10

This code c hange proposal was heard by the IBC Me ans of Egress Code Development Committee.

**Committee Action:** 

Approved as Modified

Modify the proposal as follows:

3008.7 Activation. Occupant evacuation elevator systems shall be activated by any of the following:

- 1. The operation of an automatic sprinkler system complying with Section 3008.6;
- Smoke detectors required by another provision of the code; or required as an alternative standard complying with Section 3008.1.1.
- 3. Approved manual controls.

**Committee Reason:** The modification was to remove a reference to a section proposed by G169-09/10 which was disapproved. The proposal provides a means of system activation. This should be in the code since sprinklers and smoke detectors are building code issues.

Assembly Action:

None

# G173-09/10

This code c hange proposal was heard by the IBC Me ans of Egress Code Development Committee.

**Committee Action:** 

Disapproved

**Committee Reason:** This is the wrong place in the code for this requirement. This requirement for structural integrity needs to be incorporated into the high-rise provisions in Section 403.2.3. With this referenced, if the designer chose to provide Occupant Evacuation Elevators in building less than 420 feet it is not clear if the shaft would still have to meet the structural integrity requirements in Category I and II Seismic areas.

**Assembly Action:** 

None

# G174-09/10

This code c hange proposal was he ard by the IBC Me ans of Egress Code Development Committee.

**Committee Action:** 

**Approved as Submitted** 

**Committee Re ason:** This coordinates with the committee's decision in G162-09/10. The performance language for this requirement will allow a wide variety of design options and provides

protection for the hoistway from possible water infiltration. Water does cause problems for elevators during a fire event, so this protection is needed. The requirements do clarify that protection is not needed from sprinklers activated within the lobby since the elevators will go into fire department recall if there is smoke/fire in the elevator lobbies.

Assembly Action: None

G175-09/10

Withdrawn by Proponent

## G176-09/10

This code c hange proposal was he ard by the IBC Me ans of Egress Code Development Committee.

**Committee Action:** 

Approved as Submitted

**Committee Reason:** The proposal clarifies that the lobby in front of the Fire Service Elevator and Occupant Evacuation Elevator will protect the area from fire and smoke so that hoistway doors do not have to meet fire-door assemblies. This proposal also addresses the practical difficulties for elevator doors to meet fire door assembly requirements and still operate effectively. The addition of the language in Section 3008.11.3 aligns lobby requirements for both types of elevator systems.

Assembly Action: None

# G177-09/10

This code c hange proposal was he ard by the IBC Me ans of Egress Code Development Committee.

Committee Action: Disapproved

**Committee R eason:** Signage at Occupant Evacuation Elevators should only be identification signage or symbols, not instructions, since what happens depends on the emergency and the building's evacuation plan. The Occupant Evacuation Elevator is not intended to be used in all emergencies (i.e., earthquakes) therefore the proposed text is misleading. The requirement for the symbol for accessibility could be construed that this was an elevator only for persons with disabilities and therefore could hamper occupant evacuation. This should be addressed by ASME A17.1.

Assembly Action: None

# G178-09/10

Committee Action:

**Committee Re ason:** The committee expressed concerned regarding waiving the supporting construction for the rated construction surrounding the opening to the pedestrian walkway. There was no justification provided for the additional requirement for the wall extensions specified in the revised exception to Section 3104.5.

Assembly Action: None

# G179-09/10

Committee Action: Disapproved

**Committee Reason:** The proposal added terms that should be defined. There was no justification for discounting the openings between the building and the pedestrian walkway. There was concern that if the walkway was removed there would be too many openings in the exterior wall. The committee expressed concern that there should be some protection between stacked walkways to prevent fire from leaping from one walkway to another one above it.

Assembly Action: None

Disapproved

### G180-09/10

Committee Action: Disapproved

**Committee Reason:** The committee disapproved the proposal because it was found not to be clear in its wording or how it would be applied. The committee was not made aware of any entrance 'requirement' that needed to be addressed by this proposed text.

Assembly Action: None

### G181-09/10

This code c hange was heard by the IBC Struc tural Code Development Committee.

#### **Committee Action:**

#### **Approved as Submitted**

**Committee Re ason:** This code change closes a loophole in the design of communication towers under the referenced standard, TIA-222, by excluding exceptions related to seismic design. It is more appropriate that the design of these structures consider seismic loading.

Assembly Action: None

### G182-09/10

**Note:** The following analysis was not in the Code Change monograph but was published on the ICC website at <a href="http://www.iccsafe.org/cs/codes/Documents/2009-10cycle/ProposedChanges/Standards-Analysis.pdf">http://www.iccsafe.org/cs/codes/Documents/2009-10cycle/ProposedChanges/Standards-Analysis.pdf</a>:

**Analysis:** Review of the proposed new standards indicated that, in the opinion of ICC staff, the standards do not comply with ICC standards criteria, Section Sections 3.6.2.1 and 3.6.2.4, Mandatory language.

#### Committee Action: Disapproved

**Committee Rea son:** The proposed standards did not comply with the ICC policy regarding referenced standards. In addition, the proposal was disapproved at the request of the proponent in order to allow the work on the new ICC swimming pool code to proceed.

Assembly Action: None

# G183-09/10

#### Committee Action: Disapproved

**Committee Rea son:** The proponent did not provide substantiation that the current provisions are causing significant problems nor that the revisions would eliminate the hazard. The committee speculated whether any allowance for steps or handrails should be made to permit projection into a public way.

Assembly Action: None

# G184-09/10

#### Committee Action: Disapproved

**Committee Reason:** The committee disapproved the code change because they found the proposed language very unclear and confusing. In addition there was no technical justification for constructing a 1 hour rated barrier between building areas being remodeled and portions of building where occupancy continues.

### G185-09/10

Both parts of this code change proposal were heard by the General Code Development Committee.

# PART I- IBC GENERAL Committee Action:

#### **Approved as Submitted**

**Committee Reason:** These references are needed because there currently are none in the IBC that would get the user to these key requirements. This allows code users to find their way to the IFC where it is clear that this is the responsibility of the fire marshal.

Assembly Action:

None

**PART II- IFC** 

Committee Action:

Approved as Submitted

**Committee Re ason:** During construction there are hazards that need to be addressed. The committee approved this change for consistency with Part I and provide needed options to manage hazardous situations.

**Assembly Action:** 

None

### G186-09/10

**Note:** The following analysis was not in the Code Change monograph but was published on the ICC website at <a href="http://www.iccsafe.org/cs/codes/Documents/2009-10cycle/ProposedChanges/Standards-Analysis.pdf">http://www.iccsafe.org/cs/codes/Documents/2009-10cycle/ProposedChanges/Standards-Analysis.pdf</a>:

**Analysis:** Review of the proposed new standard indicated that, in the opinion of ICC staff, the standard did not comply with ICC standards criteria, Section 3.6.2.1.

#### **Committee Action:**

Disapproved

**Committee Re ason:** The committee disapproved the code change for a variety of reasons. Primarily the proposal does not address any identified life safety hazard to the building occupants, but seems to be just provided to minimize clean up costs at the ending phases of construction. Finally the referenced document is not a standard but clearly is a guideline and it does not meet ICC policies for referenced standards.

**Assembly Action:** 

None

# G187-09/10

#### **Committee Action:**

Disapproved

**Committee Reason:** The committee was concerned that the terminology was inconsistent with the section that actually provides the regulations, that terminology being 'moved structures' rather than 'relocated'. The committee judged that a moved structure is simply a form of alteration and is within the existing scoping language.

**Assembly Action:** 

None

# G188-09/10

#### **Committee Action:**

Approved as Modified

#### Modify the proposal as follows:

**3401.3 (IEBC [B] 301.1.1) Compliance.** Alterations, repairs, additions and changes of occupancy to, or relocation of, existing structures shall comply with the provisions for alterations, repairs, additions and changes of occupancy, or relocation in the *International Fire Code, International Fuel Gas Code, International Mechanical Code, International Plumbing Code, International Property Maintenance Code, International Private Sewage Disposal Code, International Residential Code and NFPA 70.* 

**Committee Rea son:** The revisions to the text provides proper reference to the full range of requirements found in Chapter 34 of the IBC and in the International Existing Building Code.

Assembly Action: None

G189-09/10

Committee Action: Disapproved

**Committee Reason:** The revisions would seem to conflict with the general references to other codes as contained in Chapter 1 and the reason for the differences are unclear.

Assembly Action: None

# G190-09/10

This code change was heard by the IBC Structural Code Development Committee.

Committee Action: Approved as Submitted

**Committee Reason:** This code change clarifies the selection of design coefficients and factors for the analysis of existing seismic force-resisting systems.

Assembly Action: None

# G191-09/10

This code c hange was heard by the IBC Struc tural Cod e Dev elopment Committee.

Committee Action: Approved as Submitted

**Committee Reason:** This proposal clarifies the provision for existing materials by adding the cross-reference to Section 116, which accomplishes the original intent of code change G205-07/08.

Assembly Action: None

# G192-09/10

This code c hange was heard by the IBC Struc tural Cod e Dev elopment Committee.

Committee Action: Approved as Submitted

**Committee Reason:** The code change appropriately relocates the section on dangerous conditions to the beginning of Chapter 34 to reflect its broad applicability.

Assembly Action: None

# G193-09/10

This code change was heard by the IBC Struc tural Code Development Committee.

Committee Action: Disapproved

**Committee Rea son:** The proposal is not an appropriate way to establish the point at which rehabilitation and upgrades are required. We need to keep the current capacity trigger and stay away from an economic trigger. The current loss-of-capacity trigger is something that can be determined prior to going into the building department for an application for a permit whereas with the economic loss or financial loss trigger you need to do a complete design and have a set of plans in order to do that calculation. This affects how an owner can rehabilitate his structure. The proposal has adverse

consequences on an owner trying to make a decision about his building. The current system is the better way to go about it.

Assembly Action: None

### G194-09/10

This code c hange was heard by the IBC Struc tural Cod e Dev elopment Committee.

**Committee Action:** 

Approved as Modified

Modify the proposal as follows:

**3405.2.1 (IEB C [B] 304.2. 1) E valuation.** The building shall be evaluated by a registered design professional, and the evaluation findings shall be submitted to the building official. The evaluation shall establish whether the damaged building, if repaired to its pre-damage state, would comply with the provisions of this code for wind and earthquake loads. Evaluation for earthquake loads shall be required if the substantial structural damage was caused by or related to earthquake effects or if the building is in Seismic Design Category  $\underline{C}$ , D, E, or F.

Wind loads for this evaluation shall be those prescribed in Section 1609. Earthquake loads for this evaluation, if required, shall be permitted to be seventy-five percent of those prescribed in Section 1613. Where the existing seismic force-resisting system is a type that can be designated ordinary, values of R,  $\Omega_0$ , and  $C_d$  for the existing seismic force-resisting system shall be those specified by this code for an ordinary system unless it is demonstrated that the existing system will provide performance equivalent to that of a detailed, an intermediate or special system.

(Portions of proposal not shown are unchanged.)

**Committee R eason:** This proposal makes necessary clarifications to the required evaluation of damaged structures. The modification restores the current language in Section 3405.2.1 so that there will be no conflicts with the revisions to this section that are made in G190-09/10 which are preferred.

**Assembly Action:** 

None

# G195-09/10

This code c hange was heard by the IBC Struc tural Code Development Committee.

**Committee Action:** 

Disapproved

Committee Reason: This would introduce uneven requirements for repairs of earthquake damaged buildings. The Instrument Intensity VII measure may be an appropriate trigger for higher seismic areas. How the Instrument Intensity trigger would work with old buildings is not clear. It could create problems for an owner of a damaged building in making a determination on the Instrument Intensity of VII after an earthquake.

**Assembly Action:** 

None

G196-09/10

Withdrawn by Proponent

# G197-09/10

This code c hange was heard by the IBC Struc tural Code Development Committee.

**Committee Action:** 

Approved as Submitted

**Committee R eason:** The code change provides clearer wording that clarifies the seismic requirements that apply in connection with a change of occupancy.

**Assembly Action:** 

G198-09/10

**PART I- IBC GENERAL** 

Withdrawn by Proponent

**PART II- IEBC** 

Withdrawn by Proponent

G199-09/10

**Committee Action:** 

Disapproved

**Committee Rea son:** At the proponent's request, the committee disapproved the proposal. The proposal is in need of refinement to provide references other than the IRC; to consider if needed provisions were not included and reconsider it all of the repetitive code language and referencing to other sections are truly needed.

**Assembly Action:** 

None

# G200-09/10

This code c hange proposal was he ard by the IBC Me ans of Egress Code Development Committee.

**Committee Action:** 

**Disapproved** 

**Committee Reason:** It is not clear what level of alteration is required within a dwelling unit before the unit would be expected to comply with Type A dwelling unit requirements.

**Assembly Action:** 

None

G201-09/10

**Committee Action:** 

**Approved as Submitted** 

**Committee Reason:** The committee approved the revision because it provides better coordination with other parts of the IBC and IEBC.

**Assembly Action:** 

None

G202-09/10

**Committee Action:** 

**Approved as Submitted** 

**Committee Reason:** The proposal is needed to coordinate the provisions of Section 3412 with those in Chapter 30 of the IBC.

**Assembly Action:** 

None

G203-09/10

**Committee Action:** 

Disapproved

Committee Reason: The committee disapproved this change because it was inconsistent with the action taken to approve G107 09/10.

**Assembly Action:** 

### G204-09/10

# PART I- IBC GENERAL Committee Action:

Disapproved

**Committee Reason:** Adoption of a fee schedule is a jurisdictional responsibility during the adoption process of this, or any, code. The code could not provide a fee schedule that could address the distinct operations requirements of thousands of different jurisdictions.

**Assembly Action:** 

None

PART II - IRC -B/E

**Committee Action:** 

**Disapproved** 

**Committee Reason:** The committee agrees the table needs updating, but the values may be low. There is no substantiation provided for the values and more data is needed.

Assembly Action:

None

G205-09/10

Withdrawn by Proponent

G206-09/10

PART I- IBC GENERAL Committee Action:

Disapproved

**Committee Rea son:** The committee was supportive of the concept of moving the IBC closer to being recognized as providing compliance with Federal standards for the construction of medical facilities, however the proposed inclusion of the CMS forms is inappropriate. Even if the forms are not included but only referenced, the proposed appendix text reads more like commentary than it does code. Appendices need to be written so that they can be adopted and enforced as part of the code. This proposal also has an uncomfortable mixture of ICC phrasing and that of the NFPA. The IBC can not provide a vehicle for enforcing both codes.

**Assembly Action:** 

None

PART II - IFC

**Committee Action:** 

Disapproved

**Committee Reason:** The committee felt that the forms included in the proposed appendix are based on NFPA 101 and NFPA 70 which could put the fire code official in the position of being responsible for enforcing those codes. The committee also noted that the forms, if needed, are readily available on the internet and therefore need not be included in the code.

**Assembly Action:** 

None

# G207-09/10

**Note:** This code change was contained in the errata posted on the ICC website. Please go to <a href="http://www.iccsafe.org/cs/codes/Pages/09-10ProposedChanges.aspx">http://www.iccsafe.org/cs/codes/Pages/09-10ProposedChanges.aspx</a>.

**Committee Action:** 

Disapproved

**Committee Reason:** This proposal would remove Table 503 from the process of determining allowed area of a building. Such action was not technically substantiate by the proponent.

**Assembly Action:** 

None

# G208-09/10

**Note:** This code change was contained in the errata posted on the ICC website. Please go to <a href="http://www.iccsafe.org/cs/codes/Pages/09-10ProposedChanges.aspx">http://www.iccsafe.org/cs/codes/Pages/09-10ProposedChanges.aspx</a>.

**Committee Action:** 

**Disapproved** 

Committee Rea son: The proposed footnote is so complex with so many references out of the

section that this revisions would not make this provision simpler, but definitely more confusing. What happens to the framing needs to be addressed.

Assembly Action: None

# G209-09/10

**Note:** This code change was contained in the errata posted on the ICC website. Please go to <a href="http://www.iccsafe.org/cs/codes/Pages/09-10ProposedChanges.aspx">http://www.iccsafe.org/cs/codes/Pages/09-10ProposedChanges.aspx</a>.

Both parts of this code change pro posal were heard by the IEBC Cod e Development Committee.

**PART I- IBC GENERAL** 

Committee Action: Disapproved

Committee Reason: Part I was disapproved to be consistent with the first action taken on Part II.

Assembly Action: None

**PART II- IEBC** 

Committee Action: Disapproved

**Committee Reason:** The proposal was disapproved because it contains allowances to use a green building code which may result in lesser standards that contained in the IECC or IBC. The proposal confuses alterations and changes of occupancy, which are not the same and are subject to different requirements.

# 2009/2010 INTERNATIONAL BUILDING CODE Means of Egress Code Development Committee

#### Stephen Thomas, CBO - Chair

President
Colorado Code Consulting
Denver, CO

#### Jim Budzinski - Vice Chair

Fire Chief (Retired) Tamarac, FL

#### Bart Alspaugh, MCP

Building Inspector II
City of Lake Saint Louis
Lake St. Louis, MO

#### Jason Averill

Group Leader National Institute of Standards and Technology Gaithersburg, MD

#### **Tom Barrs**

Senior Plans Examiner City of Scottsdale Scottsdale, AZ

#### Neil Burning, CBO

Manager, Plans Examination Clark County Development Services-Bldg Div. Las Vegas, NV

#### **James Dawson**

Fire Marshal Chesterfield County Fire and EMS Chesterfield, VA

#### **David Frable**

Senior Fire Protection Engineer U.S. General Services Administration, Bldg Services Geneva, IL

#### **Jeffrey Heiss**

Construction Official Township of Warren, NJ

#### **James Hodgens**

Deputy Chief New York City Fire Department Brooklyn, NY

#### **Gary Lampella**

Building Official City of Redmond Redmond, OR

#### **Larry Lehman**

Building Division Chief State of Michigan Department of Energy, Labor & Economic Growth Bureau of Construction Codes Lansing, MI

#### **Paul Martin**

Rep: National Association of State Fire Marshals Acting Chief - Bureau of Fire Prevention New York State Office of Fire Prevention and Control Albany, NY

#### **Brad Schiffer, AIA**

Architect
Brad Schiffer/TAXIS Inc.
Naples, FL

#### John Stovall

Rep: National Association of Home Builders NS Architects Rockville, MD

#### **Staff Secretariat:**

Kimberly Paarlberg, RA Senior Staff Architect International Code Council

### INTERNATIONAL BUILDING CODE MEANS OF EGRESS COMMITTEE HEARING RESULTS

### E1-09/10

#### **Committee Action:**

#### Approved as Submitted

**Committee Reason:** This proposal would provide uniformity throughout the codes. This will assure that all means of egress issues in the IFC and IBC are addressed before the certificate of occupancies is issued. This will assist the fire department when they perform means of egress maintenance reviews.

**Assembly Action:** 

None

#### E2-09/10

#### **Committee Action:**

Disapproved

**Committee Reason:** The change in the definition could cause confusion for applications for fire -resistance-rated corridors. The entire chapter should be investigated for possible consequences.

**Assembly Action:** 

None

### E3-09/10

#### **Committee Action:**

Disapproved

**Committee Reason:** The list of components in the definition is n ecessary for understanding what an exit is. The text about separation requirements should not be removed because it makes the user look for the separation requirements. Adding the "or public way" is confusing when the exit is not directly on a street or public sidewalk. It appears to eliminate the 'exit discharge' component of the means of egress system.

**Assembly Action:** 

None

### E4-09/10

#### **Committee Action:**

**Disapproved** 

**Committee Reason:** Adding the "or public way" is confusing when the exit is not directly on a street or public sidewalk. It appears to eliminate the 'exit discharge' component of the means of egress system.

**Assembly Action:** 

None

### E5-09/10

This is a 2 part code change. Both parts were by the IBC Means of Egress Code Development Committee.

#### PART I IBC MEANS OF EGRESS

**Committee Action:** 

**Approved as Submitted** 

**Committee Reason:** The r evisions for stairways will clarify when exit access stair ways (i.e., monumental, convenience and mezzanines stair ways) are part or the means of egress, including protection, travel distance and enclosure requirements. The proposal coordinates the issue throughout the codes for this important issue. The committee proposal also coordinates with the proposal for vertical openings, FS56-09/10.

**Assembly Action:** 

None

#### **PART II- IFC**

#### **Committee Action:**

#### Approved as Submitted

**Committee Reason:** The changes to sections controlled by the International Fire Code should be revised to be consistent with the terminology and intent in Part I.

Assembly Action: None

#### E6-09/10

#### **Committee Action:**

Disapproved

**Committee Rea son:** The ter m "transition point" would add ress travel distan ce measuremen ts at open stairway; however, it would be confusing for situations were there is a door on a stairway enclosure.

Assembly Action:

None

### E7-09/10

Withdrawn by Proponent

### E8-09/10

This is a 2 part code change. Part I was heard by the IBC Means of Egress Code Development Committee, Part II was heard by the IRC Building/Energy Code Development Committee.

#### PART I IBC MEANS OF EGRESS

Committee Action:

Disapproved

**Committee Reason:** The proposed definition for projected tread depth is unclear. The proponent should provide figures so this definition can be fully understood. The definition for 'riser' by inclusion of the word "vertical" could be interpreted to not allow the 30 degree slope on risers currently permitted.

**Assembly Action:** 

None

## PART II- IRC B/E Committee Action:

**Approved as Submitted** 

**Committee Reason:** This is a good definition and it clarifies the meaning of "riser" as it r elates to a step or stair. The definition does not require the riser to be 90° vertical. A slope is permitted in the code.

**Assembly Action:** 

None

### E9-09/10

#### **Committee Action:**

Approved as Submitted

**Committee Reason:** Expanding the requirement to include all three parts of the means of egress would clarify that no steps or elevation changes would be permitted in the exit access route as well as at horizontal exits, or in the path for exit discharge. By leaving "throughout a story", it is clear that it is not intended to eliminate exit stairways that provide access between stories.

**Assembly Action:** 

None

### E10-09/10

#### **Committee Action:**

Approved as Modified

Replace the proposal with the following: The portions of the proposal shown remain unchanged. Proposed revisions to Section 1004.2 through 1005.3 were removed.

SECTION 1004 OCCUPANT LOAD

1004.1 (IFC [B] 1004.1) Design occupant load. In determining means of egress requirements, the number of

occupants for whom means of egress facilities shall be provided shall be determined in accordance with this section. Where occupants from accessory areas egress through a primary space, the calculated occupant load for the primary space shall include the total occupant load of the primary space plus the number of occupants egressing through it from the accessory area.

1004.1.1 (IFC [B] 1004.1.1) Cumulative occupant loads. Where the path of egress travel includes intervening rooms, areas or spaces, cumulative occupant loads shall be determined in accordance with this section.

1004.1.1.1 (IFC [B] 1004.1.1.1) Intervening spaces. Where occupants egress from one room, area or space through another, the design occupant load shall be based on the cumulative occupant loads of all rooms, areas or spaces to that point along the path of egress travel.

4004.6 1004.1.1.2 (IFC [B] 1004.1.1.2) Mezzanine Adjacent levels. The occupant load of a mezzanine or story level with egress ente through a room, er area or space on an adjacent level below shall be added to that room or area's the occupant load of that room, area or space. and the capacity of the exits shall be designed for the total occupant load thus established.

1004.1.1 1004.1.2 (IFC [B] 1004.1.1 1004.1.2) Areas without fixed seating. (No change to text)

## TABLE 4004.1.1 1004.1.2 (IFC [B] 1004.1.1 1004.1.2) MAXIMUM FLOOR AREA ALLOWANCES PER OCCUPANT

(No change to table)

**Committee Reason:** The modification will limit this revision to those dealing with convergence. This issue outside of Section 1004.1 will be addressed in E22-09/10. The revision will clarify how to a ddress egress issues in spaces where occupants from different areas are level will merge.

Assembly Action: None

### E11-09/10

#### **Committee Action:**

#### **Approved as Submitted**

**Committee Rea son:** This is a g ood editorial cle an up that m eets the intent of the code w hen d etermining occupant load and will make the text consistent with the headings in Table 1004.1.1.

Assembly Action: None

### E12-09/10

#### **Committee Action:**

#### **Approved as Submitted**

**Committee Reason:** The change in the heading for the Table will be consistent with the terms used throughout the code.

Assembly Action: None

### E13-09/10

#### **Committee Action:**

Disapproved

**Committee Reason:** Section 1004 already allows for code officials to approve the actual occupant load in large spaces with minimal occupants. There was no technical justification to support this occupant load across the industry: for example, is this consistent with small airplane manufacturers.

Assembly Action:

None

### E14-09/10

#### **Committee Action:**

#### Approved as Submitted

**Committee Reason:** Good substantiation was provided for a realistic occupant load for exhibition galleries and museums citing existing facilities. There really is no good match in the current uses listed in the table when looking for occupant load for the setypes of exhibit viewing spaces. Section 302.1 will address the occupant load for spaces where owners want to use the space for more than one use such as parties or lectures.

Assembly Action:

None

### E15-09/10

Committee Action: Disapproved

**Committee Reason:** It is not clear how to count the area on stairs and in elevators for multi-story buildings. No technical justification was provided for the occupant I oad in the circulations spaces and toilet rooms. The proposal does not deal with queuing areas in corridors in such facilities as multi-plex theaters. There could be confusion when there are corridors that area already covered by gross floor area requirements.

Assembly Action: None

### E16-09/10

Committee Action: Approved as Submitted

Editorial correction. Modify the proposal as follows:

## TABLE 1004.1.1 (IFC [B] TABLE 1004.1.1) MAXIMUM FLOOR AREA ALLOWANCES PER OCCUPANT

FUNCTION OF SPACE	FLOOR AREA IN SQ. FT. PER OCCUPANT
Mall Buildings - Covered mall building. and Open air	See Section 402.4.1
mall building	

(Portions of Table not shown remain unchanged.)

**Committee Reason:** The editorial correction was for coordination with the term used in Section 402.4.1 and for proper location within the table. The refere new will direct code users to the appropriate oc cupant load information for malls.

Assembly Action: None

#### E17-09/10

Committee Action: Disapproved

**Committee Rea son:** The requirement needs stroke width of visible requirements. The proposal does not indicate what should be posted for multi-purpose rooms. The occupant load indicated should be a proved by the code official/fire official.

Assembly Action: None

### E18-09/10

Committee Action: Approved as Submitted

Committee Reason: The revision provides the appropriate occupant load for wheelchair spaces.

Assembly Action: None

### E19-09/10

Committee Action: Disapproved

**Errata:** Replace the proposal with the following. A portion of the new text in the last sentence in the main paragraph was not underlined.

**1004.8** (**IFC** [**B**] **1004.8**) **Outdoor areas.** Yards, patios, courts and similar outdoor areas accessible to and usable by the building occupants shall be provided with means of egress as required by this chapter. The occupant load of such outdoor areas shall be assigned by the building official in accordance with the anticipated use. Where outdoor areas are to be used by persons in addition to the occupants of the building, <u>and the area is confined by barriers</u>, and the path of egress travel from the outdoor areas passes through the building, means of egress requirements for the building shall be <u>provided from the area without passing through the building</u>. based on the sum of the occupant loads of the building plus the outdoor areas.

#### **Exceptions:**

- For areas not confined by barriers, the path of egress travel from the outdoor areas are
  permitted to pass through the building. Means of egress requirements for the building shall be
  based on the sum of the occupant loads of the building plus the outdoor areas.
- 42. Outdoor areas used exclusively for service of the building need only have one means of egress.
- 23. Both outdoor areas associated with Group R-3 and individual dwelling units of Group R-2.

**Committee Reason:** The proposal is not clear in what would be considered a barrier. The code should allow for egress back through the building from are as such as balconies, central court yards and occupied roofs. There is a conflict in the text in that if there is a barrier you cannot egress through the building, but if there is not a barrier you can egress through the building. There are no allowances for exterior stairways for egress.

Assembly Action: None

### E20-09/10

This is a 2 part code change. Both parts were heard by the IBC Means of Egress Code Development Committee.

#### **PART I- IBC MEANS OF EGRESS**

**Committee Action:** 

**Disapproved** 

**Committee Reason:** The proponent's reason statement mentioned the NIST study for the World Trade Center. Because there was an election that day, the building was not fully occupied. This report does not cover if the building was fully occupied. If the building had be en fully occupied many people would not have gotten out. In the towers there were three means of egress, however, two of the stairways were compromised that day, so we do need a third staircase. Another committee member clarified that the official finding were not as indicated in the reason statement, but if the building had been fully occupied, it was predicated that possibly 14,000 people would have died.

Assembly Action: None

**PART II- IFC** 

Committee Action:

**Disapproved** 

Committee Reason: With the di sapproval of Part I, the t ext in the IFC needs to remain for corridor width in existing buildings.

Assembly Action: None

### E21-09/10

This is a 2 part code change. Both parts were heard by the IBC Means of Egress Code Development Committee.

#### PART I IBC MEANS OF EGRESS

**Committee Action:** 

Approved as Submitted

Committee Reason: Studies have shown that most people do not react to an initial alarm, therefor e, requiring a voice alarm will increase safety by providing occupants with additional information about the emergency and evacuation. The current egress width requirement will mostly affect buildings with high occupant loads that are not highrise buildings. With the addition of many safety features to highrise buildings, such as the f ire service access elevators, and occupant evacuation elevat ors, highrise buildings will be much safer. O ne of the other concerns in the NIST report was counter flow in the stairways. That has also been addressed through the new highrise requirements. No technical ju stification for the increased width for me ans of egress w as provided in the original change in the last cy cle. The additional width requirements for all buildings went too far. This is a good compromise.

Assembly Action: None

**PART II- IFC** 

**Committee Action:** 

Approved as Submitted

Committee Reason: Part II was approved for consistency with the committee's action on Part I.

### E22-09/10

#### **Committee Action:**

#### Approved as Submitted

**Committee Reason:** The revisions bring the capacity concept forward in the width determination. Breaking this into parts will add clarity and readability in the code when dealing with mean s of egress width. This is consistent with the committee approval of E10-09/10.

**Assembly Action:** 

None

### E23-09/10

**Committee Action:** 

Disapproved

**Committee Reason:** This is not the correct lo cation for this requirement. A b etter place for t his might be Section 1008. Other provisions of the code already cover the width of doorways, so this item is not needed.

Assembly Action:

None

### E24-09/10

**Committee Action:** 

Approved as Submitted

**Committee Reason:** This proposal cleans up h andrails vs. door projections for corridors. This organization will be easier to use and systematically go through the requirements for projections.

**Assembly Action:** 

None

### E25-09/10

**Committee Action:** 

Disapproved

**Committee Reason:** This prop osal was disapproved based on committee action to E24-09/10 which deals with the same issue.

**Assembly Action:** 

None

### E26-09/10

**Committee Action:** 

Disapproved

**Committee Reason:** Luminous egress path markings are a back-up and should not be used as a replacement for means of egress illumination. Maintenance is an issue for these products in high traffic areas.

**Assembly Action:** 

None

### E27-09/10

**Committee Action:** 

Disapproved

Committee Reason: Lighting in an electrical room is a task lighting issue, not a means of egress issue.

**Assembly Action:** 

None

### E28-09/10

**Committee Action:** 

**Approved as Modified** 

Modify the proposal as follows:

**1006.3 (IFC [B] 1006.3) Emergency power** <u>illumination</u>. The power supply for *means of egress* illumination shall normally be provided by the premises' electrical supply.

In the event of power supply failure, an emergency electrical system shall automatically illuminate all of the following areas:

- Aisles and unenclosed egress stairways in rooms and spaces that require two or more means of egress.
- 2. Corridors, exit enclosures and exit passageways in buildings required to have two or more exits.
- 3. Exterior egress components at other than their *levels of exit discharge* until *exit discharge* is accomplished for buildings required to have two or more *exits*.
- Interior exit discharge elements, as permitted in Section 1027.1, in buildings required to have two or more exits.
- Exterior landings as required by Section 1008.1.6 for exit discharge doorways in buildings required to have two or more exits.

The emergency power system shall provide power for duration of not less than 90 minutes and shall consist of storage batteries, unit equipment or an on-site generator. The installation of the emergency power system shall be in accordance with Chapter 27.

**1006.3.1 (IFC [B] 1006.3.1)** Emergency power illumination level. Emergency lighting facilities shall be arranged to provide initial illumination that is at least an average of 1 foot-candle (11 lux) and a minimum at any point of 0.1 foot-candle (1 lux) measured along the path of egress at floor level. Illumination levels shall be permitted to decline to 0.6 foot-candle (6 lux) average and a minimum at any point of 0.06 foot-candle (0.6 lux) at the end of the emergency lighting time duration. A maximum-to-minimum illumination uniformity ratio of 40 to 1 shall not be exceeded.

**Committee Rea son:** The m odification will para llel the title to Section 1006.2. The revisions in title and movement of Section 1006.4 to 1006.3.1 will clarify the purpose of the requirements and separate emergency lighting from general means of egress illumination.

Assembly Action: None

### E29-09/10

Committee Action: Disapproved

**Committee Re ason:** There was no technical ju stification for the reduction in lighting levels. The greatest activation of emergency lighting is loss of power, not fire, and the rational does not address these. In a fire situation, the smoke can reduce visibility, so again, the illumination level should not be reduced. There is a lack of square footage limitation on this exception, so this could be a very large building.

Assembly Action: None

### E30-09/10

Committee Action: Disapproved

**Committee Reason:** The curr ent text is clear on the points raised by the proponent. There is no need for a reference to ICC A117.1 since that is already in Chapter 11. Section 1007.2 needs the list. Section 1007.8, the exception in confusing by having an exception within an exception.

Assembly Action: None

### E31-09/10

Committee Action: Disapproved

Committee Rea son: The term "other accessible elements" is t oo broad for consistent interpret ation and enforcement. Without the additional explanation from the proponent during the testimony that extreme was not understandable as intended. This could be interpreted to require accessible means of egress from all levels that included the carroute to an different from the accessible parking spaces, not just the level with the accessible spaces.

### E32-09/10

Committee Action: Disapproved

**Committee Reason:** The term 'practical' is not specific enough language for consistent interpretation. If this is an issue a measurement is needed – perhaps using the 30 feet minimum used in the stairway separation.

Assembly Action: None

E33-09/10

Committee Action: Disapproved

**Committee Reason:** An elevat or that is part of an accessible means or egres s must have standby power. This proposal c ould send you to any elevator. The committee prefers E34-0 9/10 for addressing the t ravel distance issue.

Assembly Action: None

E34-09/10

Committee Action: Approved as Submitted

**Committee Reason:** Travel distance should be met for all accessible means of e gress, not just to those that contain areas of refuge.

Assembly Action: None

E35-09/10

Committee Action: Disapproved

**Committee Rea son:** The a dditional pointers do not clarify the require ments for what can be part of an accessible means of egress.

Assembly Action: None

E36-09/10

Committee Action: Approved as Submitted

**Committee Reason:** The addition of e xit access stairw ays is c onsistent with the current text for two story office buildings with open stairways.

Assembly Action: None

E37-09/10

Committee Action: Approved as Submitted

**Committee Rea son:** The revi sions to the separation requirements provide additional options and clarify requirements for the exterior area of assisted rescue. The current text could is confusing with the sprinkler exceptions for areas of refuge at exit stairways and this revision clears that up. This proposal works well for the level of exit discharge.

### E38-09/10

**Committee Action:** 

Approved as Submitted

**Committee Reason:** Allowing for exterior areas of assisted rescue in smoke protected or open air assembly spaces is appropriate. There was a concern about coordination with E37-09/10.

**Assembly Action:** 

None

E39-09/10

**Committee Action:** 

Disapproved

**Committee Reason:** The proposed text is unclear as to how the exceptions would be applicable to horizontal exits. For example, where would the two doors be located?

**Assembly Action:** 

None

E40-09/10

**Committee Action:** 

Disapproved

**Committee Rea son:** The proposed exception is not needed a s levels not req uired to be served by an accessible route are already exempted by the main text.

**Assembly Action:** 

None

E41-09/10

**Committee Action:** 

**Disapproved** 

**Committee Rea son:** This pro posal is the opp osite of w hat the committee approved in E36-0 9/10. The committee felt that E36-09/10 addressed the issue of using open exit access stairways as part of the accessible means of egress.

**Assembly Action:** 

None

E42-09/10

**Committee Action:** 

Disapproved

**Committee Rea son:** The committee felt that E36-09/10 add ressed the issue of allowing open e xit access stairways as part of the accessible means of egress. With that in Section 1007.1 the exception should stay in 1007.3.

**Assembly Action:** 

None

E43-09/10

**Committee Action:** 

Disapp

roved

**Committee Reason:** No technical justification was provided i ndicating why additional two way communication systems should be provided in a building. The text does not clearly indicate that the exception for area of refuge separation is still permitted in sprinklered buildings.

**Assembly Action:** 

None

E44-09/10

**Committee Action:** 

Disapproved

**Committee Reason:** The horizontal exit option for accessible means of eg ress is a good option and should not be deleted.

**Assembly Action:** 

None

### E45-09/10

Committee Action: Disapproved

**Committee Rea son:** Residential occupancies are sprinklered under the IBC, so it is not clear w hat the proponent is trying to achieve with the additional exceptions. The exception for areas of refuge in sprinklered buildings is applicable in Group R so these exceptions are not needed.

Assembly Action: None

E46-09/10

Committee Action: Disapp roved

**Committee Reason:** Code cha nge proposal he ard by the Fire Safety Committee – FS59 and F S61-09/10 – have addressed the concern of the fire bar rier continuity requirements at ar eas of refuge. No o technical justification was provided to indicate why the level of protection can be reduced from fire barriers to fire partitions around areas of refuge.

Assembly Action: None

E47-09/10

Committee Action: Disapproved

**Committee Rea son:** D eletion of the last sente nce in Section 1007.8 would send the wrong message. Pressurizing the elevator lobby and shaft when the lobby is used as an area of refuge is needed as an option.

Assembly Action: None

E48-09/10

Committee Action: Disapproved

**Committee Re ason:** Since the current text states that the wheelchair space cannot reduce the means of egress width, there is no way that the wheelchair space could block the door into the stairway, therefore the first proposed sentence is not needed. It could be interpreted that the turning space could not overlap the means of egress and the wheelchair spaces, therefore, this could result in a very large landing requirement.

Assembly Action: None

E49-09/10

Committee Action: Disapproved

**Committee Reason:** The prescriptive language in the current text is easier to understand than the subjective language proposed. There was no technical justification for removal of the horizontal exit option.

Assembly Action: None

E50-09/10

Committee Action: Disapproved

**Committee Reason:** The location of the signage must be standardized. The new term "area for assisted rescue" and "call station for assisted rescue" is new and may confuse the public.

Assembly Action: None

E51-09/10

Committee Action: Disapproved

Committee Reason: The current exceptions already address this option, therefore, this text is not needed.

E52-09/10

Committee Action: Disapp roved

Committee Reason: The current exceptions already address this option, therefore, this text is not needed.

Assembly Action: None

E53-09/10

Committee Action: Approved as Submitted

**Committee Reason:** The additional language clarifies what spaces you are talking about and re-affirms a long standing practice for application of this door swing requirement.

Assembly Action: None

E54-09/10

Committee Action: Disapproved

Committee Rea son: The current text requires full width and assumes that the head room height will be provided immediately. Since the se doors move up, the proposal needs to address when the full height for the means of egress would be provided – this is critical for adequate headroom during egress. It is a concern that these doors, when not yet fully open, may be a hazard for a visually impaired person during egress. There are issues for the change in forces and lifting vs. pushing to open the door in manual operation – infor mation is needed on if this operation is doable by all persons using the means of egress. This new technology should be in a separate section to deal with the specific provisions/concerns for this type of door rath er than trying to fit this in with horizontal sliding doors. The section should address requirements to prevent vertical sliding doors from coming down without warning.

Assembly Action: None

E55-09/10

Committee Action: Disapp roved

**Committee Reason:** The proposal was disapproved for consistency with FS95-09/10. This text is not needed since this is already covered by other sections of the code. This will also be in conflict with Section 715.4.8.2.

Assembly Action: None

E56-09/10

**Note:** The following analysis was not in the Code Change monograph but was published on the ICC website at <a href="http://www.iccsafe.org/cs/codes/Documents/2009-10cycle/ProposedChanges/Standards-Analysis.pdf">http://www.iccsafe.org/cs/codes/Documents/2009-10cycle/ProposedChanges/Standards-Analysis.pdf</a> :

**Analysis:** Review of the proposed new standard indicated that, in the opinion of ICC staff, the standard did comply with ICC standards criteria.

Committee Action: Approved as Submitted

Errata to modify the proposal as follows:

UL - Underwriters Laboratories, Inc.

ANSI / UL 294-1999 - Access Control System Units with revisions through August 2009

(Portions of proposal not shown remain unchanged.)

**Committee Reason:** Providing a listing require ment for these types of locks is important a nd will provide additional assistance to the code officials reviewing/inspecting these systems. The standard is currently used extensively by the industry.

### E57-09/10

Committee Action: Disapproved

**Committee Rea son:** As it is a cknowledged th at this sect ion needs work, the committee would like the proponent to come back with a public comment to address this obvious tripping hazard issue. The redundancy of the par agraphs regarding thresholds is too repetitive. In one of the three cases, there is also an inconsistency in the text. The intent of "at the required exit door" is not clear. Section 1008.1.5, Exception 1.1 where it says "level floor level landing... is not required"; does this mean the landing can be sloped?

Assembly Action: None

### E58-09/10

This is a 2 part code change. Part I was heard by the IBC Means of Egress Code Development Committee, Part II was heard by the IRC Building/Energy Committee.

#### PART I IBC MEANS OF EGRESS

**Committee Action:** 

**Approved as Submitted** 

**Committee Rea son:** This change clarifies that the measurement of the threshold height is taken n from the finished surface of the landing or floor. Also, this eliminates the potential for a sten prover threshold. This will help with consistent enforcement.

Assembly Action: None

PART II- IRC B/E

Committee Action: Approved as Submitted

**Committee Reason:** This change clarifies that the measurement of the threshold height is ta ken from the finished surface of the landing or floor. Also, this eliminates the potential for a step over threshold.

Assembly Action: None

### E59-09/10

**Committee Action:** 

Approved as Submitted

**Committee Reason:** The change is mainly editorial, however, the revised format provides for easier and more consistent interpretation by the code official.

Assembly Action: None

### E60-09/10

This is a 3 part co de change. Part I & II was heard by the IBC Mea ns of Egress Code Development Committee, Part III was heard by the IRC Building/Energy Code Development Committee.

#### **PART I- IBC MEANS OF EGRESS**

**Committee Action:** 

Disapproved

**Committee Reason:** Dead bolts at the proposed location should be a choice, not a requirement. No technical justification was provided to indicate a need for this requirement.

Assembly Action: None

**PART II- IPMC** 

Committee Action: Disapproved

Committee Reason: Part II was disapproved for the same reasons as and consistency with Part I.

## PART III- IRC B/E Committee Action:

#### Disapproved

**Committee Reason:** The use of a deadbolt lock helps the security but will not prevent break-ins. Sliding doors are not addressed and they are the main entry point for break-ins. This is appropriate for renters but the owner should have a choice of security device.

Assembly Action:

None

### E61-09/10

#### **Committee Action:**

#### **Approved as Submitted**

**Committee Reason:** The reference to Section 1 008.1.9.2 for height provides direction for the code official for where the "night latch, dead bolt or security chain" in hotel rooms must be installed when these locks are used for purposes other than just security.

**Assembly Action:** 

None

### E62-09/10

#### **Committee Action:**

Disapproved

**Committee Rea son:** It is not clear which side of the door (i.e., inside or outside) the signage should be located on. The reference to Section 1004.8 could include y ards and courts where egress may be directly provided without going through the building. The rewere questions about the two-way communication system: Who would it go to? What is the purpose? This could be problematic with smaller facilities or with multiple balconies.

**Assembly Action:** 

None

### E63-09/10

#### **Committee Action:**

#### Approved as Submitted

**Committee Reason:** The proposals addresses the unique locking arrangements in Group I-2 where the need is also to protect the clients, ho wever, some of the facilities where this is needed a re not necessarily medical facilities.

Assembly Action:

None

### E64-09/10

#### **Committee Action:**

Disapproved

**Committee Re ason:** An y door that looks like a means of egress must meet means of e gress door requirements. The correct enforcement at do ors where they are intended for the movement of equipment and not for a means of egress w ould be to prohibit hard ware on the door so it w as obvious that it is not normally operational – the proposal would allow hardware on the inactive leaf.

**Assembly Action:** 

None

### E65-09/10

#### **Committee Action:**

Approved as Modified

Replace the proposal with the following:

**1008.1.9.8 (IFC [B] 1008.1.9.8) Electromagnetically locked egress doors.** Doors in the means of egress that are not otherwise required to have panic hardware in buildings with an occupancy in Group A, B, E, M, R-1 or R-2 and doors to tenant spaces in Group A, B, E, M, R-1 or R-2 shall be permitted to be electromagnetically locked if equipped

with listed hardware that incorporates a built-in switch and meet the requirements below:

The listed hardware that is affixed to the door leaf has an obvious method of operation that is readily
operated under all lighting conditions.

- 2. The listed hardware is capable of being operated with one hand.
- Operation of the listed hardware <u>directly</u> releases to the electromagnetic lock and unlocks the door immediately.
- 4. Loss of power to the listed hardware automatically unlocks the door.
- Where panic or fire exit hardware is required by Section 1008.1.10 operation of the listed panic or fire exit hardware also releases the electromagnetic lock.

**Committee Rea son:** Panic ha rdware sho uld be permitted where electromagnetic locks are utilized. The modification to Items 3 and 5 clarifies that the release of the lock must be automatic with the operation of the panic bar.

Assembly Action: None

### E66-09/10

Committee Action: Disapproved

**Committee Reason:** While there are security issues in low rise buildings, the proposed language would allow the locking of the exit discharge door at the level of exit discharge.

Assembly Action: None

### E67-09/10

Committee Action: Approved as Submitted

**Committee Rea son:** A charging statement is needed for each main section of the code. The propose d language begins to clarify that means of egress stairways are not required for unoccupied areas in a building, such as mechanical penthouses.

Assembly Action: None

### E68-09/10

Committee Action: Disapproved

**Committee Rea son:** Technical justif ication w as not provided fo r this increa sed w idth for s tairways in Educational occupancies. The corridor width for Educational is based on students with bi-directional flow during passing periods based on ther e being lockers in the corridor. This is not an issue during emer gency egress. The pro ponent has misapplied the idea of minimum width vs. capacity. There is also a concern for the increased width not considering the 30 inch reach for handrails.

Assembly Action: None

### E69-09/10

Committee Action: Disapproved

**Committee Reason:** The narrow width may be acceptable for very limited applications, however, there would be reservations for large facilities and fire department access. Technical justification should be provided for the 30 inch width specified. The term "industrial application" is too broad for these exceptions.

Assembly Action: None

### E70-09/10

This is a 2 part code change. Part I was heard by the IBC Means of Egress Code Development Committee, Part II was heard by the IRC Building/Energy Code Development Committee.

### PART I IBC MEANS OF EGRESS

Committee Action: Disapproved

**Committee Reason:** The code official cannot control the owner's decision on carpet. Removing 'carpet' would be a conflict with allowing rugs or runners which are a form of carpet. Measuring the stairs without carpets, rugs or runners provides a consistent application.

Assembly Action: None

PART II- IRC B/E

Committee Action: Disapproved

**Committee Reason:** This change does not clarify the section with respect to inspection with carpet. The IRC does not regulate floor finishes.

Assembly Action: None

#### E71-09/10

This is a 2 part code change. Part I was heard by the IBC Means of Egress Code Development Committee, Part II was heard by the IRC Building/Energy Code Development Committee.

PART I IBC MEANS OF EGRESS Committee Action: Disapp

roved

**Committee Rea son:** For unifo rm application of this requireme nt the stair should be measured without the carpet installed. Waiting for the carpet to be installed before the stairway uniformity can be checked is not practical within the construction sequences.

Assembly Action: None

PART II- IRC B/E Committee Action:

Disapproved

**Committee Reason:** The proposal does not clar ify what to do or how to do it. The code do es not regulate items that could be added or deleted by the occupant.

Assembly Action: None

### E72-09/10

This is a 2 part code change. Part I was heard by the IBC Means of Egress Code Development Committee, Part II was heard by the IRC Building/Energy Code Development Committee.

#### PART LIBC MEANS OF EGRESS

Committee Action: Disapproved

**Committee Reason:** If this was approved, the owner changing the carpet would circumvent the requirements. The phrase "in place at final inspection" is not typical code language. The measurement should be to the fixe d part of the stairs to allow for uniform application. If the stairs fail at final inspection would the owner be asked to rip the carpet up and put down something less thick or to tally redesign the stairs — this does not work with the construction sequence.

Assembly Action: None

PART II- IRC B/E Committee Action:

Disapproved

**Committee Reason:** The proponent has provided data that this is a problem and has attempted to address it. However, this presents an enforcement problem with respect to material that is n ot regulated elsewhere in the code. The proponent should rework this and bring it back.

### E73-09/10

Committee Action: Approved as Submitted

Committee Reason: The proposal is mainly editorial and uses defined terms.

Assembly Action: None

### E74-09/10

This is a 2 part code change. Part I was heard by the IBC Means of Egress Code Development Committee, Part II was heard by the IRC Building/Energy Code Development Committee.

PART I IBC MEANS OF EGRESS

Committee Action: Disapp roved

**Committee Re ason:** The injury data is not corre lated with the type of stair ways in the Intern ational Building Code. The data is subjective (i.e., "I felt comfortable on the stairs.").

Assembly Action: None

PART II- IRC B/E

Committee Action: Disapproved

**Committee Reason:** The committee feels the data submitted seems to be a gra y area in what the data is revealing. The solution does not necessarily show that it is related to the problem. The committee feels the "7 3/4-10" standard is a good standard and prefers to keep it.

Assembly Action: None

### E75-09/10

This is a 2 part code change. Part I was heard by the IBC Means of Egress Code Development Committee, Part II was heard by the IRC Building/Energy Code Development Committee.

PART I IBC MEANS OF EGRESS

Committee Action: Approved as Submitted

**Committee Reason:** By breaking the current text into smaller sections the proposal clarifies the requirements for stair nosings and risers.

Assembly Action: None

PART II- IRC B/E

Committee Action: Disapproved

**Committee R eason:** The committee feels the code alread y ad dresses this and it is an enforc ement and education issue. The re is a concern about correlation of this with the p revious action on RB46 -09/10. The committee suggests both parties work together and bring this back later.

Assembly Action: None

E76-09/10

Committee Action: Approved as Submitted

Committee Reason: The proposal clarifies the line of travel measurement along landings.

E77-09/10

Committee Action: Disapproved

Committee Reason: The term "continuous radius" is not clear and will lead to inconsistent interpretations.

Assembly Action: None

E78-09/10

Committee Action: Disapp roved

**Committee Reason:** The additional language does not clarify the code and is not needed. The committee prefers E79-09/10.

Assembly Action: None

E79-09/10

Committee Action: Approved as Submitted

Committee Reason: The proposal clarifies how the treads are measured for alternating tread device stairways.

Assembly Action: None

E80-09/10

Committee Action: Approved as Submitted

**Committee Reason:** The proposal clarifies where the handrail requirements differ for ramps and stairways in assembly seating areas.

Assembly Action: None

E81-09/10

Committee Action: Disapproved

**Committee Reason:** A blanket exception for handrails on stairways and ramps leading to a stage is too broad. Handrails are necessary for stability on all stairs and ramps that access a stage. A handrail is minim all and will not be an obstruction for line of site. All stairs are required to have two hand rails in the Americans with Disabilities Act.

Assembly Action: None

E82-09/10

Committee Action: Disapproved

**Committee Reason:** The current exception allows for an alternative for sidewalks that move up with grade that should not be removed.

Assembly Action: None

E83-09/10 Withdrawn by proponent

E84-09/10

Committee Action: Disapproved

**Committee Reason:** The phrase "adjacent support" is too broad for consistent enforcement. While this may be a problem in existing courtrooms, this should be achievable in new construction.

E85-09/10

Committee Action: Disapp roved

**Committee Reason:** While ladder access may be a viable a Iternative for roof access, requirements for w hat type of ladder would be permitted are needed (i.e., fixed).

Assembly Action: None

E86-09/10

Committee Action: Disapproved

**Committee Reason:** While this safet y issue for hatch access on a roof should be addressed, for consistent enforcement additional information is needed for height and attachment of the handholds. Perhaps this w ould be better locate d in the International Mechanical Code of International Plumbing Code since this deals w ith unoccupied roofs.

Assembly Action: None

E87-09/10

Committee Action: Disapproved

**Committee Reason:** This is a d esign issue for the accessible level. There are concerns for the cross slope and lack of landings for an accessible means of egress route.

Assembly Action: None

E88-09/10

Withdrawn by proponent

E89-09/10

Committee Action: Disapproved

**Committee Reason:** The supporting reason does not include a consumption analysis for energy used by exit signs. There is an issue for ho w a code official could enforce signs turning on when there were occupants present. What are the procedures for turning on exit signs and allowing to lighting go off. This allowance could potentially hurt battery life. The exception did not address when emergency responders move into a building and their need for exit signage.

Assembly Action: None

E90-09/10

Committee Action: Disapproved

**Committee Reason:** This would be a conflict in industrial fa cilities where high c eilings are needed to move equipment or to signs are locate d high in order to s ee them over obstructions. The proponent may choose to narrow this do wn to certain occupancies where high ceilings are found but clearances are needed (i.e., restaurants).

#### E91-09/10

#### Committee Action: Disapproved

**Committee Reason:** Technical justification was not provided to indicate how these floor exit signs would assist exiting in Hotels. If there is smo ke in the corridor, the proper approach in a hotel room is to close the door and wait for assisted rescue, not to craw I to the exit or try and make it past the fire. The geomet ry indicating locations may be a conflict with other parts of the codes (i.e., minimum bottom rails on accessible door). There needs to be UL requirements for these signs. If this is an issue for hotels, it should include Group R-2 transient as well as Group R-1.

Assembly Action: None

### E92-09/10

Committee Action: Disapproved

**Committee Reason:** The proposal is too far reaching. The ICC A117.1 now allows for signage to be on the door, therefore, the exception in Section 1011.3 should be removed. The signage does not allow for other way finding options. Section 1110 and E111 give enough direction already.

Assembly Action: None

### E93-09/10

This is a 2 part code change. Both Parts were heard by the IBC Means of Egress Code Development Committee.

### PART I IBC MEANS OF EGRESS

Committee Action: Disapproved

Committee Reason: There was no technical ju stification indicating that these additional exit signs are needed for these occupancies. NFPA 101 only add resses low le vel exit signage in suich unusual situation as fun houses where means of egress is not apparent, not all the uses indicated. Requiring this on all exit access door requirements is too far reaching, effectively requiring signs on almost every door. If this is required there needs to be a limit on which doors and occupancies. Low level signs will be visually blocked for the occupants by the person in front of them. There must be impact testing on the doors signs to ensure maintenance. Not allowing "next to" would prohibit lighted signs as an option. "An y material" is too broad; there should be technical requirements (i.e., UL924). What is the height and stroke width for the letters on the sign?

Assembly Action: None

**PART II- IFC** 

Committee Action: Disapp roved

**Committee Reason:** Part II is disapproved for the same reasons and consistency with Part I. Since Section 1030 is mainten ance, it is not clear if this requirement for low level exit signage is intended to be retroactive. There are questions about signs being marked or destroyed by their location on the door, especially on the push side of accessible manual doors. No requirements were specified for the International Fire Code Chapter 46 for existing buildings.

Assembly Action: None

### E94-09/10

#### Committee Action: Approved as Modified

#### Modify the proposal as following:

**1012.2 (IFC [B] 1012.2) Height.** Handrail height, measured above stair tread nosings, or finish surface of ramp slope shall be uniform, not less than 34 inches (864 mm) and not more than 38 inches (965 mm). Handrail height of alternating tread devices and ship ladders, measured above tread nosings, shall be uniform, not less than 30 inches (762 mm) and not more than 34 inches (864mm).

**Exception:** When handrail fittings or bendings are used to provide continuous transition between flights, transition at winder treads, transition from handrail to guard, or when used at the start of a flight, the handrail height at the fittings or bendings shall be permitted to exceed the maximum height.

**Committee Reason:** The modification removed t ext that would conflict with handrail extension requirements. The current text does not specifically address the height of the handrail over la ndings. The new exception would allow for consistent enforcement for handrail heights along landings. This would allow for handrails to be installed with a consistent slope rather than a jog, therefore, this allowance would provide for a safer use of the handrail.

Assembly Action: None

### E95-09/10

Committee Action: Disapproved

**Committee Reason:** Goosenecks portions of the handrails (as illustrated in the proponent's reason statement) can result in a vertical handhold on the railing w hich can be a safety issue for occ upants using that portion of the handrail.

Assembly Action: None

### E96-09/10

Committee Action: Disapp roved

**Committee Rea son:** M ore fee dback is needed from the disabled communit yf or T ype II hand rails to be permitted in all occupancies. There needs to be additional research to see if T ype II handrails would be considered to provide "equivalent graspability" so that there will not be a conflict with the Americans with Disabilities Act.

Assembly Action: None

#### E97-09/10

This is a 2 part code change. Part I was heard by the IBC Means of Egress Code Development Committee, Part II was heard by the IRC Building/Energy Code Development Committee.

## PART I IBC MEANS OF EGRESS Committee Action:

Disapproved

**Errata to reason statement**: (It was stated during the testimony by the proponent that in the Reason statement in the paragraph immediately following Figure 2, the second sentence should be modified as follows.)

The Type II handrails tested were not consistent with the handrails sold and installed.

**Committee Reason:** No testimon y was provided indicating that Type II hand rails does not meet "or provide equivalent graspability" that is currently permitted in Section 1012.3 and was proposed to be maintained by the proponent. The option of Type II handrails should be permitted in Group R-2 and R-3 dwelling and sleeping units.

Assembly Action: None

PART II- IRC B/E

Committee Action: Disapp roved

**Committee Reason:** This proposal would severely limit the types of hand rails that could be used. Also, the statement of equivalency requires judgment and could present enforcement problems.

Assembly Action: None

### E98-09/10

Committee Action: Approved as Submitted

Committee Reason: A minimum cross section width of 1 inch for a Type I handrail is needed for graspability.

### E99-09/10

#### **Committee Action:**

#### **Approved as Submitted**

**Committee Rea son:** The proposed revision from 'handrail' to 's ide' clarifies what that projection means and allows for the supports for handrails.

**Assembly Action:** 

None

### E100-09/10

This is a 2 part code change. Part I was heard by the IBC Means of Egress Code Development Committee, Part II was heard by the IRC Building/Energy Code Development Committee.

PART I IBC MEANS OF EGRESS Committee Action: Disapp

roved

**Committee Rea son:** In Section 1013.2, Item 2, the re was no substantiation for the 22 inch separation between the fixed seating and the guard. The task force needs to work with experts in assembly seating. The front row concept does not add ress all the issues for the line of site in venues such as sports stadiums where the event is over the field and not a point.

**Assembly Action:** 

None

PART II- IRC B/E Committee Action:

Disapproved

**Committee Reason:** The committee feels this does address the issue but it does not address it fully. It will create some gray areas that will require interpretation of what the code intends. This needs more work. The committee suggests the addition of figures would improve the clarity on the intent.

**Assembly Action:** 

None

### E101-09/10

**Committee Action:** 

Approved as Modified

Modify the proposal as following:

**1013.2** (**IFC [B] 1013.2**) **Height.** Required guards shall be not less than 42 inches (1067 mm) high, measured vertically above the adjacent walking surfaces, adjacent fixed seating or the line connecting the leading edges of the treads.

#### Excepti ons:

- 1. For occupancy Group R-3 not more than three stories above grade in height and <u>within</u> individual dwelling units in occupancy Group R-2 not more than three stories above grade in height with separate means of egress, required guards shall not be less than 36 inches (914 mm) high measured vertically above the adjacent walking surfaces, <u>or</u> adjacent fixed seating ef the line connecting the leading edges of the treads.
- 2. For occupancies in Group R-3, and within individual dwelling units in occupancies in Group R-2, guards on the open sides of stairs shall have a height not less than 34 inches (864 mm) measured vertically from a line connecting the leading edges of the treads.
- 3. For occupancies in Group R-3, and within individual dwelling units in occupancies in Group R-2, where the top of the guard also serves as a handrail on the open sides of stairs, the top of the guard shall not be less than 34 inches (864 mm) and not more than 38 inches (965 mm) measured vertically from a line connecting the leading edges of the treads.
- 4. The height in assembly seating areas shall be in accordance with Section 1028.14.
- Along alternating tread devices and ship ladders, guards whose top rail also serves as a handrail, shall have height not less than 30 inches (762 mm) and not more than 34 inches (864 mm), measured vertically from the leading edge of the device tread nosing.

**Committee Reason:** The modification to take out the option along the leading edge of treads was because it is not needed as it is already addressed in Exception 2. Adding "within" clarifies that the exception is limited to inside the unit, and not outside the unit. The addition of Exception 1 will eliminate the current disconnect between guard height requirements in this occupancy in IBC and IRC. The change is needed so that the height of the guard is consistent from the stair to the landing.

Assembly Action: None

### E102-09/10

Committee Action: Disapproved

**Committee Reason:** Children are in many other occupancies than Group E, therefore the proposed limitation is not broad e nough. There is no technical justification provided to justify the reduction in height of the gua rd. There can be a very significant fall over the side rails to the landing below even if there is a limited space between the stair flights.

Assembly Action: None

### E103-09/10

Committee Action: Disapproved

**Committee Reason:** No technical support was provided that identified this as a problem. The proposed text is not needed. The concern of egreess through several rooms is already addressed in Item 1. These types of Assembly and Educational spaces should not be required to egress through corridors if there are more open options available where the path of egress is clear. This would cause confusion in Group A-3 and A-5 facilities that use concourses or open air circulation routes behind the seating. There was no justification for additional requirements for the split at 500 and 1000 occupants.

Assembly Action: None

### E104-09/10

#### Committee Action: Approved as Submitted

**Committee Reason:** The revisions clarifies that these requirements are specific to care suites in hospitals, not anything that could be called a suite. The rea rrangement of requirements clarifies requirements for egr ess within the different types of care suites.

Assembly Action: None

### E105-09/10

#### Committee Action: Approved as Submitted

**Errata:** Math symbols are missing from the heading for the 3<sup>rd</sup> and 4<sup>th</sup> column. Column 3 should read "OL is less than or equal to 30" and Column 4 should read, "OL is greater than 30". The reference in Note 'c' should be to Section 1028.8.

**Committee Reason:** The table format is easier to read and brings clarity to the requirements for common path of egress travel.

Assembly Action: None

### E106-09/10

#### Committee Action: Approved as Submitted

**Committee Reason:** The occupants of a dw elling unit are familia r with the space; therefore, where two exits are required for Group R-3 occupancy, the common path of travel should be applicable in the same manner as a Group R-2 unit.

### E107-09/10

Committee Action: Disapproved

**Committee Reason:** No technical justification was provided for the 25 feet separation requirement. Highrise provisions are alread y a ddressed in Section 403, and this requirement may be to o restrictive for very small buildings. The term 'exit access' door is not applicable to exit enclosures.

Assembly Action: None

### E108-09/10

Committee Action: Disapproved

**Committee Reason:** The revised text loses the allowance for fully sprinklered buildings to have t wo open exit access stairways. It is not clear if the stairways in Section 1022.1 Exception 1 are interior or exterior stairways, or if the y are exit or exit access stairways. Tec hnical ju stification should be provided to indicate that open stairways should be permitted between floors. It is not clear how this will work with the provisions a ccepted in E5-09/10. This proposal seems to be taking protection away from stairways.

Assembly Action: None

### E109-09/10

Committee Action: Disapproved

Committee Reason: Boeing sho uld be commended for their fire model analysis on this issue, however, ther e are concerns about the assumptions in the model: for example what is the technical basis for the size of the fire; what are the ten ability methods used; why the one location for the fire vs. moving it around; What is the gro wth of the fire. The American Society if or Prot ection Engineers does have standar ds for per formance based analysis or tenability methods from ISO that could be investigated. The egress analysis did not include people with mobility impairments or consideration of occupant delays upon alarm notification. The study should have a third party peer review. Quantitative information on the size and types of fuel loads and the resulting fire size should be provided—this is important as the industry moves to using more composite materials that may increase fuel loads. The technical data is applicable for large airplanes; however, a concern would be if this was applicable for small aircraft facilities. The anticipated occupant loading and how the occupants are notified were not included in the reason. Did the sprinkler systems activate?

Assembly Action: None

### E110-09/10

Committee Action: Approved as Submitted

**Committee Re ason:** Aisle w idths are not cur rently addressed in the code. The proposed requirements for aisles are consistent with corridors widths and are a reasonable width for Group B and M as well as Group A where fixed seating is not provided.

Assembly Action: None

### E111-09/10

Committee Action: Disapproved

**Committee Rea son:** The ratio 2.5:1 is commonly used for rel evator lobbies off corridors for dead end provisions. If there is an exception for the construction this could be interpreted as requiring a rating for the corridor but not the elevator lobby. Defining corridors in this manner could affect rooms.

### E112-09/10

#### **Committee Action:**

#### **Approved as Modified**

Modify the proposal as following:

**1018.1 (IFC [B] 1018.1) Construction.** Corridors shall be fire-resistance rated in accordance with Table 1018.1. The corridor walls required to be fire-resistance rated shall comply with Section 709 for fire partitions.

#### **Exceptions:**

- A fire-resistance rating is not required for corridors in an occupancy in Group E where each
  room that is used for instruction has at least one door opening directly to the exterior and rooms
  for assembly purposes have at least one-half of the required means of egress doors opening
  directly to the exterior. Exterior doors specified in this exception are required to be at ground
  level.
- A fire-resistance rating is not required for corridors contained within a dwelling or sleeping unit in an occupancy in Group R.
- A fire-resistance rating is not required for corridors in open parking garages.
- 4. A fire-resistance rating is not required for corridors in an occupancy in Group B which is a space requiring only a single means of egress complying with Section 1015.1.
- Corridors adjacent to the exterior walls of buildings shall be permitted to have unprotected openings on the <u>unrated</u> exterior wall where <u>unrated walls are</u> permitted by <u>Table 602 and unprotected openings are permitted by Table 705.8 and <u>Table 602</u>.
  </u>

**Committee Reason:** The modification clarified the references to Table 602 and Table 705.8. The allowance for exterior walls of corridors is reas onable and would not reduce protection for occupants. It was suggested the term "adjacent" might be misinterpreted; perhaps "where a corridor has an exterior wall" would be clearer.

Assembly Action:

### E113-09/10

Committee Action: Disapproved

Committee Reason: If you take away the trade off for spinklers vs. rated corridors the result will be many more schools designed without sprinklers – sprinklered schools are safer during a fire event than schools with rated corridors. The antidotal data v s. the NFPA data does not justify the significant increase in the cost of construction. In addition there will be issues with maintaining the fire resistance rating of the walls especially to automatic closers on the doors being in-place and functional. The fire doors with automatic closers will be a problem for access to classrooms. This would also require rated corridors in day care facilities, which would be excessive. Information w as not provided for the justification for the 30 occupant exception for the proposed ratings

The proponents continually brought up the possibility of a fire event during a lockdown situation. Rating of a corridor is a means of egress issue, not a security issue. Rated corridors will not protect students from terrorists during a lockdown situation. If there is, a concern for a fire event during a lock-downthat needs to be addressed with the emergency responders in the fire and safety evacuation plans, not through a corridor rating. In addition, there are other safety concerns in schools. Schools commonly have doors with vision panels and sidelights for observation of the classrooms and student/teacher interaction. Requiring rated doors at these locations would either significantly raise the costs for the opening protective and/or result in solid doors without this necessary observation feature.

Assembly Action: None

### E114-09/10

Committee Action: Disapproved

**Committee Reason:** Buildings in earth quake and hurricane areas are already designed to a higher standard, therefore this rated corridor requirement is not ne eded. Structural robustness is not related to fire-resistance-rated corridors. Technical just ification was not providing indicating that the fire in cidences are higher for the specified buildings in earthquake and hurricane areas. This would require rated corridors in schools, police stations, fire stations, all emergency shelters (i.e., churches, schools, community centers, football stadiums). This would be a serious operational issue for Group I-2 functions where this would require rated corridors.

Assembly Action: None

None

### E115-09/10

**Committee Action:** 

**Approved as Submitted** 

Committee Reason: Placing the base requirement and exceptions in a table makes the requirements easier to understand

**Assembly Action:** 

None

### E116-09/10

Committee Action:

Disapp

roved

**Committee Reason:** This may jeopardize the te nability of the corridors moving smoke into the corridor. The justification for this revision is not clear.

**Assembly Action:** 

None

### E117-09/10

**Committee Action:** 

**Approved as Submitted** 

**Committee Reason:** The additional text clarifies that when an open exit access stairway is utilized in a situation where a rated corridor is required, the rated corridor continuity would include the exit access stairway.

**Assembly Action:** 

None

### E118-09/10

**Committee Action:** 

**Disapproved** 

**Committee Reason:** The code a lready allows this exception for exit discharge through lobbies and vestibules so the proposed text is not needed. The allow ances for lobbies and vestibules is not considered a reduction of the level of protection, the option is an alternative.

**Assembly Action:** 

None

### E119-09/10

**Committee Action:** 

**Approved as Modified** 

Modify the proposal as following:

**1021.1.3** (IFC [B] **1021.1.3**) Single-story or multi-story dwelling units. Individual single-story or multi-story dwelling units shall be permitted to have a single exit within and from the dwelling unit provided that all of the following criteria are met:

- 1. The dwelling unit complies with Section 1015.1 as a space with one means of egress and
- Either the exit from the dwelling unit is located discharges directly to the exterior at the level of exit discharge, or the exit access outside the dwelling unit's entrance door provides access to not less than two approved independent exits.

Exception: Single exits designed in accordance with Section 1021.2

(Remainder of proposal remains unchanged.)

**Committee Reason:** The modification to add "within and" is in current S ection 1021.1 Item 4 and addresses stairways within a dwelling unit, not just the exit d oor from the whole unit. This also allow s for the option of a dwelling unit opening onto a dead end corridor and extending the common path of travel allow ance down that dead end to the main corridor. A dding "discharges directly to the exterior" clarifies where you leave the unit. The proposal is primarily editorial and clarifies the application of the single means of egress out of an individual dwelling unit.

**Assembly Action:** 

None

#### E120-09/10

#### **Committee Action:**

#### **Approved as Submitted**

Committee Reason: This proposal addresses a design issue where exits may be located wholly within tenant spaces.

Assembly Action: None

### E121-09/10

**Committee Action:** 

Approved as Modified

Modify the proposal as following:

## TABLE 1021.2(1) (IFC [B] TABLE 1021.1(1)) SINGLE EXITS STORIES WITH ONE EXIT OR ACCESS TO ONE EXIT FOR R-2 OCCUPANCIES

STORY	OCCUPANCY	MAXIMUM NUMBER OF DWELLING UNITS PER FLOOR SERVED BY A SINGLE EXIT AND TRAVEL DISTANCE TO THE EXIT	MAXIMUM EXIT ACCESS TRAVEL DISTANCE
Basement, first, second or third story	R-2ª	4 dwelling units-and 125 feet travel distance	<u>125 feet</u>
Fourth story and above NF	P NA	NA	

For SI: 1 foot = 3048 mm.

## TABLE 1021.2(2) SINGLE EXITS STORIES WITH ONE EXIT OR ACCESS TO ONE EXIT FOR OTHER OCCUPANCIES

STORY OCC	UPANCY	MAXIMUM OCCUPANTS PER STORY FLOOR AND TRAVEL DISTANCE TO THE_EXIT	MAXIMUM EXIT ACCESS TRAVE DISTANCE
First story or basement	A, B <sup>d</sup> , E <sup>e</sup> , F <sup>d</sup> , M, U, S <sup>d</sup>	49 occupants and 75 feet travel distance	<u>75 feet</u>
	H-2, H-3	3 occupants <del>and 25 feet</del> travel distance	<u>25 feet</u>
	H-4, H-5, I, R-1, R-2 <sup>c,f</sup> , R- 4	10 occupants and 75 feet travel distance	<u>75 feet</u>
	Sª	29 occupants <del>and 100</del> feet travel distance	<u>100 feet</u>
Second story	B <sup>b</sup> , F, M, S <sup>a</sup>	29 occupants <del>and 75 feet</del> travel distance	<u>75 feet</u>
Third story and above NF	NA	NA	

For SI: 1 foot = 3048 mm.

- a. For the required number of exits for parking structures, see Section 1021.1.1.
- b. For the required number of exits for air traffic control towers, see Section 412.3.
- c. Buildings classified as Group R-2 equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 or 903.3.1.2 and provided with emergency escape and rescue openings in accordance with Section 1029.
- d. Group B, F and S Occupancies in buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 shall have a maximum travel distance of 100 feet.
- e. Day care occupancies shall have a maximum occupant load of 10.
- f. This Table is used for R-2 occupancies consisting of sleeping units. For R-2 occupancies consisting of dwelling units, use Table 1021.2(1).

(Portions of proposal not shown remain unchanged.)

**Committee Rea son:** The modifications were for coordination with E5-09/10 which was the CT C proposal approved by the committee. The modification also eliminated the committee's concern about a single row table in Table 1021.2(1). The two tables separate occupants from number of dwelling units when dealing with single exit buildings, which will simplify application.

Buildings classified as Group R-2 equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 or 903.3.1.2 and provided with emergency escape and rescue openings in accordance with Section 1029.

### E122-09/10

This is a 2 part code change. Part I was heard by the IBC Means of Egress Code Development Committee, Part II was heard by the IRC Building/Energy Code Development Committee.

#### PART I IBC MEANS OF EGRESS

**Committee Action:** 

**Approved as Submitted** 

**Committee Reason:** The first s entence in Section 1021.2 is red undant with the text in Section 1 021.1 and 1015.1. This should be correlated with the committee actions on E119 and E121.

Assembly Action:

None

## PART II- IRC B/E Committee Action:

Disapproved

**Committee Rea son:** The committee recognizes there is a need for the is in large mansions. However, this proposal is unclear and confusing on how to apply. The 1000 square foot threshold is an arbitrary number. The remoteness of the two means of egress is not addressed. There is no data for decaths or injuries associated with this situation.

**Assembly Action:** 

None

### E123-09/10

#### **Committee Action:**

#### **Approved as Submitted**

**Committee Reason:** The proposal addresses mixed occupancy buildings in a ratio manner similar to the floor area limitations. The current text would allow for occupant loads in mixed occupancy building in excess of what would be considered safe for single occupancies.

Assembly Action:

None

### E124-09/10

Committee Action: Disapp

roved

**Committee Reason:** The current text for openings and penetrations is clear. It is not clear what the proponent was trying to address in the revisions.

**Assembly Action:** 

None

### E125-09/10

**Committee Action:** 

Disapproved

**Committee Reason:** The proponent is misinterpreting the current text. Doors between the exit stair enclosure and lobb y/vestibule are permitted by current text. The proposed language allowing for 'protected openings' would allow any type of opening (i.e., windows, storage closets) in the exit enclosure on the lobby level.

**Assembly Action:** 

None

### E126-09/10

**Committee Action:** 

Approved as Submitted

**Committee Rea son:** Membra ne penetration in the w alls of exit enclosures is a common practice. allowance maintains a reasonable level of safety.

**Assembly Action:** 

None

The

E127-09/10

**Committee Action:** 

Approved as Submitted

Committee Rea son: Clarifies the purpose, t ype of sign and w hat info rmation is required for stairwa y identification

**Assembly Action:** 

None

E128-09/10

**Committee Action:** 

**Approved as Submitted** 

Committee Reason: The proposal reduces wording and repeated requirements with a specific reference.

Assembly Action:

None

E129-09/10

**Committee Action:** 

Disapproved

**Committee Reason:** Exit passageways when connected to an exit stairway at the level of exit discharge or at upper levels should have a consistent level of protection throughout. The reduction of the fire resistance rating is not justified.

**Assembly Action:** 

None

E130-09/10

**Committee Action:** 

**Approved as Submitted** 

**Committee Reason:** This proposal clarifies that transfer passageways at upper floors between exit enclosures are permitted and that the rating must be consistent for the entire enclosure.

**Assembly Action:** 

None

E131-09/10

**Committee Action:** 

Disapproved

**Committee Re ason:** While this ne w technolog y will allow gre ater flex ibility, t his proposal is not clear on electrical backup and sup ervision requirements. There is still the issue of mainten ance of the battery system. Would 'loss of power' be loss of power to the building or loss of emergency power?

**Assembly Action:** 

None

E132-09/10

**Committee Action:** 

Disapproved

**Committee Reason:** Several of the proponents and opponent brought up possible revisions to clarify the text that need to be brought for ward at the public comment phase. The proposal needs to clarify if the term "assembly" includes the supporting construction or not. "Essentially open", while it is currently in code text, leaves too much open for interpretation.

**Assembly Action:** 

None

### E133-09/10

#### **Committee Action:**

#### **Approved as Submitted**

**Committee Reason:** The proposal will keep the exterior exit stairway provisions together in a place that is easier to find. This proposal may need correlation with E5 revisions.

**Assembly Action:** 

None

### E134-09/10

**Committee Action:** 

**Approved as Modified** 

#### Modify the proposal as following:

**1026.6 (IFC [B] 1026.6) Exterior ramps and stairway protection.** Exterior exit ramps and stairways shall be separated from the interior of the building as required in Section 1022.1. Openings shall be limited to those necessary for egress from normally occupied spaces.

#### Excepti ons:

- Separation from the interior of the building is not required for occupancies, other than those in Group R-1 or R-2, in buildings that are no more than two stories above grade plane where a level of exit discharge serving such occupancies is the first story above grade plane.
- 2. Separation from the interior of the building is not required where the exterior ramp or stairway is served by an exterior ramp or balcony that connects two remote exterior stairways or other approved exits, with a perimeter that is not less than 50 percent open. To be considered open, the opening shall be a minimum of 50 percent of the height of the enclosing wall, with the top of the openings no less than 7 feet (2134 mm) above the top of the balcony.
- Separation from the interior of the building is not required for an exterior ramp or stairway located in a building or structure that is permitted to have unenclosed interior stairways in accordance with Section 1022.1.
- Separation from the interior of the building is not required for exterior ramps or stairways connected to open-ended corridors, provided that the adjacent exterior wall and openings comply with Section 1022.6 and Items 4.1 through 4.4 4.5 are met:
  - 4.1 The building, including corridors and ramps and stairs, shall be equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 or 903.3.1.2.
  - 4.2 The open-ended corridors comply with Section 1018.
  - 4.3 The open-ended corridors are connected on each end to an exterior exit ramp or stairway complying with Section 1026.
  - 4.4 The exterior walls and openings adjacent to the exterior exit ramp or stairway comply with Section 1022.6.
- 4.4 4.5 At any location in an open-ended corridor where a change of direction exceeding 45 degrees (0.79 rad) occurs, a clear opening of not less than 35 square feet (3.3 m²) or an exterior ramp or stairway shall be provided. Where clear openings are provided, they shall be located so as to minimize the accumulation of smoke or toxic gases.

**Committee Rea son:** The proposed modification provides a better format for the revision. The revision to these requirements will clarify what are the wall and opening requirements around the exterior exit stairways.

**Assembly Action:** 

None

### E135-09/10

**Committee Action:** 

Disapproved

**Committee Reason:** No technical justification was provided for the increase separation requirements – this has been in the codes since the 1950s. This w ill be a conflict with air lock/energy requirements for vestibules. While the current text "equivalent to w ired glass" may need add ressing the proposal does not do t his – wired glass is most often tested as h aving a 45 minu te ra ting. The proposed requirements in Ex ception 2.3 will prohibit double doors in a 10 foot wall of the vestibule.

**Assembly Action:** 

None

E136-09/10

Committee Action: Disapp

**Committee Reason:** This is a limited application, which should already be covered by the code text. The base requirement under Exception 5 is a conflict with the definition of exit discharge by saying it can terminate in a court and not a public way. A concern would be if the passageway did not provided a clear line of site to the outside that some type of exit signage would be required. The wording in 5.2 is not clear that the passage goes through the wall to the outside rather than just up to the wall.

Assembly Action: None

E137-09/10

Committee Action: Disapp roved

**Committee Reason:** The current reference to Section 705 is more expansive than the proposed reference to Section 705.2. The reference could get put the exit discharge much closer to the property line than currently permitted. Technical justification was not provided to indicate why this reduction should be permitted.

Assembly Action: None

E138-09/10

Committee Action: Disapproved

Committee Reason: It would be preferable to close the identifie d loophole in Se ction 705.8 rather that allow exit discharge so close to the lot line.

Assembly Action: None

E139-09/10

Committee Action: Approved as Submitted

**Committee Reason:** The relocation of the requirements out of exit discharge properly places the requirements to the egress balconies and exterior stairways in their respective code sections and makes the cod e easier to understand.

Assembly Action: None

E140-09/10

Committee Action: Approved as Submitted

**Committee Rea son:** The pro posal clarifies a pplications for spaces used for assembly purposes that are located in facilities that are not strictly Group A. This is especially important for assembly spaces with less than 50 occupants. The proposal clears up requirements for aisles vs. aisle accessways. This coordinates with the Americans with Disabilities Act/Architectural Barriers Act (ADA/ABA) Accessib ility Guidelines in small spaces that include assembly seating.

Assembly Action: None

E141-09/10

Committee Action: Disapp roved

Committee Reason: The committee prefers the broader fix of this issue in E140-09/10/

Assembly Action: None

roved

### E142-09/10

#### **Committee Action:**

#### Approved as Modified

Modify the proposal as following:

**1028.1.1.1 (IFC [B] 1028.1.1.1) Spaces under grandstands and bleachers.** When spaces under grandstands or bleachers are used for purposes other than toilet rooms and ticket booths less than 100 sq.ft. (9.29 m²) and toilet rooms, such spaces shall be separated by fire barriers complying with Section 707 and horizontal assemblies complying with Section 712 with not less than 1-hour fire-resistance-rated construction.

**Committee Reason:** The modification clarifies that the exemption is for toilet rooms of an y size and the 100 sq.ft. limit is only applicable to the ticket booths. The proposal identifies information that is missing in the current text to address hazards under bleachers.

Assembly Action:

None

### E143-09/10

#### **Committee Action:**

#### **Approved as Submitted**

**Committee Reason:** This proposal moves the p rovisions for ste pped aisles to a more logical location. The current location as an exception for level or ramped aisles is incorrect.

**Assembly Action:** 

None

### E144-09/10

**Committee Action:** 

**Disapproved** 

Committee Reason: The committee prefers the format for stepped aisles in E143-09/10.

**Assembly Action:** 

None

### E145-09/10

**Committee Action:** 

Approved as Submitted

Committee Reason: The proposal clarifies that handrails can be on one side of the aisle in assembly seating areas

**Assembly Action:** 

None

### E146-09/10

**Committee Action:** 

Disapproved

**Committee Re ason:** The current language is adequate for c ross ailses. A blan ket exception as propose d would conflict w ith the America ns w ith Disabilities Act/Architectural Barriers Act (ADA/ABA) Accessibi lity Guidelines.

**Assembly Action:** 

None

### E147-09/10

**Committee Action:** 

**Disapproved** 

**Committee Reason:** Using a walking surface measurement is a ppropriate to get the level of saf ety we are looking for when using self rising chairs. The proponents and CTC committee should work together to address this issue of guards heights adjacent to different types of seats in assembly venues.

**Assembly Action:** 

None

#### E148-09/10

Committee Action: Disapproved

**Committee Reason:** The proposal is too broad as written for uniform enforceability. The proponents and CTC committee should work together to address this issue of guards heights adjacent to different types of seats in assembly venues.

Assembly Action: None

### E149-09/10

Committee Action: Approved as Submitted

Committee Reason: The proposal removes redundant text.

Assembly Action: None

### E150-09/10

This is a 2 part code change. Part I was heard by the IBC Means of Egress Code Development Committee, Part II was heard by the IRC Building/Energy Code Development Committee.

### PART I IBC MEANS OF EGRESS

Committee Action: Disapproved

Committee Reason: Group R-3 is unique in that it is only required to have one me ans of egress, therefore the redundancy of the emergency escape window is needed. Early suppression and early detection saves lives, but there are no maintenance re quirements for a NFPA13D system, therefore, there is a concern that the chance of these systems to be out of service is high enough that removal of the requirement for a secondary exit through the emergency escape window is not warranted. There is no aler the element on an NFPA13D system, and while smoke detectors are good at detection, they are not always the best at alerting. In a person's home the may be sleeping, into xicated or unable to evacuate without assistance—this can cause delayed evacuation, thus the real need of or the emergency escape windows. One of the opponent indicated that not having emergency escape windows in group homes may be a violation of federal law—that needs to be investigated. There needs to be more information on the entry rescue issues brought up by the fire service, including their use in non-fire emergencies.

Assembly Action: None

## PART II- IRC B/E Committee Action:

Approved as Submitted

**Committee Reason:** This change adds a reasonable exception based on an approved automatic sprinkler system in the d welling. This creates an incentive to provide a sprinkler system. Also, the is may get some retrofits for additions.

Assembly Action: None

### E151-09/10

This is a 4 Part Code Change. All 4 Parts were heard by the IBC Means of Egress Code Development Committee.

### PART LIBC MEANS OF EGRESS

**Committee Action:** 

**Approved as Submitted** 

Modify the proposal as follows (editorial correction):

**3001.3 Accessibility.** Passenger elevators required to be accessible or serve as part of an accessible means of egress shall comply with Section 1107 Sections 1007 and 1109.6.

**E105.4 Mailboxes.** Where mailboxes are provided in an interior location, at least 5 percent, but not less than one, of each type shall be accessible. In residential and institutional facilities, where mailboxes are provided for

each dwelling unit or sleeping unit, <u>accessible</u> mailboxes <del>be accessible</del> shall be provided for each unit required to be an Accessible unit.

(Portions of proposal not shown remain unchanged.)

**Committee Reason:** The selective deletions of the reference to ICC A117.1 remove redundant text. Revisions in terminology for tactile signage coordinate with revisions in the 2009 edition of ICC A117.1.

Assembly Action: None

**PART II- IFC** 

Committee Action: Approved as Submitted

**Committee Rea son:** The revisions clarify the applicable te chnical requirements in ICC A117. 1 for visible alarms in dwelling units.

Assembly Action: None

**PART III- IPC** 

Committee Action: Approved as Submitted

Committee Reason: The revisions clarify the applicable technical requirements in ICC A117.1 for signage at toilet rooms.

Assembly Action: None

**PART IV- IEBC** 

Committee Action: Approved as Submitted

Committee Reason: The selective deletions of the reference to ICC A117.1 remove redundant text.

Assembly Action: None

### E152-09/10

This is a 2 part code change. Both parts were by the IBC Means of Egress Code Development Committee.

#### PART I IBC MEANS OF EGRESS

Committee Action: Disapproved

**Committee Reason:** The technical provisions in the 2009 edition of ICC A117.1 n eed to be published befor e these scoping provisions are included in the IBC. Some of the items in these provisions are outside the scope of the code official's ty pical purview and should be lo cated in Appendix E (i.e., golf courses, boating piers, amusement rides).

Assembly Action: None

**PART II- IEBC** 

Committee Action: Disapproved

Committee Reason: Part II was disapproved based on the committee's actions to Part I of E152-09/10.

Assembly Action: None

### E153-09/10

Committee Action: Disapproved

Modify the proposal as follows (editorial correction of missing underline):

**1102.1 Definitions.** The following words and terms shall, for the purposes of this chapter and as used elsewhere in the code, have the meanings shown herein:

**COMMON USE:** Interior or exterior circulation paths, rooms, spaces or elements that are not for public use and are made available for the shared use of <u>either</u> two or more people in a non-residential facility or the residents of two or more units of a residential facility.

**Committee Reason:** The term "non-residential facilities" is unclear as to meaning. For residential, this conflicts with the F air Ho using interpretation of common use—area being immediately outside or assigned to the unit. This could be interpreted as also the inside of the unit if the apartment is for more than one person. The term is not used in the codes at this time in a manner that needs this definition.

Assembly Action: None

### E154-09/10

Committee Action: Disapproved

**Committee Reason:** This proposal is too broad and could result in possible conflicts with the Fair Housing Act (FHA). HUD's interpretation limits the size of the unit to the same footprint as the garage. It is important that the code stay consistent with the FHA.

Assembly Action: None

### E155-09/10

Committee Action: Disapproved

**Committee Rea son:** This definition w ould put the building official in place of enforcing st ate specific certifications, and would result in inconsistent enforcement. The code official can make a broader interpretation with the current language which would better address the concern expressed by the proponent. The definition actually narrows application.

Assembly Action: None

### E156-09/10

This is a 3 Part Code Change. Part I & II were heard by the IBC Means of Egress Code Development Committee, Part III was heard by the IRC Building/Energy Code Development Committee.

## PART I IBC MEANS OF EGRESS Committee Action:

Disapproved

**Committee Reason:** This proposal is too far reaching for just visitability. It is easy to retrofit existing one and two step entries. There is a big concern about water infiltration and a stepped entry is needed to address that.

Justification was not provided for the 50% req uirement for number of units. It is unclear how this will effect construction of individual units – perhaps requiring every unit to meet Type C unit requirements. If there are Type A and Type B units on the site, there should be an a llowance for consideration of those units counting towards the percentage required to meet Type C units, similar to what is currently in Section 1107.2.

There needs to be exceptions for units that are a level above grade, in flood plains, on steep sites, etc. There are areas of the country where putting in a basement might hit rock and blasting down to get the zero level entry would be too costly – these types of issues should be considered when determining percentages.

Adding anothe r t ype of unit is confusing. Pe rhaps these mi nimal accessibility r equirements should be incorporated into the International Residential Code.

Assembly Action: None

**PART II- IEBC** 

Committee Action: Disapp roved

Committee Reason: The proposal was disapproved for consistency with the committee action on E156-09/10 Part I

Assembly Action: None

PART III- IRC B/E Committee Action:

Disapproved

**Committee R eason:** The committee supports the need for visit ability but is concerned about the zoning, particularly the number of units in a development. The committee suggests that it would be better if the technical requirements were placed into the code in the appropriate sections then all homes would comply and

there would not be a need for T ype C. The re are difficulties with the definitions and the y contain technical requirements.

Assembly Action: None

### E157-09/10

Committee Action: Approved as Submitted

Committee Reason: The proposed text coordinates with the intent of the ADA and clarifies that the exempted work areas could be raised or lowered.

Assembly Action: None

### E158-09/10

Committee Action: Disapproved

**Committee Rea son:** While ther e should be allow ances for some areas within a church, there needs to be some sort of size limitations. A possible interpretation could be t hat the entire church w as used f or religious ceremonies, which is not consistent with the intent of the proponent.

Assembly Action: None

### E159-09/10

Committee Action: Disapproved

**Committee Reason:** Da y care centers are not always within Section 419 for Liv e/Work units as indicated in the proponent's reason. This would also result in a conflict with the American's with Disabilities Act (ADA).

Assembly Action: None

### E160-09/10

Committee Action: Disapp roved

**Committee Reason:** The current allowances for platform lifts covers providing access to an individual dwelling unit in Section 1109.7 Item 4, therefore this text is redundant.

Assembly Action: None

### E161-09/10

Committee Action: Disapproved

**Committee Reason:** This would be a conflict with the re quirements in ICC A1 17.1. The proposal is too far reaching and could be interpreted too broadly.

Assembly Action: None

### E162-09/10

Committee Action: Approved as Submitted

**Committee Re ason:** The increased ar ea would be consistent with the Amer ican's with Disabilitie's Act Accessibility Guidelines (ADAAG).

## E163-09/10

Committee Action: Disapproved

**Committee Rea son:** The new term "public areas" is unclear and very open for interpretation. The 30 occupants limit would result in very different area limitations depending on use; and uses in a space can change over time. Item 1.4 would be a conflict with the American's with Disabilities Act Accessibility Guidelines (ADAAG).

Assembly Action: None

## E164-09/10

Committee Action: Disapproved

**Committee Reason:** The proposed language does not clarify the intent of the route provisions and more than the current text.

Assembly Action: None

## E165-09/10

Committee Action: Disapproved

**Committee Reason:** In some cases this requirement could be too broad and restrictive for individual tenants. This could have substantial impact on multi-story building with tenants on multiple floors that also include exi t stairways, but where everyone has access to a common elevator.

Assembly Action: None

## E166-09/10

Committee Action: Disapproved

**Committee Rea son:** The F air Housing Accessibility G uidelines (FHAG) does not add ress van space w ith additional headr oom, so the exception is not a conflict w ith F HAG. T echnology is such that the height requirement for private converted vans may not be needed. No t echnical justification was submitted indicated that the lower height is a problem for private vans.

Assembly Action: None

## E167-09/10

Committee Action: Disapproved

**Committee Reason:** This concern is an educational issue for designers – this is already covered by "serving units". "Elements" and "but not limited too" can be in terpreted to o broadly. This should be in Section 1109, since mailboxes and garbage chutes can be in uses other than residential.

Assembly Action: None

## E168-09/10

Committee Action: Disapproved

**Committee Reason:** This concern is an educational issue for designers – this is already covered by "serving units". Rubbish chutes that serve non-accessible dwelling units should not be required to meet this requirement. This should be in Section 1109, since mail boxes and garage chutes can be in uses other than residential. It is not clear how the door and disposal operation can be accomplished with only one hand as required in the last sentence.

## E169-09/10

Committee Action: Disapproved

**Committee Reason:** No t echnical justification was provided for such a major re duction. This would conflict with current American's with Disabilities Act (ADA) requirements.

Assembly Action: None

## E170-09/10

Committee Action: Approved as Modified

#### Modify the proposal as follows:

**1107.6.1.1.1 Accessible unit facilities.** All interior and exterior spaces and elements provided as part of or serving an Accessible dwelling unit or sleeping unit shall be accessible and be located on an accessible route.

#### **Exceptions:**

- Where multiple bathrooms are provided within an Accessible unit, at least one full bathroom shall be accessible.
- Where multiple family or assisted bathrooms serve an Accessible unit, at least 50% but not less than one room for each use at each cluster shall be accessible.
- 3. Five percent, but not less than one bed shall be accessible.

(Portions of proposal not shown remain unchanged.)

**Committee Reason:** For the modification, the term "and elements" is too broad to be uniformly applied. This term should be deleted for consistency with the committee actions on E167- 09/10. The proposal as a whole was approved because it more clearly addresses sleeping units in hotels. Exception 1 in Section 11 07.6.1.1.1 is consistent with the 2009 edition of A117.1 for Accessible units with two or more bathrooms.

Assembly Action: None

## E171-09/10

Committee Action: Disapproved

**Committee Reason:** While the code does use the same table for Accessible units in Group R-1 (i.e., hotels) as it does for Group R-2 (i.e., dormitories, fraternities, so rorities, boarding houses), removing this text would be confusing for the users by mixing transient and non-transient requirements.

Assembly Action: None

## E172-09/10

Committee Action: Disapproved

**Committee Reason:** The American's with Disabilities Act (ADA) does not include an exception for multi-story dwelling units like Fair Housing Act (FHA), therefore this exception should not be allowed for multi-story unit.

Assembly Action: None

## E173-09/10

Committee Action: Disapproved

**Committee Reason:** It was not clear if the private residence elevator would have to comply with ICC A117.1, or this could be just an y type of e levator (i.e., non-accessible). While this proposal is consistent with Housing and Urban Development's (HUD) interpretation for individual dwelling units provided with private elevators, the committee felt that it was unnecessary for the elevator to go to every floor.

## E174-09/10

#### **Committee Action:**

#### **Approved as Submitted**

**Committee Rea son:** The reorg anization will clarify when assistive listening devi ces are required in loose seating areas. This would be consistent with the new American's with Disabilities Act/Architectural Barriers Act (ADA/ABA) Accessibility Guidelines.

**Assembly Action:** 

None

### E175-09/10

#### **Committee Action:**

#### Approved as Modified

#### Modify the proposal as follows:

4108.2.7.1.2 1108.2.7.2 Ticket Windows. Where ticket windows are provided in stadiums and arenas at least one of each type window at each location shall have an assistive listening system.

**Committee Reason:** The renumbering of the section w as an editorial fix. The mod ification clarifies that there only needs to be one w indow with an assistive listening system at each group of windows. If different types of services are provided at different window, such as sales vs. pick-up, this can be addressed by the facility as a modification to how services can be provided. Services at windows cannot be determined by the code official during construction.

This requirement for assistive-listening systems at ticket windows addresses the needs of persons with hearing impairments. M ost stadiums an d aren as will alread y have this capability b ecause of the req uirements in Section 1108.2.7. While the p roponent stated that he did n ot intent to pick up smaller facilities, such as high-schools, a public comment providing a minimum size consistent with the provisions in E176-09/10 w ould be helpful.

**Assembly Action:** 

None

## E176-09/10

#### **Committee Action:**

#### **Approved as Submitted**

**Committee Rea son:** This prop osal puts a spec ific limit of 15, 000 occupants for the size of facilities where captioning will be required. These size facilities should have staff and equipment that will have a level of sophistication that is needed to effectively provide captioning. This would coordinate with the Fire Safet y committee's approval of F105-09/10.

**Assembly Action:** 

None

## E177-09/10

#### **Committee Action:**

#### Approved as Submitted

**Committee Rea son:** The propo sal clarifies these provisions app ly to both d rinking and dining areas. This clarifies that elevation changes within a single level are not permitted in dining and drinking areas. Items 1 and 4 will clarify where the 3,000 sq.f t. and employee only areas exceptions are permitted. This would coordinate with the American's with Disabilities Act/Architectural Barriers Act (ADA/ABA) Accessibility Guidelines.

**Assembly Action:** 

None

## E178-09/10

Committee Action: Disapproved

**Committee Reason:** How to get into a Self-Service Storage facility is a technical requirement that should be in the ICC A117.1. The 15 lbs. upward force required to open an upward acting door is in conflict with ICC A117.1 and the American's with Disabilities Act (ADA). No technical information was provided to support that the 15 lbs force was useable by persons with disabilities and the text was not clear which direction the force could be applied.

Assembly Action: None

## E179-09/10

**Note:** The following analysis was not in the Code Change monograph but was published on the ICC website at <a href="http://www.iccsafe.org/cs/codes/Documents/2009-10cycle/ProposedChanges/Standards-Analysis.pdf">http://www.iccsafe.org/cs/codes/Documents/2009-10cycle/ProposedChanges/Standards-Analysis.pdf</a> :

**Analysis:** Review of the proposed new standard indicated that, in the opinion of ICC staff, the standard did not comply with ICC standards criteria, Section 3.6.2.1, 3.6.2.4, 3.6.3.1.

Committee Action: Disapproved

**Committee Reason:** The proposed reference standard had not yet completed its revision to put re quirements into mandatory language. The current standard is not in mandatory language.

Assembly Action: None

E180-09/10

Committee Action: Disapproved

Committee Reason: The term "same type" is too broad and will lead to many interpretation issues.

Assembly Action: None

E181-09/10

Committee Action: Approved as Submitted

**Committee Reason:** This proposal coordinates with the children provisions in ICC A117.1. It is appropriate to allow the unique provisions for children in such facilities as day cares and grade schools.

Assembly Action: None

E182-09/10

Committee Action: Disapproved

**Committee Rea son:** Ma ny pe ople with differe nt types of disab ilities still need the 'access ible' restrooms, therefore, the exception would not serve the general population well. This would be a problem if the only restrooms were on the non-accessible level. This would also be in conflict with the American's with Disabilities Act (ADA).

## E183-09/10

#### Committee Action: Disapproved

**Committee Rea son:** The prop osed revision is confusing and does not m eet the intent expressed in the reason. If the re is both a kitchen and kitchenette in the same hotel suite, both must be accessible. The proposed language could be interpreted such that where multiple tenant space kitchenettes are provided on the same floor in a multi-tenant building, only one had to be accessible.

Assembly Action: None

## E184-09/10

#### **Committee Action:**

#### **Approved as Submitted**

**Committee Reason:** This is a practical application for facilities primarily designed for children. It is understood that the A117.1 standard currently only addresses children's heights for wheelchair drinking fountains and not drinking fountains for standing children. The current height in A117.1 for standing drinking fountains is too high for small children, so the 30 inches proposed should work better. This should be moved to the A117.1 when there is the opportunity.

Assembly Action: None

## E185-09/10

#### Committee Action:

#### Disapproved

**Committee Re ason:** In facilities where the IPC only require one drinking b oth a drinking f ountain for wheelchair users and a drinking fountain for standing persons is required by the American's with Disabilities Act (ADA). The code should not change here and conflict with ADA. If this is an issue for small spaces, it would be better to address this issue in the IPC fixture count table.

Assembly Action: None

## E186-09/10

#### **Committee Action:**

#### Approved as Submitted

**Committee Reason:** Adding scoping for sau na and steam rooms would coordinate with both ICC A117.1 and the American's with Disabilities Act (ADA). Any time public facilities are offered, they should be accessible, and therefore this requirement is appropriate for these types of spaces.

Assembly Action: None

## E187-09/10

#### **Committee Action:**

#### Disapproved

**Committee R eason:** Limited U se/Limited Access (LULA) elevators and Private Residence Elevators are considered passenger elevators by ASME A17.1, so this text is not needed. ASME A17.1 should contain the limitations for use of these elevators. Repeating ASM E A17.1 requirements in the IBC could lead to possible conflicts in the future.

Assembly Action: None

## E188-09/10

#### **Committee Action:**

#### Approved as Submitted

**Committee Reason:** The proposed language clarifies that all ameni ties provided must be usable by persons with disabilities, not just coat hooks and shelves.

Assembly Action:

None

## E189-09/10

Committee Action: Disapproved

**Committee Reason:** Proponents for E189-09/10 and E190-09/10 requested disapproval so that they have the opportunity to submit a public comment with a compromise solution for mailbox access.

Assembly Action: None

E190-09/10

Committee Action: Disapproved

**Committee Reason:** Proponents for E189-09/10 and E190-09/10 requested disapproval so that they have the opportunity to submit a public comment with a compromise solution for mailbox access.

Assembly Action: None

E191-09/10

Committee Action: Disapproved

**Committee Reason:** If this is truly not within the scope of the code as indicated by the proponent than this text is not needed. This is also not a complete list of all the recreational facilities covered in the 200 9 edition of A117.1, therefore it could be interpreted that those recreational areas are covered. The committee hopes that this issue will be addressed in the public comments to E152-09/10.

Assembly Action: None

E192-09/10

Committee Action: Disapproved

**Committee Reason:** If this is truly not within the scope of the code as indicated by the proponent than this text is not needed.

Assembly Action: None

E193-09/10

Committee Action: Approved as Submitted

**Committee Reason:** Variable message sign requirements will make essential information available for person with low vision as well as the general public. This will coordinate with the new provisions in the 2009 edition of ICC A117.1.

Assembly Action: None

E194-09/10

This is a 2 Part Code Change. Part I was heard by the IBC Means of Egress Code Development Committee, Part II was heard by the IRC Building/Energy Code Development Committee.

Note: This code change was contained in the e rrata po sted on t he I CC website. P lease go t o <a href="http://www.iccsafe.org/cs/codes/Pages/09-10ProposedChanges.aspx">http://www.iccsafe.org/cs/codes/Pages/09-10ProposedChanges.aspx</a>.

**PART I- IBC MEANS OF EGRESS** 

Committee Action: Disapproved

Committee Reason: The definition does not address landings at doors where a single step is provided. There

is a conflict with the definition of 'flight' which only deals with several risers. The definition is not clear for intermediate landings on stairways and ramps. There are other areas in the code that use this term, such as balconies, where this definition could be considered a conflict.

Assembly Action: None

PART II- IRC B/E Committee Action:

Disapproved

**Committee Reason:** The proposed definition does not address the I andings at the exterior door. This should be reworked and brought to Final Action.

Assembly Action: None

## E195-09/10

Note: This code change was contained in the e rrata po sted on t he I CC website. P lease go t o http://www.iccsafe.org/cs/codes/Pages/09-10ProposedChanges.aspx.

Committee Action: Disapproved

**Committee Reason:** The new language could be interpreted differently if the stairs went "to" a floor rather than "through" the story or was not open to all floors as the stair tower moved up the building.

Assembly Action: None

## E196-09/10

Note: This code change was contained in the e rrata po sted on t he I CC website. P lease go t o <a href="http://www.iccsafe.org/cs/codes/Pages/09-10ProposedChanges.aspx">http://www.iccsafe.org/cs/codes/Pages/09-10ProposedChanges.aspx</a>.

Committee Action: Approved as Submitted

**Committee Reason:** This propo sal will allow for security to be m aintained when a stairway is within a tenant space.

Assembly Action: None

## E197-09/10

Note: This code change  $\$ was contained in  $\$ the e  $\$ rrata po sted on t  $\$ he I CC  $\$ website. P lease go t  $\$ o  $\$ http://www.iccsafe.org/cs/codes/Pages/09-10ProposedChanges.aspx.

Committee Action: Approved as Submitted

**Committee Reason:** This propo sal will allow for security to be m aintained when a stairway is within a tenant space. This would also be consistent with E196-09/10.

Assembly Action: None

## E198-09/10

Note: This code change was contained in the e rrata po sted on t he I CC website. P lease go t o http://www.iccsafe.org/cs/codes/Pages/09-10ProposedChanges.aspx.

Committee Action: Approved as Submitted

**Committee Reason:** The increased travel distance in open parking garages is reasonable due to the low fuel and occupant loads.

## E199-09/10

Note: This code change was contained in the e rrata po sted on t he I CC website. P lease go t o <a href="http://www.iccsafe.org/cs/codes/Pages/09-10ProposedChanges.aspx">http://www.iccsafe.org/cs/codes/Pages/09-10ProposedChanges.aspx</a>.

Committee Action: Disapproved

**Committee Reason:** No technical justification was provided indicating that the current code requirements for corridors were deficient in Group I-4 occupancies.

Assembly Action: None

## E200-09/10

Note: This code change was contained in the e rrata po sted on t he I CC website. P lease go t o http://www.iccsafe.org/cs/codes/Pages/09-10ProposedChanges.aspx.

Committee Action: Disapproved

**Committee Reason:** The p roposed footnote did not allow for the corridor reduct ion for the higher levels of construction (i.e., IIA, IIIA and VA). No technical justification was provided for the increase in fire-resistance-rating or the increase from a NFPA13R sprinkler system to a NFPA 13 system for Group R.

Assembly Action: None

## E201-09/10

Note: This code change was contained in the er rata posted on t he ICC website on 10/25/09. Please go to <a href="http://www.iccsafe.org/cs/codes/Pages/09-10ProposedChanges.aspx">http://www.iccsafe.org/cs/codes/Pages/09-10ProposedChanges.aspx</a>.

Committee Action: Disapproved

The posted erratum is the following:

E201-09/10 1008.1.4.3

Proponent: Gregory J. Cahanin, Cahanin Fire & Code Consulting Representing the Skyfold Company

#### Revise as follows:

**1008.1.4.3** Horizontal sliding doors. In other than Group H occupancies, horizontal sliding doors permitted to be a component of a *means of egress* in accordance with Exception 6 to Section 1008.1.2 shall comply with all of the following criteria:

- The doors shall be power operated and shall be capable of being operated manually in the event of power failure.
- 2. The doors shall be openable by a simple method from both sides without special knowledge or effort.
- 3. The force required to operate the door shall not exceed 30 pounds (133 N) to set the door in motion and 15 pounds (67 N) to close the door or open it to the minimum required width.
- 4. The door shall be openable with a force not to exceed 15 pounds (67 N) when a force of 250 pounds (1100 N) is applied perpendicular to the door adjacent to the operating device.
- 5. The door assembly shall comply with the applicable *fire protection rating* and, where rated, shall be self closing or automatic closing by smoke detection in accordance with Section 715.4.8.3, shall be installed in accordance with NFPA 80 and shall comply with Section 715.
- 6. The door assembly shall have an integrated standby power supply.
- 7. The door assembly power supply shall be electrically supervised.
- The door shall open to the minimum required width within 10 seconds after activation of the operating device.

Exception: Manual exit devices used to open doors shall be permitted in lieu of manual operation.

- Manual exit devices shall be located 40 inches to 48 inches vertically above the floor and within 5 feet of the egress door. Ready access shall be provided to the manual unlocking device and the device shall be clearly identified by a sign that reads "Push to Exit". When operated, the manual exit device shall result in the opening of the door.
- Standby power supplies for manual exit devices shall be capable of providing power for 10 opening and closing cycles.

**Reason:** First, this proposal deletes the Horizontal term from the sliding door requirement. The horizontal or vertical orientation of the sliding door is not relevant to how it is used in an emergency. The permitting of only Horizontal sliding doors for egress with the special stipulations of 1008.1.4.3 prevents vertically sliding doors from being used for egress.

Second, the code has well established provisions for Access-controlled doors for people with mobility impairments. These provisions which provide for safe egress of slower occupants due to their being in a wheelchair, using a walker or cane or needing personal assistance should be available to the general public as well

This new exception will allow the use of a horizontal or vertical sliding door with the redundant and accepted Access-controlled door features for both able bodied and mobility impaired individuals.

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

**Committee Rea son:** This was disapproved to be consistent with the committee action on E 54-09/10. Technical justification needs to be provided for the 10 opening-closing cycle requirements. The proposal does not address when the door will provide adequate height for egress. Vertical sliding doors should be in a section separate from horizontal sliding doors.

Assembly Action: None

## E202-09/10

Note: This code change was contained in the er rata posted on t he ICC website on 10/25/09. Please go to <a href="http://www.iccsafe.org/cs/codes/Pages/09-10ProposedChanges.aspx">http://www.iccsafe.org/cs/codes/Pages/09-10ProposedChanges.aspx</a>.

Committee Action: Disapproved

The posted erratum is the following:

E202-09/10 1008.1.4.3

Proponent: Gregory J. Cahanin, Cahanin Fire & Code Consulting Representing the Skyfold Company

#### Revise as follows:

**1008.1.4.3** Horizontal sliding doors. In other than Group H occupancies, horizontal sliding doors permitted to be a component of a *means of egress* in accordance with Exception 6 to Section 1008.1.2 shall comply with all of the following criteria:

- 1. The doors shall be power operated and shall be capable of being operated manually in the event of power failure.
- The doors shall be openable by a simple method from both sides without special knowledge or effort.
- The force required to operate the door shall not exceed 30 pounds (133 N) to set the door in motion and 15 pounds (67 N) to close the door or open it to the minimum required width.
- 4. The door shall be openable with a force not to exceed 15 pounds (67 N) when a force of 250 pounds (1100 N) is applied perpendicular to the door adjacent to the operating device.
- 5. The door assembly shall comply with the applicable *fire protection rating* and, where rated, shall be self closing or automatic closing by smoke detection in accordance with Section 715.4.8.3, shall be installed in accordance with NFPA 80 and shall comply with Section 715.
- 6. The door assembly shall have an integrated standby power supply.
- 7. The door assembly power supply shall be electrically supervised.
- The door shall open to the minimum required width within 10 seconds after activation of the operating device.
- The door, if not contained in a fire or smoke rated assembly, but within the egress path, shall
  open upon activation of the building fire alarm system, building automatic fire sprinkler system,
  or fire detection system, if provided. The door shall be permitted to remain in the open position
  until the fire alarm system has been reset.

**Reason:** Not all sliding doors are fire or smoke rated, but they are used in the means of egress. Doors which are not part of a fire or smoke compartmentation wall need not close automatically. Side swinging doors which are in the means of egress are not required to have closers unless they are fire or smoke rated. This change will be consistent with non-rated side swinging doors. This change will allow sliding doors in folding non-rated partitions such as those found in convention centers, meeting rooms and churches to subdivide spaces to be more readily used for egress. Currently the side swinging doors used in folding partitions are not required to close automatically.

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

**Committee Reason:** The proposal will increase the cost of construction because the door will be tied in the fire alarm system. There was no indication on why these doors would be required to open automatically.

# 2009/2010 INTERNATIONAL BUILDING CODE Structural Code Development Committee

#### David P. Tyree, PE, CBO - Chair

Director, Codes and Standards Building Owners and Managers Association, International Washington, DC

#### Marcelino Iglesias - Vice Chair

Code Specialist
State of New Jersey
Dept. of Community Affairs; Division
Trenton, NJ

#### Alexander Abel, PE

Plans Review Engineer City and County of Denver Denver, CO

#### Lindsey Carter, PE, CBO

Inspection Services Supervisor Shelby County Department of Development Services Pelham, AL

#### David Chang, PE

Plan Check Supervisor Building & Safety Department, City of Los Angeles Los Angeles, CA

#### Wanda Edwards. PE

Director of Building Code Development Institute of Business & Home Safety Tampa, FL

#### Frank Golon

Rep: National Association of Home Builders The Kleiner Group LLC Eatontown, NJ

#### Cole Graveen, PE, SE

Engineer Raths & Johnson Inc. Willowbrook, IL

#### Kirk Grundahl, PE

President Qualtim, Inc. Madison, WI

#### John Loscheider, PE, SE

Principal Loscheider Engineering Company Renton, WA

#### James Robinson, Jr., PE, SE

Rep: National Council of Structural Engineering Associations President Robinson Associates Consulting Engineers Inc. Atlanta, GA

#### Gary Searer, PE, SE

Associate Principal Wiss, Janney, Elstner Associates, Inc. Burbank, CA

#### Constadino Sirakis, PE

Acting Director of Engineering Technical Affairs Division New York City Dept. of Buildings New York, NY

#### Gary Walker, PE

President Walker Engineering Inc. Birmingham, AL

#### Can Xiao, MS, PE

Camelback Infrastructure Development Manager, Water Services Department City of Phoenix Phoenix, AZ

## **Staff Secretariat:**

Alan Carr, SE

Code and Standards International Code Council

## INTERNATIONAL BUILDING CODE STRUCTURAL COMMITTEE HEARING RESULTS

## S1-09/10

**PART I- IBC STRUCTURAL** 

Committee Action: Disapproved

**Committee Rea son:** The proposed revision to the definition of Roof Assembly is unnecessary because Chapter 16 already clarifies the design loads.

Assembly Action: None

PART II- IRC B/E

Committee Action: Disapproved

**Committee Reason:** The wind is a design load and is inherent in the definition. This revision would imply that a fire-resistant rating is required. This change would make the definition inconsistent with the definition in the IBC.

**Assembly Action:** 

### S2-09/10

Parts I and II of this code change were heard by the IPC code development committee.

**PART I- IPC** 

Committee Action: As Submitted

**Committee Rea son:** Proponent's reason statement which stated that the requirements for secondary roof drains needs to be clarified so as to alert roofers to their responsibility to size drains and scuppers.

Assembly Action: None

PART II- IBC STRUCTURAL Committee Action:

As Submitted

**Committee Rea son:** Proponent's reason statement which stated that the requirements for secondary roof drains needs to be clarified so as to alert roofers to their responsibility to size drains and scuppers.

Assembly Action: None

PART III- IRC PLUMBING Committee Action:

As Submitted

**Committee Re ason:** Residential roofers are probably not real familiar with roofs having parapets but the application does present itself from time to time. The added text is a good thing to have in the code to alert storm gutter and drain installers that they may need to add secondary drains in these rare applications.

## S3-09/10

## PART I- IBC STRUCTURAL Committee Action:

**Disapproved** 

**Committee Rea son:** The proposed exception to Section 1503.6 would apply to all skylights as written. Specifying "unit" skylights may not be enough of a clarification to tie the exception to applicable Chapter 24 requirements. If not completely clear, an exception to allow the use of the manufacturers' instructions could open the door to misapplication.

Assembly Action: None

PART II- IRC B/E Committee Action:

**Approved as Modified** 

Modify the proposal as follows:

**R903.2.2 Crickets and saddles.** A cricket or saddle shall be installed on the ridge side of any chimney or penetration more than 30 inches (762 mm) wide as measured perpendicular to the slope. Cricket or saddle coverings shall be sheet metal or of the same material as the roof covering.

**Exception:** <u>Unit</u> skylights installed <u>in accordance with Section R308.6</u> and flashed in accordance with the manufacturer's instructions <u>shall be permitted to be installed without a cricket or saddle.</u>

**Committee Reason:** The exception is needed to address roof penetration that is engineered to prevent water infiltration without a cricket. The modification clarifies that the exception only applies to unit skylights.

Assembly Action: None

## S4-09/10

**Note:** The following analysis was not in the Code Change monograph but was published on the ICC website at <a href="http://www.iccsafe.org/cs/codes/Documents/2009-10cycle/ProposedChanges/Standards-Analysis.pdf">http://www.iccsafe.org/cs/codes/Documents/2009-10cycle/ProposedChanges/Standards-Analysis.pdf</a>:

**Analysis:** Review of proposed new standard SPRI WD-1 indicated that, in the opinion of ICC Staff, the standard complies with ICC standards criteria.

Committee Action: Disapproved

**Committee Reason:** There was some question on the scope of reference to a "design" standard, SPRI WD-1, for the "installation" requirement as was proposed. Additional clarification should be provided on the derivation of the factor of safety that is employed in the standard. The proposed requirements would be more suitably located in Section 1504.3.1 rather than the charging section. The committee suggests that the proponent address these questions in the public comment phase in addition to including his proposed floor modification.

Assembly Action: None

S5-09/10

Withdrawn by Proponent

S6-09/10

Committee Action: Disapproved

**Committee Reason:** There are concerns with the ten percent fines that would be permitted in the ballast, since testing indicates these fines are a problem in glass breakage. The proposed restrictions (exceptions) that are based on a building's Occupancy Category do not properly address the debris hazard posed to (or by) adjacent buildings, since the Occupancy Category is not relevant to the ballast blowing off the roof. There were concerns raised on correlating the parapet height to the area of the roof.

## S7-09/10

#### **Committee Action:**

#### **Approved as Submitted**

**Committee Re ason:** This proposal clarifies the code by listing the specific roof membrane types to which Section 1504.5 applies.

Assembly Action:

None

## S8-09/10

#### **Committee Action:**

#### Approved as Submitted

**Committee Reason:** This code change clarifies the scope of reference to ANSI/SPRI ES-1 in Section 1504.5. By indicating the specific test methods, RE-1, RE-2 and RE-3, the applicable portions of the reference standard are more obvious to the reader.

**Assembly Action:** 

None

## S9-09/10

**Note:** The following analysis was not in the Code Change monograph but was published on the ICC website at <a href="http://www.iccsafe.org/cs/codes/Documents/2009-10cycle/ProposedChanges/Standards-Analysis.pdf">http://www.iccsafe.org/cs/codes/Documents/2009-10cycle/ProposedChanges/Standards-Analysis.pdf</a> :

**Analysis:** Review of proposed new standard ANSI/SPRI RP 14 indicated that, in the opinion of ICC Staff, the standard did not comply with ICC standards criteria, Section 3.6.3(1) Readily available.

Committee Action: Disapproved

**Committee Rea son:** The committee's disapproval was based on the status of the proposed reference standard. As a draft, it is not readily available.

Assembly Action: None

## S10-09/10

This code change was heard by the IBC Fire Safety code development committee.

**Committee Action:** 

**Approved as Modified** 

Modify the proposal as follows:

TABLE 1505.1<sup>a,b, d</sup>
MINIMUM ROOF COVERING CLASSIFICATION
FOR TYPES OF CONSTRUCTION

(No change to table)

(No change to Notes a. through c.)

d. Any exposed portions of roof coverings on roofs containing roof gardens or landscaped roofs shall have their roof covering fire classification increased one level above the level indicated in the table.

(Portions of the proposal not shown remain unchanged)

**Committee Reason:** Roof gardens and landscaped roofs are terms currently used in the I-codes and providing these requirements would be appropriate and consistent with the new language in the IFC recommended for approval. The modification removes a language that is no longer needed base on the related language recommended for approval in the IFC.

**Assembly Action:** 

None

## S11-09/10

This code change was heard by the IBC Fire Safety code development committee.

Committee Action: Disapproved

**Committee Reason:** Large amounts of requirements should not be placed in a footnote as they may not easily be recognized. Further the proposed requirements related to roof classifications, building construction types and maximum building areas are confusing and could be misinterpreted. Lastly, it is unclear how these requirements would, or could, apply to reroofing projects.

Assembly Action: None

## S12-09/10

This code change was heard by the IBC Fire Safety code development committee.

**Note:** The following analysis was not in the Code Change monograph but was published on the ICC website at <a href="http://www.iccsafe.org/cs/codes/Documents/2009-10cycle/ProposedChanges/Standards-Analysis.pdf">http://www.iccsafe.org/cs/codes/Documents/2009-10cycle/ProposedChanges/Standards-Analysis.pdf</a> :

**Analysis:** Review of proposed new standard ANSI/SPRI VF 1 indicated that, in the opinion of ICC Staff, the standard did not comply with ICC standards criteria, Section 3.6.3(1) Readily available.

Committee Action: Disapproved

**Committee Reason:** Disapproval was based on the proponents request for disapproval. Further, the proposed standard SPRI VF-1-08 has not been submitted.

Assembly Action: None

## S13-09/10

This code change was heard by the IBC Fire Safety code development committee.

Committee Action: Approved as Modified

Modify the proposal as follows:

**1505.8 Photovoltaic systems.** Rooftop installed photovoltaic systems that are adhered or attached to the roof covering or photovoltaic modules/shingles installed as roof coverings shall be labeled to identify their fire classification in accordance with the testing required in Section 1505.1.

**Committee Reason:** The committee agreed that photovoltaic systems should be required to comply with the same roof classification requirements as the assembly they are installed upon. The modification appropriately includes other photovoltaic system components.

Assembly Action: None

## S14-09/10

PART I- IBC STRUCTURAL Committee Action:

Disapproved

Committee Reason: There are concerns with the test wind speed versus the code required basic wind speed and no data was provided that would indicate that shingles installed in accordance with the current requirements of Table 1507.2.7(2) are not performing adequately. There should be some correlation between the code wind speed and the test wind speed. The proposed change to the required asphalt shingle classification was deemed overly restrictive, as written.

## PART II- IRC B/E Committee Action:

Disapproved

**Committee Rea son:** This change would make the classification requirements inconsistent with the IBC classification. The two hour test duration in ASTM D 3161 is sufficient.

Assembly Action: None

S15-09/10

## PART I- IBC STRUCTURAL Committee Action:

Disapproved

Committee Reason: As worded, the requirements could be applied to currently used products that do not have problems, excluding self-adhered underlayment unless it is nailed down. This would be an extensive change and the committee was not provided with the data to support these specific requirements. The need for this underlayment requirement is unclear since it is under a covering that is already held down. There is no credit given for the nails through the shingles, for instance. Typically the roof covering manufacturer provides direction on how to install the underlayment and the underlayment varies with the type of roof covering. While the phrase "underlayment ... shall be applied with corrosion-resistant fasteners in accordance with the manufacturer's installation instructions" is currently used in Section 1507.2.8.1, there are questions on its intent and the wording should be clear on whether this refers to the fastener or underlayment manufacturer before adding it in several new sections.

Assembly Action: None

PART II- IRC B/E Committee Action:

Approved as Modified

Modify the proposal as follows:

**R905.2.7.2 Underlayment and high wind.** Underlayment applied in areas subject to high winds [above 110 mph (49 m/s) per Figure R301.2(4)] shall be applied with corrosion-resistant fasteners in accordance with manufacturer's installation instructions. Fasteners are to be applied along the overlap not farther apart than 36 inches (914mm) on center.

Underlayment installed where the basic wind speed equals or exceeds 120 mph (54 m/s) shall comply with ASTM D 226 Type II, ASTM D 4869 Type IV, or ASTM D 6757. The underlayment shall be attached in a grid pattern of 12 inches (305 mm) between side laps with a 6 inch (152 mm) spacing at the side laps. Underlayment shall be applied in accordance with Section R905.2.7 except all Head laps shall be a minimum of 4 inches (102 mm) and end laps shall be a minimum of 6 inches (152 mm). Underlayment shall be attached using metal or plastic cap nails with a head diameter of not less than 15/8 inches (41 25.4 mm) with a shank thickness of at least 32 gauge sheet metal. The cap-nail shank shall be a minimum of 12 gauge (0.105 inches) with a length to penetrate through the roof sheathing or a minimum of 3/4 inch into the roof sheathing.

Exception: As an alternative, adhered underlayment complying with ASTM D 1970 shall be permitted.

Underlayment installed where the basic wind speed equals or exceeds 140 mph (63 m/s) shall be attached using metal cap nails with a head diameter of not less than 1 5/8 inches (41 mm) with a shank of at least 32 gauge sheet metal with a length to penetrate through the roof sheathing.

**R905.3.3.3 Underlayment and high wind.** Underlayment applied in areas subject to high wind [over 110 miles per hour (49 m/s) per R301.2(4)] shall be applied with corrosion-resistant fasteners in accordance with manufacturer's installation instructions. Fasteners are to be applied along the overlap not farther apart than 36 inches (914 mm) on center.

Underlayment installed where the basic wind speed equals or exceeds 120 mph (54 m/s) shall be attached in a grid pattern of 12 inches (305 mm) between side laps with a 6 inch (152 mm) spacing at the side laps. Underlayment shall be applied in accordance with Section R905.2.7 except all Head laps shall be a minimum of 4 inches (102 mm) and end laps shall be a minimum of 6 inches (152 mm). Underlayment shall be attached using metal or plastic cap nails with a head diameter of not less than 1 5/8 inches (41 25.4 mm) with a shank thickness of at least 32 gauge sheet metal. The cap-nail shank shall be a minimum of 12 gauge (0.105 inches) with a length to penetrate through the roof sheathing or a minimum of 3/4 inch into the roof sheathing.

Exception: As an alternative, adhered underlayment complying with ASTM D 1970 shall be permitted.

Underlayment installed where the basic wind speed equals or exceeds 140 mph (63 m/s) shall be attached using metal cap nails with a head diameter of not less than 1 5/8 inches (41 mm) with a shank of at least 32 gauge sheet metal with a length to penetrate through the roof sheathing.

R905.4.3.2 Underlayment and high wind. Underlayment applied in areas subject to high winds [above 110

mph (49 m/s) per Figure R301.2(4)] shall be applied with corrosion-resistant fasteners in accordance with manufacturer's installation instructions. Fasteners are to be applied along the overlap not farther apart than 36 inches (914 mm) on center.

Underlayment installed where the basic wind speed equals or exceeds 120 mph (54 m/s) shall comply with ASTM D 226 Type II, ASTM D 4869 Type IV, or ASTM D 1970. The underlayment shall be attached in a grid pattern of 12 inches (305 mm) between side laps with a 6 inch (152 mm) spacing at the side laps.

<u>Underlayment shall be applied in accordance with Section R905.2.7 except all Head laps shall be a minimum of 4 inches (102 mm) and end laps shall be a minimum of 6 inches (152 mm). Underlayment shall be attached using metal or plastic cap nails with a head diameter of not less than 1 5/8 inches (41 25.4 mm) with a shank thickness of at least 32 gauge sheet metal. The cap-nail shank shall be a minimum of 12 gauge (0.105 inches) with a length to penetrate through the roof sheathing or a minimum of 3/4 inch into the roof sheathing.</u>

Exception: As an alternative, adhered underlayment complying with ASTM D 1970 shall be permitted.

Underlayment installed where the basic wind speed equals or exceeds 140 mph (63 m/s) shall be attached using metal cap nails with a head diameter of not less than 1 5/8 inches (41 mm) with a shank of at least 32 gauge sheet metal with a length to penetrate through the roof sheathing.

**R905.5.3.2 Underlayment and high wind.** Underlayment applied in areas subject to high winds [above 110 mph (49 m/s) per Figure R301.2(4)] shall be applied with corrosion-resistant fasteners in accordance with manufacturer's installation instructions. Fasteners are to be applied along the overlap not farther apart than 36 inches (914 mm) on center.

Underlayment installed where the basic wind speed equals or exceeds 120 mph (54 m/s) shall comply with ASTM D 226 Type II or ASTM D 4869 Type IV. The underlayment shall be attached in a grid pattern of 12 inches (305 mm) between side laps with a 6 inch (152 mm) spacing at the side laps. <u>Underlayment shall be applied in accordance with Section R905.2.7 except all Head laps shall be a minimum of 4 inches (102 mm) and end laps shall be a minimum of 6 inches (152 mm). Underlayment shall be attached using metal or plastic cap nails with a head diameter of not less than 1 5/8 inches (41 25.4 mm) with a shank thickness of at least 32 gauge sheet metal. The cap-nail shank shall be a minimum of 12 gauge (0.105 inches) with a length to penetrate through the roof sheathing or a minimum of 3/4 inch into the roof sheathing.</u>

Exception: As an alternative, adhered underlayment complying with ASTM D 1970 shall be permitted.

Underlayment installed where the basic wind speed equals or exceeds 140 mph (63 m/s) shall be attached using metal cap nails with a head diameter of not less than 1.5/8 inches (41 mm) with a shank of at least 32 gauge sheet metal with a length to penetrate through the roof sheathing.

**R905.6.3.2 Underlayment and high wind.** Underlayment applied in areas subject to high winds [above 110 mph (49 m/s) per Figure R301.2(4)] shall be applied with corrosion-resistant fasteners in accordance with manufacturer's installation instructions. Fasteners are to be applied along the overlap not farther apart than 36 inches (914 mm) on center.

Underlayment installed where the basic wind speed equals or exceeds 120 mph (54 m/s) shall comply with ASTM D 226 Type II or ASTM D 4869 Type IV. The underlayment shall be attached in a grid pattern of 12 inches (305 mm) between side laps with a 6 inch (152 mm) spacing at the side laps. <u>Underlayment shall be applied in accordance with Section R905.2.7 except all Head laps shall be a minimum of 4 inches (102 mm) and end laps shall be a minimum of 6 inches (152 mm). Underlayment shall be attached using metal or plastic cap nails with a head diameter of not less than 1 5/8 inches (44 25.4 mm) with a shank thickness of at least 32 gauge sheet metal. The cap-nail shank shall be a minimum of 12 gauge (0.105 inches) with a length to penetrate through the roof sheathing or a minimum of 3/4 inch into the roof sheathing.</u>

Exception: As an alternative, adhered underlayment complying with ASTM D 1970 shall be permitted.

Underlayment installed where the basic wind speed equals or exceeds 140 mph (63 m/s) shall be attached using metal cap nails with a head diameter of not less than 1 5/8 inches (41 mm) with a shank of at least 32 gauge sheet metal with a length to penetrate through the roof sheathing.

**R905.7.3.2 Underlayment and high wind.** Underlayment applied in areas subject to high winds [above 110 mph (49 m/s) per Figure R301.2(4)] shall be applied with corrosion-resistant fasteners in accordance with manufacturer's installation instructions. Fasteners are to be applied along the overlap not farther apart than 36 inches (914mm) on center.

Underlayment installed where the basic wind speed equals or exceeds 120 mph (54 m/s) shall comply with ASTM D 226 Type II or ASTM D 4869 Type IV. The underlayment shall be attached in a grid pattern of 12 inches (305 mm) between side laps with a 6 inch (152 mm) spacing at the side laps. <u>Underlayment shall be applied in accordance with Section R905.2.7 except all Head laps shall be a minimum of 4 inches (102 mm) and end laps shall be a minimum of 6 inches (152 mm). Underlayment shall be attached using metal or plastic cap nails with a head diameter of not less than 1 5/8 inches (41 25.4 mm) with a shank thickness of at least 32 gauge sheet metal. The cap-nail shank shall be a minimum of 12 gauge (0.105 inches) with a length to penetrate through the roof sheathing or a minimum of 3/4 inch into the roof sheathing.</u>

Exception: As an alternative, adhered underlayment complying with ASTM D 1970 shall be permitted.

Underlayment installed where the basic wind speed equals or exceeds 140 mph (63 m/s) shall be attached

using metal cap nails with a head diameter of not less than 1.5/8 inches (41 mm) with a shank of at least 32 gauge sheet metal with a length to penetrate through the roof sheathing.

**R905.8.3.2 Underlayment and high wind.** Underlayment applied in areas subject to high winds [above 110 mph (49 m/s) per Figure R301.2(4)] shall be applied with corrosion-resistant fasteners in accordance with manufacturer's installation instructions. Fasteners are to be applied along the overlap not farther apart than 36 inches (914 mm) on center.

Underlayment installed where the basic wind speed equals or exceeds 120 mph (54 m/s) shall comply with ASTM D 226 Type II or ASTM D 4869 Type IV. The underlayment shall be attached in a grid pattern of 12 inches (305 mm) between side laps with a 6 inch (152 mm) spacing at the side laps. <u>Underlayment shall be applied in accordance with Section R905.2.7 except all Head</u> laps shall be <u>a minimum of 4</u> inches (102 mm) and end laps shall be a minimum of 6 inches (152 mm). Underlayment shall be attached using metal or plastic cap nails with a head diameter of not less than 1 5/8 inches (44 25.4 mm) with a shank thickness of at least 32 gauge sheet metal. The cap-nail shank shall be a minimum of 12 gauge (0.105 inches) with a length to penetrate through the roof sheathing or a minimum of 3/4 inch into the roof sheathing.

Exception: As an alternative, adhered underlayment complying with ASTM D 1970 shall be permitted.

Underlayment installed where the basic wind speed equals or exceeds 140 mph (63 m/s) shall be attached using metal cap nails with a head diameter of not less than 1.5/8 inches (41 mm) with a shank of at least 32 gauge sheet metal with a length to penetrate through the roof sheathing.

**R905.10.5.1 Underlayment and high wind.** Underlayment applied in areas subject to high winds [above 110 mph (49 m/s) per Figure R301.2(4)] shall be applied with corrosion-resistant fasteners in accordance with manufacturer's installation instructions. Fasteners are to be applied along the overlap not farther apart than 36 inches (914 mm) on center.

Underlayment installed where the basic wind speed equals or exceeds 120 mph (54 m/s) shall comply with ASTM D 226 Type II. The underlayment shall be attached in a grid pattern of 12 inches (305 mm) between side laps with a 6 inch (152 mm) spacing at the side laps. <u>Underlayment shall be applied in accordance with Section R905.2.7 except all Head laps shall be a minimum of 4 inches (102 mm) and end laps shall be a minimum of 6 inches (152 mm). Underlayment shall be attached using metal or plastic cap nails with a head diameter of not less than 1 5/8 inches (41 25.4 mm) with a shank thickness of at least 32 gauge sheet metal. The cap-nail shank shall be a minimum of 12 gauge (0.105 inches) with a length to penetrate through the roof sheathing or a minimum of 3/4 inch into the roof sheathing.</u>

Exception: As an alternative, adhered underlayment complying with ASTM D 1970 shall be permitted.

Underlayment installed where the basic wind speed equals or exceeds 140 mph (63 m/s) shall be attached using metal cap nails with a head diameter of not less than 1.5/8 inches (41 mm) with a shank of at least 32 gauge sheet metal with a length to penetrate through the roof sheathing.

**Committee Reason:** This change will add underlayment requirements that will improve the performance of the roof covering in high wind situations. The modification corrects an error with respect to the nailing and adds self-adhering underlayment as an alternate. The committee has concern that eight sections are being added that prescribe the same requirement. The proponent should consolidate these and bring this back later.

Assembly Action: None

## S16-09/10

## PART I- IBC STRUCTURAL Committee Action:

Disapproved

**Committee Re ason:** Consideration should be given to the thickness of the drip edge versus the fastener spacing as they can both be effective in improving the performance in high winds. The proposed 4 inch fastener spacing seems too conservative and some clarification of the staggered fastener pattern would be suggested. It is unclear that the proposed limit on the extension of a shingle beyond the drip edge is appropriate.

Assembly Action: None

PART II- IRC B/E Committee Action:

Disapproved

**Committee Re ason:** Based upon the proponent's request for disapproval. The proposal contains requirements that are beyond the scope of the IRC.

## S17-09/10

#### PART I- IBC STRUCTURAL

Committee Action:

Disapproved

**Committee Rea son:** There are concerns with the appropriateness of adapting a referenced standard for asphalt shingles to apply to metal roof shingles. No specifics were provided that would justify this change.

Assembly Action: None

PART II- IRC B/E Committee Action:

Disapproved

**Committee Reason:** The reference standard is not approved for metal roof shingles. The proponent should bring this back with appropriate test method for metal roof shingles.

Assembly Action: None

## S18-09/10

**Note:** The following analysis was not in the Code Change monograph but was published on the ICC website at <a href="http://www.iccsafe.org/cs/codes/Documents/2009-10cycle/ProposedChanges/Standards-Analysis.pdf">http://www.iccsafe.org/cs/codes/Documents/2009-10cycle/ProposedChanges/Standards-Analysis.pdf</a> :

**Analysis:** Review of proposed new standard UL 55A indicated that, in the opinion of ICC Staff, the standard complies with ICC standards criteria.

## PART I- IBC STRUCTURAL Committee Action:

### **Approved as Submitted**

Committee Reason: The proposal adds a referenced standard that is appropriate for built-up roof covering materials.

Assembly Action: None

## PART II- IRC B/E Committee Action:

#### Approved as Submitted

**Committee Reason:** The reference standard is being used for built-up roof coverings. This change brings the standard into the code and will permit an additional alternate for built-up roof coverings.

Assembly Action: None

## S19-09/10

#### **Committee Action:**

#### **Approved as Submitted**

**Committee Reason:** The proposal adds a referenced standard for asphalt coatings, coordinating the IBC with the corresponding requirements in the IRC.

Assembly Action: None

## S20-09/10

## PART I- IBC STRUCTURAL

**Committee Action:** 

#### **Approved as Submitted**

**Committee Reason:** Agreement with the proponent's reason which indicates that this proposal clarifies the requirements for protective coating materials by adding a table listing the material standards that are applicable to sprayed polyurethane foam roof systems.

Assembly Action: None

PART II- IRC B/E Committee Action:

**Approved as Submitted** 

**Committee Reason:** This change provides clarity for the appropriate material to use for the protective coating for sprayed polyurethane foam roofing.

Assembly Action: None

## S21-09/10

#### **PART I- IBC STRUCTURAL**

Committee Action:

Approved as Submitted

**Committee Reason:** This proposal corrects terminology relating to liquid applied products that serve as a roof covering.

Assembly Action: None

PART II- IRC B/E Committee Action:

Approved as Submitted

Committee Reason: This change clarifies the materials that can serve as liquid-applied roofing.

Assembly Action: None

## S22-09/10

**Note:** The following analysis was not in the Code Change monograph but was published on the ICC website at <a href="http://www.iccsafe.org/cs/codes/Documents/2009-10cycle/ProposedChanges/Standards-Analysis.pdf">http://www.iccsafe.org/cs/codes/Documents/2009-10cycle/ProposedChanges/Standards-Analysis.pdf</a> :

**Analysis:** Review of proposed new standard UL 1703 indicated that, in the opinion of ICC Staff, the standard complies with ICC standards criteria.

## PART I & II- IBC STRUCTURAL Committee Action:

Approved as Modified

Modify the proposal as follows:

**PHOTOVOLTAIC MODULES/SHINGLES.** A roof covering composed of flat-plate photovoltaic modules fabricated in sheets that resemble three-tab composite shingles.

**1507.17.3 Wind resistance.** Photovoltaic modules/shingles shall be tested in accordance with procedures adapted from ASTM D 3161. Photovoltaic modules/shingles shall comply with the classification requirements of Table 1507.2.7.1(2) for the appropriate maximum basic wind speed. Photovoltaic modules/shingle packaging shall bear a label to indicate compliance with the procedures adapted from ASTM D 3161 and the required classification from Table 1507.2.7.1(2).

(Portions not proposal not shown are unchanged)

**Committee Reason:** This proposal adds requirements for photovoltaic shingles. This is important due to the increase in solar applications on roofs. The modification clarifies the definition and removes language that is problematic in order to clarify acceptance criteria. This helps clarify the provision since ASTM D 3161 covers other material.

Assembly Action: None

PART III- IRC B/E Committee Action:

**Approved as Modified** 

Modify the proposal as follows:

**PHOTOVOLTAIC MO DULES/SHINGLES.** A roof covering composed of flat-plate photovoltaic modules fabricated into sheets that resemble three-tab composite shingles.

R905.16.3 Win d resistance. Photovoltaic modules/shingles shall be tested in accordance with procedures adapted from and acceptance criteria in ASTM D 3161. Photovoltaic modules/shingles shall comply with the

classification requirements of Table R905.2.4.1(2) for the appropriate maximum basic wind speed. Photovoltaic modules/shingle packaging shall bear a label to indicate compliance with the procedures adapted from in ASTM D 3161 and the required classification from Table R905.2.4.1(2).

(Portions of proposal not shown remain unchanged)

**Committee Rea son:** This change introduces a new product into the code that provides not only a roof covering but also a source of electrical power. A new reference standard is added for listing and labeling the new product. This is a needed addition to the code to regulate the installation of these photovoltaic modules/shingles.

The modification clarifies that the procedures and acceptance criteria from ASTM D 3161 are to be used to classify the modules/shingles for the approved wind speeds.

**Assembly Action:** 

None

## S23-09/10

## PART I- IBC STRUCTURAL

Committee Action:

Disapproved

Committee Reason: There are concerns with the proposal to adapt an asphalt shingle standard to formed plastic shingles.

**Assembly Action:** 

None

## PART II- IRC B/E Committee Action:

Disapproved

**Committee Reason:** There is no definition of the term "formed plastic shingles". Other requirements need to be addressed, such as deck, underlayment and flashing.

**Assembly Action:** 

None

## S24-09/10

Withdrawn by Proponent

## S25-09/10

This code change was heard by the IBC Fire Safety code development committee.

**Note:** The following analysis was not in the Code Change monograph but was published on the ICC website at <a href="http://www.iccsafe.org/cs/codes/Documents/2009-10cycle/ProposedChanges/Standards-Analysis.pdf">http://www.iccsafe.org/cs/codes/Documents/2009-10cycle/ProposedChanges/Standards-Analysis.pdf</a>:

**Analysis:** Review of proposed new standard ASTM C 726 indicated that, in the opinion of ICC Staff, the standard complies with ICC standards criteria.

**Committee Action:** 

Approved as Submitted

**Committee Reason:** The committee agreed that ASTM C 726 was an appropriate material standard to include mineral fiber insulation board as a prescribed roof insulation material.

**Assembly Action:** 

None

## S26-09/10

This code change was heard by the IBC General code development committee.

**Committee Action:** 

**Disapproved** 

**Committee Rea son:** Although the proposal would provide more specific standards and options based on different types of equipment, the committee felt the proposal lacked technical justification. It was not clear what the hazards were regarding mechanical equipment screens that would necessitate that they be more strictly regulated than the roof surface on which they sit.

**Assembly Action:** 

None

## S27-09/10

This code change was heard by the IBC General code development committee.

Committee Action: Disapproved

Committee Reason: The committee recognized the need to improve this section and acknowledged the efforts of the proponents. Based on the testimony provided and the number of attempted modifications, the proposal needs additional refinement before it can be approved. The committee also expressed concerns that some of the wall and screening requirements for the penthouses would be more stringent that the walls of the building below. There was an uncomfortable mixture of materials and fire resistance ratings. The various fire separation distances appeared inconsistent as did the variety of height limits.

Assembly Action: None

## S28-09/10

This code change was heard by the IBC General code development committee.

Committee Action: Approved as Modified

Modify the proposal as follows:

**1509.6.1 Wind resistance.** Rooftop mounted photovoltaic systems shall be designed for wind loads <u>for component and cladding</u> in accordance with Chapter 16 <u>using an effective wind area based on the dimensions of a single unit frame.</u>

**1509.6.2 Fire Classification.** Rooftop mounted photovoltaic systems shall be shall have the same fire classification as the roof assembly as defined required by Section 1505.

(Portions of proposal not shown are unchanged)

**Committee Rea son:** With the modifications included, it is important to have the rooftop installation of photovoltaic equipment and systems addressed in the code. The fire classifications provided in the code proposal are good additions to the code.

Assembly Action: None

## S29-09/10

Committee Action: Disapproved

**Committee Rea son:** The proposed exception is not necessary because the existing recovering versus replacement requirement already allows this. Furthermore, it would be a loophole to conditions 2 and 3.

Assembly Action: None

## S30-09/10

## PART I- IBC STRUCTURAL Committee Action:

#### **Approved as Submitted**

**Committee Reason:** Agreement with the proponent's reason which indicates that the removal of an adhered ice barrier membrane causes damage that is not in line with the intent of the code. The no exception will permit this to be recovered.

Assembly Action: None

PART II- IRC B/E Committee Action:

#### **Approved as Submitted**

**Committee Reason:** This change provides a solution to the situation where an adhered ice barrier membrane is present and the difficulty of removing it. During removal the adhered membrane will leave an irregular surface. This provides a solution by applying an additional smooth adhered membrane. This change will be consistent with the IBC.

## S31-09/10

#### **Committee Action:**

#### **Approved as Submitted**

**Committee Reason:** This proposal makes an editorial change to the definition of "vehicle barrier system" that makes it clear that it includes walls as well as open sides of garage floors. It also provides correlation with the 2010 edition of ASCE 7.

**Assembly Action:** 

None

## S32-09/10

#### **Committee Action:**

#### Approved as Modified

#### Modify the proposal as follows:

**LIVE LOAD, ROOF.** A load on a roof produced (1) during maintenance by workers, equipment and materials; and (2) during the life of the structure by movable objects such as planters or other similar small decorative appurtenances that are not occupancy related; or (2 3) by the use and occupancy of the roof such as for roof gardens or assembly areas.

(Portions of proposal not shown remain unchanged)

**Committee Reason:** This code change addresses the issue of occupied roofs by revising definitions of and notation for live loads and roof live load. This improvement will better distinguish between the typical roof live load of 20 psf or less versus those for an occupied roof. The modification retains the current numbering of items in the definition of roof live load.

**Assembly Action:** 

None

## S33-09/10

#### **Committee Action:**

#### Approved as Modified

#### Modify the proposal as follows:

**1603.1.4 Wind design data.** The following information related to wind loads shall be shown, regardless of whether wind loads govern the design of the lateral-force-resisting system of the building structure:

- 1. Basic wind speed (3-second gust), miles per hour (km/hr).
- 2. Occupancy category.
- 3. Wind exposure; applicable wind direction if more than one wind exposure is utilized.
- 4. Applicable internal pressure coefficient.
- Design wind pressures to be used for exterior component and cladding materials not specifically designed by the registered design professional responsible for the design of the structure, psf (kN/m²).

**1603.1.5 Earthquake design data.** The following information related to seismic loads shall be shown, regardless of whether seismic loads govern the design of the lateral-force-resisting system of the building structure:

- 1. Occupancy category.
- 2. Seismic importance factor, Ie.
- 3. Mapped spectral response accelerations parameters,  $S_S$  and  $S_1$ .
- 4. Site class.
- 5. Design spectral response coefficients acceleration parameters,  $S_{DS}$  and  $S_{D1}$ .
- 6. Seismic design category.
- 7. Basic seismic-force-resisting system(s).
- 8. Design base shear(s).
- 9. Seismic response coefficient(s), C<sub>s</sub>.
- 10. Response modification factor(s) coefficient(s), R.
- 11. Location of base(s) as defined in Section 11.2 of ASCE 7.
- 42 11. Analysis procedure used.

(Portions of proposal not shown are unchanged)

**Committee Reason:** This proposal makes editorial revisions to the required design data on construction documents that provide correlation with the ASCE 7 standard. The modification changes "building" to "structure" to more accurately reflect the scope of chapter 16 as well as the ASCE 7 load standard. It also removes the location of the base (item 11) from the list of required seismic data to address concerns with the increasing length of this list as well as recognizing this information needs to be in the design calculations.

Assembly Action: None

S34-09/10

Committee Action: Disapproved

**Committee Reason:** The proposal to include horizontal and vertical irregularities in the seismic data required for construction documents was judged to be too burdensome. This information is not as imperative as the other data that is currently required. Architectural design changes would affect this, requiring the information to be revised. It is recognized that the existence of certain irregularities matter more than others. Therefore, it would be preferable to focus on specific irregularities and this could be achieved in the public comment phase.

Assembly Action: None

S35-09/10

Committee Action: Approved as Submitted

**Committee Rea son:** This code change adds appropriate deflection limits to Table 1604.3 for structural members supporting plaster or stucco finishes. This also corresponds to IRC Table R301.7 as well as ASTM C 926

Assembly Action: None

S36-09/10

Committee Action: Disapproved

**Committee Rea son:** The proposed footnote to Table 1604.3 referring to the "design" of metal composite material panels does not agree with the reason which indicates structural adequacy is determined by testing. Nothing in the proposal provides the design guidance for these panels and there is a concern that a nonlinear analysis would be required to address their behavior. Introducing a requirement for what could be considered sheathing may indicate that similar criterion is needed for all other types of sheathing. Should a public comment or subsequent proposal be submitted to address these concerns it is preferred that the requirement be in a subsection of 1604.3 rather than placed in a footnote to the table.

Assembly Action: None

S37-09/10

Committee Action: Approved as Modified

Modify the proposal as follows:

**1604.3.6 Limits.** The deflection limits of Section 1604.3.1 shall be used unless more restrictive deflection limits are required in order to ensure adequate serviceability of the structural members by a referenced standard for the element or and finish material.

**Committee Reason:** This revision to Section 1604.3.6 puts the designer on notice of possible deflection criteria contained in standards. The modification makes it clearer by changing vague wording to "...referenced standard for the element...."

## S38-09/10

Committee Action: Disapproved

**Committee Reason:** The proposed change is not needed since the concept of load path is already adequately addressed. Using the current code language, a systems engineering approach can be used to achieve what the proponent wishes to address. If it were added, the wording would need to be carefully considered due to a concern over chances of misapplication.

Assembly Action: None

## S39-09/10

Committee Action: Disapproved

**Committee Reason:** The intent to clarify adult education facilities in Occupancy Category III of Table 1604.5 is valid, but the proposal does not recognize the nature of occupancy. The phrase "formal educational system" is not defined which could lead to non uniform application. As worded, it suggests the building has to have classrooms and the classroom occupant load must be greater than 500. This differs from the current provision. If a public comment is submitted wording such as "aggregate classroom occupant load" may be more appropriate.

Assembly Action: None

## S40-09/10

Committee Action: Approved as Submitted

**Committee Rea son:** This code change provides clarification on the Table 1604.5 Occupancy Category determination where hazardous materials are a factor. Referring to the maximum allowable quantities per control area for the hazardous material tables is an improvement.

Assembly Action: None

## S41-09/10

## PART I- IBC STRUCTURAL Committee Action:

**Approved as Modified** 

Modify the proposal as follows:

**1602.1 Definitions.** The following words and terms shall, for the purposes of this chapter, have the meanings shown herein.

RISK CATEGORY. A category used to determine structural requirements categorization of buildings and other structures for determination of flood, wind, snow, ice and earthquake loads based on eccupancy the risk associated with unacceptable performance.

(Portions of proposal not shown remain unchanged)

**Committee Reason:** Changing "Occupancy Category" to "Risk Category" will align the IBC structural provision with the next edition of the ASCE 7 load standard. The modification reflects further updates made in ASCE 7 development process.

Assembly Action: None

## PART II- IEBC

Committee Action: Approved as Submitted

Committee Reason: This change coordinates the IEBC with the IBC and is consistent with the committee's action on Part I.

## S42-09/10

Committee Action: Disapproved

**Committee Rea son:** The committee believes the code is clear that designated emergency shelters are considered Occupancy Category IV. Furthermore, the existing language in Section 1604.5.1 covers multiple occupancy categories. Moving all schools to Occupancy Category IV is problematic. There is a concern with the effect this change could have on existing school buildings.

Assembly Action: None

## S43-09/10

Committee Action: Approved as Submitted

**Committee Reason:** This code change simplifies the IBC making maintenance easier. It is not necessary to repeatedly refer to Chapter 35 for referenced Standards. This is covered in Section 102.4.

Assembly Action: None

## S44-09/10

Committee Action: Approved as Modified

#### Modify the proposal as follows:

**1604.8.2 Structural walls**. Walls that provide vertical load bearing resistance or lateral shear resistance for a portion of the structure shall be anchored to the roof and to all floors and members that provide lateral support for the wall or that are supported by the wall. The connections shall be capable of resisting the horizontal forces specified in Section 1.4.4 of ASCE 7 for walls of structures assigned to Seismic Design Category A and to Section 12.11 of ASCE 7 for walls of structures assigned to all other structures seismic design categories. Concrete and masonry walls shall be designed to resist bending between anchors where the anchor spacing exceeds 4 feet (1219 mm). Required anchors in masonry walls of hollow units or cavity walls shall be embedded in a reinforced grouted structural element of the wall. See Section 1609 for wind design requirements and see Section 1613 for earthquake design requirements.

**Committee Reason:** The proposal removes an ASCE 7 modification in Section 1613.7 that will not be needed, since it will be addressed in the next edition of the standard. It also revises the requirements for anchoring walls to diaphragms for clarity and makes reference to appropriate requirements in ASCE 7. The modification reflects further updates made in the ASCE 7 development process.

Assembly Action: None

## S45-09/10

Committee Action: Disapproved

**Committee Reason:** The proposed requirement for consideration of dead load is currently covered for wind under the load combinations. Because the earthquake load is tied to the dead load it would place an additional burden on the computation. The wording of the second sentence is vague, which could lead to enforcement problems.

Assembly Action: None

## S46-09/10

Committee Action: Disapproved

**Committee Reason:** The proposed loading on patio covers conflicts with typical roof live loads in the IBC and ASCE 7. Before incorporation into the building code, this issue should be taken up with the ASCE 7 committee.

## S48-09/10

#### **Committee Action:**

#### Approved as Modified

Modify the proposal as follows:

**1810.3.6.1 Seismic Design Categories C through F.** For structures assigned to Seismic Design Category C, D, E, or F, splices of deep foundation elements shall develop the lesser of the following:

- 1. The nominal strength of the deep foundation element; and
- The axial and shear forces and moments from the seismic load effects including overstrength factor in accordance with Section 12.4.3.2 12.4.3 or 12.14.3.2 of ASCE 7.

**1810.3.11.2** Seismic Design Categories D through F. For structures assigned to Seismic Design Category D, E, or F in accordance with Section 1613, deep foundation element resistance to uplift forces or rotational restraint shall be provided by anchorage into the pile cap, designed considering the combined effect of axial forces due to uplift and bending moments due to fixity to the pile cap. Anchorage shall develop a minimum of 25 percent of the strength of the element in tension. Anchorage into the pile cap shall comply with the following:

- 1. In the case of uplift, the anchorage shall be capable of developing the least of the following:
  - 1.1. The nominal tensile strength of the longitudinal reinforcement in a concrete element;
  - 1.2. The nominal tensile strength of a steel element; and
  - 1.3. The frictional force developed between the element and the soil multiplied by 1.3.

**Exception**: The anchorage is permitted to be designed to resist the axial tension force resulting from the seismic load effects including overstrength factor in accordance with Section 42.4.3.2 or 12.14.3.2 of ASCE 7.

 In the case of rotational restraint, the anchorage shall be designed to resist the axial and shear forces, and moments resulting from the seismic load effects including overstrength factor in accordance with Section <u>12.4.3.2</u> <u>12.4.3</u> or 12.14.3.2 of ASCE 7; or shall be capable of developing the full axial, bending and shear nominal strength of the element.

Where the vertical lateral-force-resisting elements are columns, the pile cap flexural strengths shall exceed the column flexural strength. The connection between batter piles and pile caps shall be designed to resist the nominal strength of the pile acting as a short column. Batter piles and their connection shall be designed to resist the forces and moments that result from the application of seismic load effects including overstrength factor in accordance with Section 12.4.3.2 12.4.3 or 12.14.3.2 of ASCE 7.

**1810.3.12 Grade beams.** For structures assigned to Seismic Design Category D, E, or F in accordance with Section 1613, grade beams shall comply with the provisions in Section 21.12.3 of ACI 318 for grade beams, except where they are designed to resist the seismic load effects including overstrength factor in accordance with Section <u>12.4.3.2</u> <u>12.4.3</u> or 12.14.3.2 of ASCE 7.

(Portions of proposal not shown remain unchanged)

**Committee Reason:** This code change clarifies application of the seismic load effect including overstrength and provides better coordination with ASCE 7. The modification corrects section references to match the original intent and retains portions of the current IBC wording in Section 1810.3.11.2

Assembly Action: None

## S49-09/10

#### **Committee Action:**

#### **Approved as Modified**

#### Modify the proposal as follows:

**1605.2.1 Basic load combinations.** Where strength design or load and resistance factor design is used, structures and portions thereof shall resist the most critical effects from the following combinations of factored loads:

1.4 (D + F)	(Equation 16-1)
1.2 $(D + F + T) + 1.6 (L + H) + 0.5 (L_r \text{ or } S \text{ or } R)$	(Equation 16-2)
1.2 $(D + F) + 1.6 (L_r \text{ or } S \text{ or } R) + 1.6 H + (f_1 L \text{ or } 0.8 W)$	(Equation 16-3)
1.2 $(D + F) + 1.6 W + f_1 L + 1.6 H + 0.5 (L_r \text{ or } S \text{ or } R)$	(Equation 16-4)
$1.2 (D + F) + 1.0 E + f_1 L + 1.6 H + f_2 S$	(Equation 16-5)
0.9 D + 1.6 W + 1.6 H	(Equation 16-6)
0.9 (D + F) + 1.0 E + 1.6 H	(Equation 16-7)

#### where:

- f<sub>1</sub> = 1 for floors in places of public assembly, for live loads in excess of 100 pounds per square foot (4.79 kN/m²), and for parking garage live load, and
  - = 0.5 for other live loads.
- $f_2$  = 0.7 for roof configurations (such as saw tooth) that do not shed snow off the structure, and = 0.2 for other roof configurations.

#### **Exceptions:**

- Where other factored load combinations are specifically required by other provisions of this code, such combinations shall take precedence.
- Where the effect of H resists the primary variable load effect, a load factor of 0.9 shall be included with H where H is permanent and H shall be set to zero for all other conditions.

**1605.3.1 Basic load combinations.** Where allowable stress design (working stress design), as permitted by this code, is used, structures and portions thereof shall resist the most critical effects resulting from the following combinations of loads:

D+F	(Equation 16-8)
D+H+F+L+T	(Equation 16-9)
$D + H + F + (L_r \text{ or } S \text{ or } R)$	(Equation 16-10)
$D + H + F + 0.75 (L + T) + 0.75 (L_r \text{ or } S \text{ or } R)$	(Equation 16-11)
D + H + F + (W  or  0.7  E)	(Equation 16-12)
$D + H + F + 0.75 W + 0.75 L + 0.75 (L_r \text{ or } S \text{ or } R)$	(Equation 16-13)
D+H+F+0.75 (0.7 E) +0.75 L+0.75 S	(Equation 16-14)
0.6 D + W + H	(Equation 16-15)
0.6 <u>(</u> D <u>+ F)</u> + 0.7 E + H	(Equation 16-16)

#### **Exceptions:**

- Crane hook loads need not be combined with roof live load or with more than three-fourths of the snow load or one-half of the wind load.
- Flat roof snow loads of 30 psf (1.44 kN/m²) or less and roof live loads of 30 psf or less need not be combined with seismic loads. Where flat roof snow loads exceed 30 psf (1.44 kN/m²), 20 percent shall be combined with seismic loads.
- Where the effect of H resists the primary variable load effect, a load factor of 0.6 shall be included with H where H is permanent and H shall be set to zero for all other conditions.

**Committee Rea son:** This code change correlates the strength load combinations and the basic allowable stress load combinations with the comparable provisions in the next edition of ASCE 7. The modification reflects further updates made in the ASCE 7 development process.

Assembly Action: None

## S50-09/10

Committee Action: Disapproved

**Committee Reason:** The removal of the exception for flat roof snow loads of 30 psf or less in the allowable stress load combinations is not justified. This is a long-standing difference between ASCE 7 and the IBC that dates back to legacy codes. It would be too drastic a change to make without some evidence that there is a need for this change. The proponent is urged to raise this issue with the ASCE 7 committee.

Assembly Action: None

S51-09/10

Withdrawn by Proponent

### S52-09/10

#### **Committee Action:**

#### Approved as Submitted

**Committee Reason:** This proposal updates the IBC load combinations based on similar changes to appear in the next edition of ASCE 7. The self-straining force, T, is removed from load combinations in favor of a reference to the section of ASCE 7 that provides guidance on this subject. This refects the problems associated with a single load factor on self-straining force, T.

### S53-09/10

#### **Committee Action:**

#### **Approved as Modified**

Modify the proposal as follows:

**1605.3.1 Basic load combinations.** Where allowable stress design (working stress design), as permitted by this code, is used, structures and portions thereof shall resist the most critical effects resulting from the following combinations of loads:

D + F	(Equation 16-8)
D+H+F+L+T	(Equation 16-9)
$D + H + F + (L_r \text{ or } S \text{ or } R)$	(Equation 16-10)
$D + H + F + 0.75 (L + T) + 0.75 (L_r \text{ or } S \text{ or } R)$	(Equation 16-11)
D + H + F + (W  or  0.7  E)	(Equation 16-12)
D + H + F + 0.75 (W or 0.7 E) +0.75 L + 0.75 (L, or S or R)	(Equation 16-13)
0.6 D + W + H	(Equation 16-14)
0.6 D + 0.7 E + H	(Equation 16-15)

#### **Exceptions:**

- Crane hook loads need not be combined with roof live load or with more than three-fourths of the snow load or one-half of the wind load.
- Flat roof snow loads of 30 psf (1.44 kN/m²) or less and roof live loads of 30 psf or less need not be combined with seismic loads. Where flat roof snow loads exceed 30 psf (1.44 kN/m²), 20 percent shall be combined with seismic loads.
- In Equation 16-14, the wind load, W, is permitted to be reduced 10 percent for design of the foundation other than anchorage of the structure to the foundation in accordance with Exception 2 of Section 2.4.1 of ASCE 7.
- 4. In Equation 16-15, 0.6 *D* is permitted to be increased to 0.9 *D* for the design of special reinforced masonry shear walls complying with Chapter 21.

**Committee Re ason:** This code change correlates the basic allowable stress load combinations with those of ASCE 7. In particular, new Exception 4 addresses the dead load factor for design of special reinforced masonry shear walls. The modification reflects further updates made in the ASCE 7 development process.

Assembly Action:

S54-09/10

Committee Action: Disapproved

**Committee Rea son:** The proposed elimination of the alternative allowable stress load combinations would remove an important tool for designers. This set of load combinations is much needed for foundation designs because the one-third stress increase remains a common practice in the geo-technical reports. This is only permitted with these alternative load combinations.

Assembly Action: None

S55-09/10

Withdrawn by Proponent

None

Committee Action: Disapproved\*

**Committee Reason:** Chapter 16 is for structural loads and design. The requirements for posting live loads were moved out of Chapter 16 to Chapter 1 previously. A posting requirement is an administrative issue that belongs in Chapter 1.

Assembly Action: None

\*Note: Subsequent to committee action, the proponent withdrew this code change proposal.

S56-09/10

Withdrawn by Proponent

## S57-09/10

## PART I- IBC STRUCTURAL Committee Action:

Approved as Modified

Modify the proposal as follows:

#### **TABLE 1607.1**

#### MINIMUM UNIFORMLY DISTRIBUTED LIVE LOADS, Lo, AND MINIMUM CONCENTRATED LIVE LOADS 9

(No change to footnotes a through h)

- I. Uninhabitable attics without storage are those where the maximum clear height between the joists and rafters is less than 42 inches, or where there are not two or more adjacent trusses with web configurations capable of accommodating an assumed rectangle 42 inches in height by 24 inches in width, or greater, within the plane of the trusses. This live load need not be assumed to act concurrently with any other live load requirements.
- j. Uninhabitable attics with storage are those where the maximum clear height between the joists and rafters is 42 inches or greater, or where there are two or more adjacent trusses with web configurations capable of accommodating an assumed rectangle 42 inches in height by 24 inches in width, or greater, within the plane of the trusses.

At the trusses, The live load need only be applied to those portions of the joists or bottom chords where all both of the following conditions are met:

- i. The attic area is accessible from an opening not less than 20 inches in width by 30 inches in length that is located where the clear height in the attic is a minimum of 30 inches; and
- ii. The slopes of the joists or truss bottom chords are no greater than 2 units vertical to 12 units horizontal.

The remaining portions of the <u>joists or</u> bottom chords shall be designed for a uniformly distributed concurrent live load of not less than 10 lb/ft<sup>2</sup>.

(Portions of proposal not shown are unchanged)

**Committee Reason:** This proposal makes editorial clarifications to Table 1607.1 footnotes that relate to attic live loads. These changes correspond to updates in the next edition of the ASCE 7 load standard. The modification clarifies the applicability of the uninhabitable attic with storage live load.

Assembly Action: None

PART II- IRC B/E Committee Action:

**Approved as Modified** 

Modify the proposal as follows:

## TABLE R301.5 MINIMUM UNIFORMLY DISTRIBUTED LIVE LOADS (in pounds per square foot)

(iii poulius per square 100t)		
USE LIVE	LOAD	
Uninhabitable attics without storage <sup>b</sup>	10	
Uninhabitable attics with <u>limited</u> storage b, g	20	
Habitable attics and attics served with fixed stairs	30	

(No changes to the remaining Table not shown)

(No change to footnote a)

b. Uninhabitable attics without storage are those where the maximum clear height between the joists and rafters is less than 42 inches, or where there are not two or more adjacent trusses with web configurations capable of accommodating an assumed rectangle 42 inches in height by 24 inches in width, or greater, within the plane of the trusses. This live load need not be assumed to act concurrently with any other live load requirements.

(No change to footnotes c through f)

g. Uninhabitable attics with <u>limited</u> storage are those where the maximum clear height between the joists and rafters is 42 inches or greater, or where there are two or more adjacent trusses with web configurations capable of accommodating an assumed rectangle 42 inches in height by 24 inches in width, or greater, within the plane of the trusses.

At the trusses, The live load need only be applied to those portions of the joists or bottom chords where all of the following conditions are met:

 The attic area is accessible from an opening not less than 20 inches in width by 30 inches in length that is located where the clear height in the attic is a minimum of 30 inches.

- The slopes of the <u>joists or</u> truss bottom chords are no greater than 2 units vertical to 12 units horizontal.
- 3. Required insulation depth is less than the joist or bottom chord member depth.

The remaining portions of the joists or bottom chords shall be designed for a uniformly distributed concurrent live load of not less than 10 lb/ft².

(No change to footnote h)

**Committee Reason:** This change adds clarity to the code and correlates with ASCE 7-10. The modification clarifies that Note g applies to joists as well as truss bottom chords. Also, the modification retains the term "limited storage".

Assembly Action: None

## S58-09/10

Committee Action: Approved as Modified

Modify the proposal as follows:

## TABLE 1607.1 MINIMUM UNIFORMLY DISTRIBUTED LIVE LOADS, $L_0$ , AND MINIMUM CONCENTRATED LIVE LOADS <sup>9</sup>

	OCCUPANCY OR USE	UNIFORM (psf)	CONCENTRATED (lbs.)
4.	Assembly areas and theaters		
	Fixed seats (fastened to floor)	60	
	Follow spot, projections and control rooms	<u>50</u>	
	Lobbies	100	-
	Movable seats	100	
	Stages floors	150	
	Platforms (assembly)	100	
	Other assembly areas	100	

(Portions of Table not shown, remain unchanged)

**Committee Reason:** This code change aligns live loads in Table 1607.1 for stages and platforms in assembly areas with the corresponding provisions in ASCE 7. The modification reflects further updates made in the ASCE 7 development process. It also retains the requirement for follow spot, projections and control rooms.

Assembly Action: None

S59-09/10

Withdrawn by Proponent

## S60-09/10

This code change was contained in the errata posted on the ICC website. Please go to <a href="http://www.iccsafe.org/cs/codes/Pages/09-10ProposedChanges.aspx">http://www.iccsafe.org/cs/codes/Pages/09-10ProposedChanges.aspx</a>.

#### Committee Action:

**Approved as Modified** 

#### Modify the proposal as follows:

**1605.2.1 Basic load combinations.** Where strength design or load and resistance factor design is used, structures and portions thereof shall resist the most critical effects from the following combinations of factored loads:

1.4(D+F)	(Equation 16-1)
1.2 $(D + F + T) + 1.6 (L + H) + 0.5 (L_r \text{ or } S \text{ or } R)$	(Equation 16-2)
1.2 D + 1.6 ( $L_r$ or S or R) + ( $f_1$ L or 0.8 W)	(Equation 16-3)
1.2 D + 1.6 W + $f_1$ L + 0.5 ( $L_r$ or S or $R$ )	(Equation 16-4)
1.2 D + 1.0 E + $f_1$ L + $f_2$ S	(Equation 16-5)
0.9 D + 1.6 W + 1.6 H	(Equation 16-6)
0.9 D + 1.0 E + 1.6 H	(Equation 16-7)

#### where:

f<sub>1</sub> = 1 for floors in places of public assembly, areas and recreational uses (see Table 1607.1), for live loads, L<sub>T</sub> in excess of 100 pounds per square foot (4.79 kN/m²), and for floors in passenger vehicle parking garages; and

<sup>= 0.5</sup> for other live loads, L.

 $f_2$  = 0.7 for roof configurations (such as saw tooth) that do not shed snow off the structure; and = 0.2 for other roof configurations.

**Exception:** Where other factored load combinations are specifically required by the provisions of this code, such combinations shall take precedence.

(Portions of proposal not shown are unchanged)

**Committee Re ason:** This proposal correlates the reduction of live loads at floors and occupied roofs with comparable provisions in the next edition of ASCE 7 load standard. The modification rolls back portions of the proposed revisions to the basic allowable load combination notes that were deemed unnecessary.

Assembly Action: None

## S61-09/10

#### PART I- IBC STRUCTURAL

Committee Action: Disapproved

Committee Reason: Disapproval was because the committee's action of S57-09/10 was preferred.

Assembly Action: None

PART II- IRC B/E

Committee Action: Disapproved

**Committee Reason:** Based on the committee's previous action on S57-09/10, Part II and the proponent's request for disapproval.

Assembly Action: None

## S62-09/10

## PART I- IBC STRUCTURAL

Committee Action: Disapproved

**Committee Rea son:** There is no evidence suggesting the current live load requirements for decks and balconies are a problem. The issue raised in the proponent's reason has been associated more with the deck connections.

Assembly Action: None

PART II- IRC B/E

Committee Action: Disapproved

**Committee Reason:** There is no technical justification provided to substantiate the load increase. The support of hot tubs must be addressed separately.

Assembly Action: None

## S63-09/10

Committee Action: Disapproved

**Committee Reason:** The proposed definitions should not contain requirements. The committee encourages a public comment modifying the definitions of cornice.

Assembly Action: None

### S64-09/10

Withdrawn by Proponent

## S65-09/10

Committee Action: Disapproved

Committee Reason: This code change was disapproved because the committee's action on S57-09/10 was preferred.

Assembly Action: None

### S66-09/10

## **PART I- IBC STRUCTURAL**

Committee Action: Disapproved

**Committee Reason:** The 10 psf attic load in footnote j is considered a live load, but this proposal would replace this live load with an inappropriate reference to the dead load requirements.

Assembly Action: None

PART II- IRC B/E

Committee Action: Disapproved

**Committee Reason:** This change would remove the 10 psf required minimum load. The committee feels it is appropriate to maintain a minimum load requirement and require a larger load if applicable.

Assembly Action: None

S67-09/10

Committee Action: Approved as Modified

Modify the proposal as follows:

#### **TABLE 1607.1**

#### MINIMUM UNIFORMLY DISTRIBUTED LIVE LOADS / AND MINIMUM CONCENTRATED LIVE LOADS 9

IVI	WINIMOW UNIFORMET DISTRIBUTED LIVE LOADS, Lo, AND WINIMOW CONCENTRATED LIVE LOADS		
	OCCUPANCY OR USE	UNIFORM	CONCENTRATED
		(psf)	(lbs.)
7.	Catwalks for maintenance access	40	300

(Portions of table not shown are unchanged)

**1607.7.3 Vehicle barrier systems.** Vehicle barrier systems for passenger vehicles shall be designed to resist a single load of 6,000 pounds (26.70 kN) applied horizontally in any direction to the barrier system and shall have anchorage or attachment capable of transmitting this load to the structure. For design of the system, two loading conditions shall be analyzed. The first condition shall apply the load at a height of 1 foot, 6 inches (457 mm) above the floor or ramp surface. The second loading condition shall apply the load at 2 feet, 3 inches (686 mm) above the floor or ramp surface. The more severe load condition shall govern the design of the barrier restraint system. The load shall be assumed to act on an area not to exceed 12 inches by 12 inches (305 mm by 305 mm), and located so as to produce the maximum load effects. This load is not required to act concurrently with any handrail or guard loadings specified in Section 1607.7.1. Garages accommodating trucks and buses shall be designed in accordance with an approved method that contains provision for traffic railings.

**1607.8 Impact loads.** The live loads specified in Section 4607.2 1607.3 shall be assumed to include adequate allowance for ordinary impact conditions. Provisions shall be made in the structural design for uses and loads that involve unusual vibration and impact forces.

**1607.11.2.1 Flat, pitched and curved roofs.** Ordinary flat, pitched and curved roofs, and awnings and canopies other than of fabric construction supported by a skeleton structures, are permitted to be designed for a reduced roof live load as specified in the following equations or other controlling combinations of loads as specified in Section 1605, whichever produces the greater load effect.

In structures such as greenhouses, where special scaffolding is used as a work surface for workers and materials during maintenance and repair operations, a lower roof load than specified in the following equations shall not be used unless approved by the building official. Such structures shall be designed for a minimum roof live load of 12 psf (0.58 kN/m²).

 $L_r = L_{ro} R_1 R_2$  (Equation 16-25)

where:  $12 \le L_r \le 20$ For SI:  $L_r = L_{FO} R_1 R_2$ 

where:  $0.58 \le L_r \le 0.96$ 

 $L_{ro}$  = Unreduced roof live load per square foot (m<sup>2</sup>) of horizontal projection supported by the member (see Table 1607.1).

 $L_r$  = Reduced roof live load per square foot (m<sup>2</sup>) of horizontal projection supported by the member.

The reduction factors  $R_1$  and  $R_2$  shall be determined as follows:

 $R_1 = 1 \text{ for } A_t \le 200 \text{ square feet } (18.58 \text{ m}^2)$  (Equation 16-26)

 $R_1 = 1.2 - 0.001 A_t$  for 200 square feet  $A_1 < 600$  square feet (Equation 16-27)

For SI: 1.2 - 0.011  $A_t$  for 18.58 square meters  $< A_t < 55.74$  square meters

 $R_1 = 0.6 \text{ for } A_t \ge 600 \text{ square feet } (55.74 \text{ m}^2)$  (Equation 16-28)

where:

 $A_t$  = Tributary area (span length multiplied by effective width) in square feet (m<sup>2</sup>) supported by the member, and

 $R_2 = 1$  for  $F \le 4$  (Equation 16-29)  $R_2 = 1.2 - 0.05$  F for 4 < F < 12 (Equation 16-30)  $R_2 = 0.6$  for  $F \ge 12$  (Equation 16-31)

where:

F = For a sloped roof, the number of inches of rise per foot (for SI: F = 0.12 x slope, with slope expressed as a percentage), and or for an arch or dome, rise-to-span ratio multiplied by 32.

(Portions of proposal not shown are unchanged)

**Committee Re ason:** This code change makes various editorial revisions to live load requirements that correlate the IBC with the next edition of the ASCE 7 load standard. In addition to further coordinating with ASCE 7, the modification corrects some unintended changes in the original proposal. It also removes the change to catwalks in Table 1607.1, since the proposed wording, "for maintenance access" would restrict the applicability of this live load, leaving a hole in the code requirement.

Assembly Action: None

## S68-09/10

Committee Action: Disapproved

Committee Reason: The proposal was disapproved because the committee believes the current live load provisions for partitions are clear.

Assembly Action: None

## S69-09/10

#### Committee Action: Approved as Modified

#### Modify the proposal as follows:

**1607.6 Helipads.** Helipads shall be designed for the following live loads:

- 1. A uniform live load, L, as specified below. This load shall not be reduced.
  - 1.1. 40 psf (1.92 kN/m²) where the design basis helicopter has a maximum take-off weight of 3,000 pounds (13.35 kN) or less.
  - 1.2. 60 psf (2.87 kN/m²) where the design basis helicopter has a maximum take-off weight greater than 3,000 pounds (13.35 kN).
- A single concentrated live load, L, of 3,000 pounds (13.35 kN) applied over an area of 4.5 inches by 4.5 inches (114 mm by 114 mm) and located so as to produce the maximum load effects on the structural elements under consideration. The concentrated load need not be assumed is not required to act concurrently with other uniform or concentrated live loads.
- 3. Two single concentrated live loads, *L*, 8 feet (2438 mm) apart applied on the landing pad (representing the helicopter's two main landing gear, whether skid type or wheeled type), each having a magnitude of 0.75

times the maximum take-off weight of the helicopter, and located so as to produce the maximum load effects on the structural elements under consideration. The concentrated loads shall be applied over an area of 8 inches by 8 inches (203 mm by 203 mm) and need not be assumed are not required to act concurrently with other uniform or concentrated live loads.

Landing areas designed for a design basis helicopters with maximum take-off weight not exceeding of 3,000 pounds (13.35 kN) shall be identified with a 3,000 pound (13.34 kN) weight limitation. The landing area weight limitation shall be indicated by the numeral "3" (kips) located in the bottom right corner of the landing area as viewed from the primary approach path. The indication for the landing area weight limitation shall be a minimum 5 feet (1524 mm) in height.

(Portions of proposal not shown are unchanged)

**Committee Re ason:** This code change clarifies the live loads specific to helipads and correlates these requirements with the next edition of the ASCE 7 load standard. The modification reflects further updates made in the ASCE 7 development process.

Assembly Action: None

S70-09/10

Committee Action: Disapproved

**Committee R eason:** The proposal would provide necessary clarifications of provisions for heavy vehicle loading. Proposed requirements for emergency vehicles need work and it is hoped this can be accomplished in the public comment phase.

Assembly Action: None

S71-09/10

Committee Action: Disapproved

**Committee Reason:** The proposed terminology, in trying to distinguish the structural requirements from means of egress requirements, is itself potentially confusing. The currently used term is guard and there's no reason to change it to guardrail.

Assembly Action: None

S72-09/10

Withdrawn by Proponent

S73-09/10

Committee Action: Approved as Modified

Modify the proposal as follows:

1607.7.3 Vehicle barrier systems. Vehicle barrier systems for passenger vehicles shall be designed to resist a single load of 6,000 pounds (26.70 kN) applied horizontally in any direction to the barrier system and shall have anchorage or attachment capable of transmitting this load to the structure. For design of the system, the load shall be assumed to act at heights of between 18 to inches (457 mm) and 27 inches (457 to 686 mm) above the floor or ramp surface, located so as to produce the maximum load effects. The load shall be applied on an area not to exceed 12 inches by 12 inches (305 mm by 305 mm). The load is not required to act concurrently with any handrail or guard loadings specified in Section 1607.7.1. Garages accommodating trucks and buses shall be designed in accordance with an approved method that contains provision for traffic railings.

**Committee Reason:** This code change makes editorial changes that clarify the load requirements for vehicle barrier systems. The modification provides further updates for correlation with the ASCE 7 load standard.

## S74-09/10

Committee Action: Disapproved

**Committee Re ason:** The proposed wording is problematic. The basis for the 2.5 factor on the load for attachment to the structure should be clarified. If possible, this should be addressed in the public comment phase.

Assembly Action: None

## S75-09/10

Committee Action: Approved as Submitted

**Committee Reason:** This proposal correlates the provisions for impact loads with the ASCE 7 load standard. Elevator loading appropriately relies on a reference to ASME A17.1.

Assembly Action: None

S76-09/10

Committee Action: Disapproved

**Committee Reason:** In keeping with the committee's action on S54-09/10, the disapproval of this item retains the alternative approach to reducing live loads in Section 1607.9.2.

Assembly Action: None

S77-09/10

Committee Action: Approved as Modified

Modify the proposal as follows:

TABLE 1607.1

MINIMUM UNIFORMLY DISTRIBUTED LIVE LOADS,  $L_o$ , AND MINIMUM CONCENTRATED LIVE LOADS <sup>9</sup>

OCCUPANCY OR USE		UNIFORM (psf)	CONCENTRATED (lbs.)
29. Roofs:			-
All roof surfaces subject to maintenance wo	rkers		300
Awnings and canopies:			
Fabric construction supported by a lightw	eight rigid skeleton	5	
structure		nonreduceable	
		20	
All other construction			
Ordinary flat, pitched, and curved roofs (not	serving an	20	
occupancy function)			
Primary roof members, exposed to a work fl			
Single panel point of lower chord of roof t			
along primary structural members supp			2,000
manufacturing, storage warehouses, a	nd repair garages		300
All other occupancies			
Roofs serving an occupancy function:			
Roof gardens		<del>60</del> <u>100</u>	
Assembly areas		100	
All other similar areas		Note I	Note I

(Portions of Table not show, remain unchanged)

Portions of proposal not shown are unchanged

**Committee Rea son:** By deleting duplicate text and reorganizing the roof live load requirements, this code change clarifies this portion of the code. The modification reverses the reorganization of Table 1607.1 in item 2 and also restores roof live loads that were not intended to be included in this code change.

## S78-09/10

Committee Action: Disapproved

**Committee Reason:** The proposal would remove the live load reductions for members supporting two or more floors. The justification for this change is not sufficient. The requirement for a rational approach by a registered design professional could be included as an alternative.

Assembly Action: None

S79-09/10

Committee Action: Disapproved

**Committee Reason:** The committee is not opposed in principle to the proposed clarifications for landscaped roofs, but some of the wording needs work. It should be reworked in the public comment phase.

Assembly Action: None

S80-09/10

Committee Action: Approved as Submitted

**Committee Reason:** In lieu of code change S79-09/10, this code change provides some good clarifications of the provisions for landscaped roofs.

Assembly Action: None

S81-09/10

Committee Action: Disapproved

**Committee Reason:** The proposed wording creates confusion as to why the specified partition live load should be considered a wind load when used in Table 1604.3 for determining allowable deflections. It would be preferable to state the deflection limit prescriptively or fix the table. A public comment is encouraged.

Assembly Action: None

S82-09/10

Committee Action: Disapproved

**Committee Rea son:** Proponent's reason states that the proposed horizontal load on fire-resistance rated exterior walls is arbitrary. This requirement needs justification. There is also a concern with unenforceable language.

Assembly Action: None

S83-09/10

Committee Action: Approved as Modified

Modify the proposal as follows:

**SUSCEPTIBLE BAY**. A roof or portion thereof with (1) a slope less than 1/4-inch per foot (0.0208 rad), or (2) where on which water will be is impounded upon it, in whole or in part, and the secondary drainage system is functional but the primary drainage system is not functional blocked. A roof surface with a slope of 1/4-inch per foot (0.0208 rad) or greater towards points of free drainage is not a susceptible bay.

**1611.2 Ponding instability**. Susceptible bays of roofs shall be investigated by structural analysis to ensure that they possess adequate stiffness to preclude progressive deflection evaluated for ponding instability in accordance with Section 8.4 of ASCE 7.

(Portions of proposal not shown are unchanged)

**Committee Reason:** This code change enhances the safety of roofs by correlating the IBC with the ponding instability provisions of ASCE 7. In addition to covering portions of roofs with a slope up to ¼ inch per foot, it also addresses greater slopes that do not drain to a point of free drainage. The modification reflects further updates made in the ASCE 7 development process.

Assembly Action: None

## S84-09/10

#### **Committee Action:**

#### Approved as Modified

Modify the proposal as follows:

**1609.6 Alternate all-heights method.** The alternate wind design provisions in this section are simplifications of the ASCE 7 Directional Procedure.

**1609.6.1 Scope.** As an alternate to ASCE 7 Chapters 27 and 30, the following provisions are permitted to be used to determine the wind effects on regularly shaped buildings, or other structures that are regularly shaped, which meet all of the following conditions:

- The building or other structure is less than or equal to 75 feet (22 860 mm) in height with a height-toleast width ratio of 4 or less, or the building or other structure has a fundamental frequency greater than or equal to 1 hertz.
- 2. The building or other structure is not sensitive to dynamic effects.
- 3. The building or other structure is not located on a site for which channeling effects or buffeting in the wake of upwind obstructions warrant special consideration.
- 4. The building shall meet the requirements of a simple diaphragm building as defined in ASCE 7 Section 26.2, where wind loads are only transmitted to the main wind-force-resisting system (MWFRS) at the diaphragms.
- For open buildings, multispan gable roofs, stepped roofs, sawtooth roofs, domed roofs, roofs with slopes greater than 45 degrees (0.79 rad), solid free-standing walls and solid signs, and rooftop equipment, apply ASCE 7 provisions.

**1609.6.1.1 Modifications.** The following modifications shall be made to certain subsections in ASCE 7: in Section 1609.6.2, symbols and notations that are specific to this section are used in conjunction with the symbols and notations in ASCE 7 Section 26.3.

**1609.6.2 Symbols and notations.** Coefficients and variables used in the alternate all-heights method equations are as follows:

- $\underline{C}_{net}$  = Net-pressure coefficient based on  $K_{\underline{d}}[(G)(Cp) (GC_{\underline{pi}})]$ , in accordance with Table 1609.6.2.
- G = Gust effect factor for rigid structures in accordance with ASCE 7 Section 26.9.3.
- $K_d$  = Wind directionality factor in accordance with ASCE 7 Table 26-6.
- $\underline{P_{net}}$  = Design wind pressure to be used in determination of wind loads on buildings or other structures or their components and cladding, in psf (kN/m<sup>2</sup>).

## $\frac{\text{TABLE 1609.6.2}}{\text{NET PRESSURE COEFFICIENTS, C}_{\text{NET}}}$

STRUCTURE OR PART THEREOF	DESCRIPTION		C <sub>net</sub> FACTOR			
1. Main Wind Force			Encl	osed	Partially	Enclosed
Resisting Frames and Systems	WALLS:		± Internal	- Internal Pressure	+ Internal Pressure	- Internal Pressure
	Windward Wall		<u>0.43</u>	<u>0.73</u>	<u>0.11</u>	<u>1.05</u>
	Leeward Wall		<u>-0.51</u>	<u>-0.21</u>	<u>-0.83</u>	<u>0.11</u>
	Side Wall		<u>-0.66</u>	<u>-0.35</u>	<u>-0.97</u>	<u>-0.04</u>
	Parapet Wall  ROOFS:  Wind perpendicular to ridge		<u>1.28</u>		<u>1.28</u>	
			<u>-0.85</u>		<u>-0.85</u>	
			<u>Enclosed</u>		Partially Enclosed	
			± Internal	- Internal Pressure	+ Internal Pressure	- Internal Pressure
	Leeward roof or flat roof		<u>-0.66</u>	<u>-0.35</u>	<u>-0.97</u>	<u>-0.04</u>
	Windward roof slopes:					
Slope < 2:12 ( 10°)	Slope + 2:12 ( 10°)	Condition 1	<u>-1.09</u>	<u>-0.79</u>	<u>-1.41</u>	<u>-0.47</u>
	Siope < 2.12 ( 10°)	Condition 2	<u>-0.28</u>	0.02	<u>-0.60</u>	<u>0.34</u>

		1						
	Slope = 4:12 ( 18°)	Condition 1	<u>-0.73</u>	<u>-0.</u>	.42	<u>-1.04</u>	<u>-0.11</u>	
	Slope = 4.12 ( 10 )	Condition 2	<u>-0.05</u>	<u>0.</u>	<u>25</u>	<u>-0.37</u>	<u>0.57</u>	
	Slope = 5:12 ( 23°)	Condition 1	<u>-0.58</u>	<u>-0.</u>	.28	<u>-0.90</u>	<u>0.04</u>	
		Condition 2	0.03	0.	<u>34</u>	<u>-0.29</u>	<u>0.65</u>	
	Clara (40 ( 070)	Condition 1	-0.47	<u>-0.</u>	.16	-0.78	0.15	
	Slope = 6:12 ( 27°)	Condition 2	0.06	0.	37	-0.25	0.68	
		Condition 1	-0.37	-0.	.06	-0.68	0.25	
	Slope = 7:12 ( 30°)	Condition 2	0.07		37	-0.25		
		Condition 1	-0.27	_	04	-0.58		
	Slope = 9:12 ( 37°)	Condition 2	0.14	_	<del>44</del>	-0.18		
	Slope = 12:12 ( 45°)	<u>oondition 2</u>	0.14	_	44	<u>-0.18</u>		
	Wind parallel to ridge and flat roofs		-1.09	_	.79	-1.41	i i	
							<u> 0.47</u>	
	Non Building Structures: Chimneys, Tanks and Similar Structures:  h/D							
				1				
	0 000	`	1			<u>7</u>	<u>25</u>	
	Square (Wind normal to f		<u>0.99</u>			<u>.07</u>	<u>1.53</u>	
	Square (Wind on diagonal)				<u>.84</u>	<u>1.15</u>		
	Hexagonal or Octagonal		<u>0.81</u> <u>0</u>		<u>.97</u>	<u>1.13</u>		
	Round		<u>0.65</u>			<u>0.97</u>		
	Open Signs and Lattice F	<u>rameworks</u>	_	atio o		to gross		
			<u>&lt; 0.1</u>		<u>0.1 t</u>	o 0.29	0.3 to 0.7	
	<u>at</u>		<u>1.45</u>		<u>1</u>	<u>.30</u>	<u>1.16</u>	
	Round		<u>0.87</u> <u>0</u>		<u>.94</u>	<u>1.08</u>		
2.Components and cladding not in	Roof Elements and slop	Enclosed Partially Enclosed			lly Enclosed			
areas of discontinuity – Roofs and	Gable or hipped configurations (Zone 1)							
overhangs	Flat < Slope < 6:12 ( 27°) See ASCE 7 Figure 6-11C Zone 1							
	Positive	10 SF or less	0.0	<u>58</u>			0.89	
		100 SF or more	0.41				0.72	
	<u>Negative</u>	10 SF or less	<u>-1.00</u> <u>-0.92</u>		<u>-1.32</u>			
		100 SF or more				<u>-1.23</u>		
	Overhang: Flat < Slope < 6:12 ( 27°) See ASCE 7 Figure 6-11B Zone 1							
	<u>Negative</u>	10 SF or less	-1.45					
		100 SF or more	<u>-1.36</u>					
		500 SF or more	<u>-0.94</u>					
	6:12 (27°) < Slope < 12:12 ( 45°) See ASCE 7 Figure 6-11D Zone 1			<u> </u>				
	<u>Positive</u>	10 SF or less	0.92		1.23			
		100 SF or more	<u>0.0</u>	<u>33</u>			<u>1.15</u>	
	<u>Negative</u>	10 SF or less	<u>-1.</u>	00			<u>-1.32</u>	

		100 SF or more	<u>-0.83</u>	<u>-1.15</u>		
	Monosloped Configurat	tions (Zono 1)	Enclosed	Partially Enclosed		
	Flat < Slope < 7:12 ( 30°) See ASCE 7 Figure 6-14B Zone 1					
	<u>Positive</u>	10 SF or less	<u>0.49</u>	<u>0.81</u>		
		100 SF or more	<u>0.41</u>	<u>0.72</u>		
	<u>Negative</u>	10 SF or less	<u>-1.26</u>	<u>-1.57</u>		
		100 SF or more	<u>-1.09</u>	<u>-1.40</u>		
	Tall flat topped roofs ha	<u>→ 60'</u>	Enclosed Partially Enclosed			
	Flat <slope (10°)<="" 2:12="" <="" td=""><td>) (Zone 1) See ASC</td><td>E 7 Figure 6-17 Zone 1</td><td></td></slope>	) (Zone 1) See ASC	E 7 Figure 6-17 Zone 1			
	<u>Negative</u>	10 SF or less	<u>-1.34</u>	<u>-1.66</u>		
		500 SF or more	<u>-0.92</u>	<u>-1.23</u>		
3. Components and cladding in	Roof Elements and slop	<u>oes</u>	<u>Enclosed</u>	Partially Enclosed.		
areas of discontinuities – roofs and	Gable or Hipped Configurations at Ridges, Eaves and Rakes (Zone 2)					
overhangs	Flat < Slope < 6:12 (27°) See ASCE 7 Figure 6-11C Zone 2					
	<u>Positive</u>	10 SF or less	<u>0.58</u>	<u>0.89</u>		
		100 SF or more	0.41	<u>0.72</u>		
		10 SF or less	<u>-1.68</u>	<u>-2.00</u>		
	<u>Negative</u>	100 SF or more	<u>-1.17</u>	<u>-1.49</u>		
	Overhang for Slope Flat < Slope < 6:12 ( 27°) See ASCE 7 Figure 6-11C Zone 2					
		10 SF or less	<u>-1.</u>	<u>87</u>		
	<u>Negative</u>	100 SF or more	<u>-1.</u>	<u>87</u>		
	6:12 (27°) < Slope < 12 6-11D	::12 (45°) Figure	Enclosed	Partially Enclosed		
	<u>Positive</u>	10 SF or less	0.92	1.23		
		100 SF or more	0.83	<u>1.15</u>		
		10 SF or less	<u>-1.17</u>	<u>-1.49</u>		
	<u>Negative</u>	100 SF or more	<u>-1.00</u>	<u>-1.32</u>		
	Overhang for 6:12 ( 27°) < Slope < 12:12 ( 45°) See ASCE 7 Figure 6-11D Zone 2					
	<u>Negative</u>	10 SF or less	<u>-1.</u>	<u>70</u>		
	•	•				

	100 SF or more	<u>-1.</u>	<u>53</u>		
Monosloped Configurations at Ridges, Eaves and Rakes (Zone 2)					
Flat < Slope < 7:12 ( 30°) See ASCE 7 Figure 6-14B Zone 2					
<u>Positive</u>	10 SF or less	0.49	<u>0.81</u>		
	100 SF or more	0.41	0.72		
	10 SF or less	<u>-1.51</u>	<u>-1.83</u>		
<u>Negative</u>	100 SF or more	<u>-1.43</u>	<u>-1.74</u>		
Tall flat topped roofs h>	60'	<u>Enclosed</u>	Partially Enclosed		
Flat <slope (10°)<="" 2:12="" <="" td=""><td>(Zone 2) See ASC</td><td>E 7 Figure 6-17 Zone 2</td><td></td></slope>	(Zone 2) See ASC	E 7 Figure 6-17 Zone 2			
<u>Negative</u>	10 SF or less	<u>-2.11</u>	<u>-2.42</u>		
	500 SF or more	<u>-1.51</u>	<u>-1.83</u>		
Gable or Hipped Config	urations at Corners	(Zone 3) See ASCE 7 F	igure 6-11C Zone 3		
Flat < Slope < 6:12 ( 27°)		Enclosed	Partially Enclosed		
<u>Positive</u>	10 SF or less	0.58	0.89		
	100 SF or more	<u>0.41</u>	<u>0.72</u>		
	10 SF or less	<u>-2.53</u>	<u>-2.85</u>		
<u>Negative</u>	100 SF or more	<u>-1.85</u>	<u>-2.17</u>		
Overhang for Slope Flat	t < Slope < 6:12 (27	7°) See ASCE 7 Figure 6	6-11C Zone 3		
	10 SF or less	<u>-3.</u>	<u>15</u>		
<u>Negative</u>	100 SF or more	<u>-2.13</u>			
6:12 (27°) < Slope < 12	:12 (45°) See ASCE	7 Figure 6-11D Zone 3			
<u>Positive</u>	10 SF or less	0.92	<u>1.23</u>		
	100 SF or more	0.83	<u>1.15</u>		
	10 SF or less	<u>-1.17</u>	<u>-1.49</u>		
<u>Negative</u>	100 SF or more	<u>-1.00</u>	<u>-1.32</u>		
Overhang for 6:12 (27°) < Slope <		Enclosed	Partially Enclosed.		
	10 SF or less	<u>-1.</u>	<u>70</u>		
<u>Negative</u>	100 SF or more	<u>-1.</u>	1.53		
	<u> </u>	]			

	Monosloped Configurations at corners (Zone 3) See ASCE 7 Figure 6-14B Zone 3					
	Flat < Slope < 7:12 (30°)					
	<u>Positive</u>	10 SF or less	<u>0.49</u>	<u>0.81</u>		
		100 SF or more	0.41	<u>0.72</u>		
		10 SF or less	-2.62	<u>-2.93</u>		
	Negative 100 SF or more -1.85		<u>-1.85</u>	<u>-2.17</u>		
	Tall flat topped roofs ha	<u>&gt; 60'</u>	<u>Enclosed</u>	Partially Enclosed		
	Flat < slope < 2:12 (10°) (Zone 3) See ASCE 7 Figure 6-17 Zone 3					
	<u>Negative</u>	10 SF or less	<u>-2.87</u>	<u>-3.19</u>		
		500 SF or more	<u>-2.11</u>	<u>-2.42</u>		
4. Components and Cladding not in	Wall Elements: h ≤ 60'	(Zone 4) Figure 6-	Enclosed	Partially Enclosed		
areas of discontinuity - Walls and parapets		10 SF or less	1.00	<u>1.32</u>		
	<u>Positive</u>	500 SF or more	<u>0.75</u>	<u>1.06</u>		
		10 SF or less	<u>-1.09</u>	<u>-1.40</u>		
	<u>Negative</u>	500 SF or more	<u>-0.83</u>	<u>-1.15</u>		
	Wall Elements: h > 60' (Zone 4) See ASCE 7 Figure 6-17 Zone 4					
		20 SF or less	0.92	<u>1.23</u>		
	<u>Positive</u>	500 SF or more	0.66	0.98		
		20 SF or less	<u>-0.92</u>	<u>-1.23</u>		
	<u>Negative</u>	500 SF or more	<u>-0.75</u>	<u>-1.06</u>		
	Parapet Walls					
	<u>Positive</u>		2.87	<u>3.19</u>		
	<u>Negative</u>		<u>-1.68</u>	<u>-2.00</u>		
5. Components and Cladding in areas of discontinuity - Walls and parapets	Wall Elements: h ≤ 60' 11A	(Zone 5) Figure 6-	Enclosed	Partially Enclosed		
	<u>Positive</u>	10 SF or less	1.00	<u>1.32</u>		
		500 SF or more	<u>0.75</u>	<u>1.06</u>		
		10 SF or less	<u>-1.34</u>	<u>-1.66</u>		
	<u>Negative</u>	500 SF or more	<u>-0.83</u>	<u>-1.15</u>		
	Wall Elements: h > 60' (Zone 5) See ASCE 7 Figure 6-17 Zone 4					
	<u>Positive</u>	20 SF or less	0.92	<u>1.23</u>		

	500 SF or more	0.66	0.98
	20 SF or less	<u>-1.68</u>	<u>-2.00</u>
<u>Negative</u>	500 SF or more	<u>-1.00</u>	<u>-1.32</u>
Parapet Walls			
<u>Positive</u>		3.64	<u>3.95</u>
<u>Negative</u>		<u>-2.45</u>	<u>-2.76</u>

For SI: 1 foot = 304.8 mm, 1 square foot = 0.0929 m<sup>2</sup>, 1 degree = 0.0175 radians

1609.6.3 Design equations. When using the alternate all-heights method, the MWFRS, and components and cladding of every structure shall be designed to resist the effects of wind pressures on the building envelope in accordance with Equation 16-34.

 $P_{ne} = 0.00256 V^2 K_z C_{net} K_{zt}$  (Equation 16-34)

Design wind forces for the MWFRS shall not be less than 16 psf (0.77 kN/m²) multiplied by the area of the structure projected on a plane normal to the assumed wind direction (see ASCE 7 Section 27.4.7 for criteria). Design net wind pressure for components and cladding shall not be less than 16 psf (0.77 kN/m²) acting in either direction normal to the surface.

- **1609.6.4 Design procedure.** The MWFRS and the components and cladding of every building or other structure shall be designed for the pressures calculated using Equation 16-34.
- **1609.6.4.1 Main wind-force-resisting systems.** The MWFRS shall be investigated for the torsional effects identified in ASCE 7 Figure 27.4.6.
- **1609.6.4.2 Determination of**  $K_z$  and  $K_{zc}$ . Velocity pressure exposure coefficient,  $K_z$ , shall be determined in accordance with ASCE 7 Section 27.3.1 and the topographic factor,  $K_{zt}$ , shall be determined in accordance with ASCE 7 Section 26.8.
  - 1. For the windward side of a structure,  $K_{zt}$  and  $K_z$  shall be based on height z.
  - For leeward and sidewalls, and for windward and leeward roofs, K<sub>zt</sub> and K<sub>z</sub> shall be based on mean roof height h.
- 1609.6.4.3 Determination of net pressure coefficients,  $C_{net}$ . For the design of the MWFRS and for components and cladding, the sum of the internal and external net pressure shall be based on the net pressure coefficient,  $C_{net}$ .
  - 1. The pressure coefficient, C<sub>nets</sub> for walls and roofs shall be determined from Table 1609.6.2.
  - 2. Where  $C_{net}$  has more than one value, the more severe wind load condition shall be used for design.
- 1609.6.4.4 Application of wind pressures. When using the alternate all-heights method, wind pressures shall be applied simultaneously on, and in a direction normal to, all building envelope wall and roof surfaces.
- **1609.6.4.4.1 Components and cladding.** Wind pressure for each component or cladding element is applied as follows using  $C_{net}$  values based on the effective wind area, A, contained within the zones in areas of discontinuity of width and/or length "a," "2a" or "4a" at: corners of roofs and walls; edge strips for ridges, rakes and eaves; or field areas on walls or roofs as indicated in figures in tables in ASCE 7 as referenced in Table 1609.6.2 in accordance with the following:
  - Calculated pressures at local discontinuities acting over specific edge strips or corner boundary areas.
  - Include "field" (Zone 1, 2 or 4, as applicable) pressures applied to areas beyond the boundaries of the areas of discontinuity.
  - Where applicable, the calculated pressures at discontinuities (Zones 2 or 3) shall be combined with design pressures that apply specifically on rakes or eave overhangs.

(Portions of proposal not shown are unchanged)

a. Linear interpolation between values in the table is permitted.

Some C<sub>net</sub> values have been grouped together. Less conservative results may be obtained by applying ASCE 7 provisions.

**Committee Reason:** This code change updates the IBC wind load requirements for consistency with the next edition of the ASCE 7 load standard. The modification retains the current IBC alternative procedure with necessary corrections to the ASCE 7 references. A public comment is recommended to further coordinate the IBC with ASCE 7

Assembly Action: None

## S85-09/10

Committee Action: Approved as Submitted

Committee Reason: It is appropriate to put the correction to the referenced standard in the code at this time.

Assembly Action: None

## S86-09/10

**Note:** The following analysis was not in the Code Change monograph but was published on the ICC website at <a href="http://www.iccsafe.org/cs/codes/Documents/2009-10cycle/ProposedChanges/Standards-Analysis.pdf">http://www.iccsafe.org/cs/codes/Documents/2009-10cycle/ProposedChanges/Standards-Analysis.pdf</a> :

**Analysis:** Review of proposed new standard ASCE/SEI 49 indicated that, in the opinion of ICC Staff, the standard did not comply with ICC standards criteria, Section 3.6.3(1) Readily available.

Committee Action: Disapproved

**Committee Reason:** The proposed standard, ASCE/SEI 49 is not yet completed. In addition the proposal wording referring to minimum loading may take away any benefit to performing wind tunnel tests.

Assembly Action: None

## S87-09/10

**Note:** The following analysis was not in the Code Change monograph but was published on the ICC website at <a href="http://www.iccsafe.org/cs/codes/Documents/2009-10cycle/ProposedChanges/Standards-Analysis.pdf">http://www.iccsafe.org/cs/codes/Documents/2009-10cycle/ProposedChanges/Standards-Analysis.pdf</a> :

**Analysis:** Review of proposed new standard TMS 404 indicated that, in the opinion of ICC Staff, the standard did not comply with ICC standards criteria, Section 3.6.3(1) Readily available.

#### PART I- IBC STRUCTURAL

Committee Action: Disapproved

Committee Reason: The proposed referenced standard, TMS 404, is not yet completed.

Assembly Action: None

PART II- IRC B/E

Committee Action: Disapproved

**Committee Reason:** Based on the proponent's request for disapproval. The standard is in draft form and is not ready at this time.

Assembly Action: None

## S88-09/10

This code change was contained in the errata posted on the ICC website. Please go to <a href="http://www.iccsafe.org/cs/codes/Pages/09-10ProposedChanges.aspx">http://www.iccsafe.org/cs/codes/Pages/09-10ProposedChanges.aspx</a>.

#### Committee Action: Disapproved

**Committee Reason:** The wording of this code change would limit the scope of impact-resistant test standards in Section 1609.1.2 to impact requirements only, circumventing the pressure testing that is currently a requirement. The referenced standard ICC 500, references the ASTM Standards that are already required by this section. Perhaps the ICC 500 Standard could be added at the end of the current provision as a permitted option.

Assembly Action: None

## S89-09/10

Committee Action: Disapproved

**Committee Reason:** Disapproval was requested by the proponent. Extending the scope of Section 1609.1.2 from glazing to include any opening would include any penetration of the exterior wall which is not the intent of the impact resistance provision.

Assembly Action: None

## S90-09/10

**Note:** The following analysis was not in the Code Change monograph but was published on the ICC website at <a href="http://www.iccsafe.org/cs/codes/Documents/2009-10cycle/ProposedChanges/Standards-Analysis.pdf">http://www.iccsafe.org/cs/codes/Documents/2009-10cycle/ProposedChanges/Standards-Analysis.pdf</a> :

**Analysis:** Review of proposed new standard ANSI A250.12 indicated that, in the opinion of ICC Staff, the standard complies with ICC standards criteria.

Committee Action: Approved as Submitted

**Committee Reason:** With the addition of ANSI A250.12 to regulate the parts of a side-hinged door, there will be at least a requirement for their testing. It can be better to have tests on each part of the assembly. This component approach is not a novel idea, but is something that is done all the time. There is a consensus standard and it's a good option to have in the code.

Assembly Action: None

## S91-09/10

## PART I- IBC STRUCTURAL

Committee Action: Disapproved

**Committee Reason:** Disapproval of this code change maintains consistency with the National Flood Insurance Program, thus providing a safe harbor by complying with the IBC. Building officials understand the use of market value in making the determination of substantial damage or substantial improvement.

Assembly Action: None

**PART II- IEBC** 

Committee Action: Disapproved

Committee Reason: See reason for disapproval of S91-09/10, Part I.

Assembly Action: None

## S92-09/10

This code change was contained in the errata posted on the ICC website. Please go to <a href="http://www.iccsafe.org/cs/codes/Pages/09-10ProposedChanges.aspx">http://www.iccsafe.org/cs/codes/Pages/09-10ProposedChanges.aspx</a>.

# PART I- IBC STRUCTURAL Committee Action:

Approved as Modified

#### Modify the proposal as follows:

**801.5 Applicability.** For buildings in flood hazard areas as established in Section 1612.3, interior finishes, trim and decorative materials that extend below the elevation required by Section 1612.4 1612 shall be flood-damage-resistant materials.

**1403.5 Flood resistance.** For buildings in flood hazard areas as established in Section 1612.3, exterior walls extending below the elevation required by Section 4612.4 1612 shall be constructed with flood damage resistant materials. Wood shall be pressure-preservative treated in accordance with AWPA U1 for the species, product and end use using a preservative listed in Section 4 of APWA U1 or decay-resistant heartwood of redwood, black locust or cedar.

**Committee Reason:** This code change provides a definition as to what the flood elevation is that triggers flood requirements that are already in the IBC and it is just a clarification. The modification changes the section reference to merely refer to Section 1612.

Assembly Action: None

PART II- IPC

Committee Action: Approved as Modified

#### Modify the proposal as follows:

**[B] 309.2 Flood hazard.** For structures located in flood hazard areas, the following systems and equipment shall be located and installed as required by Section <u>1612.4</u> <u>1612</u> of the *International Building Code*.

**Exception:** The following systems are permitted to be located below the elevation required by Section 4612.4 1612 of the *International Building Code* for utilities and attendant equipment provided that the systems are designed and installed to prevent water from entering or accumulating within their components and the systems are constructed to resist hydrostatic and hydrodynamic loads and stresses, including the effects of buoyancy, during the occurrence of flooding to up to such elevation.

- 1. All water service pipes.
- Pump seals in individual water supply systems where the pump is located below the design flood elevation.
- Covers on potable water wells shall be sealed, except where the top of the casing well or pipe sleeve is elevated to at least 1 foot (305 mm) above the design flood elevation.
- 4. All sanitary drainage piping.
- 5. All storm drainage piping.
- 6. Manhole covers shall be sealed, except where elevated to or above the design flood elevation.
- 7. All other plumbing fixtures, faucets, fixture fittings, piping systems and equipment.
- 8. Water heaters.
- 9. Vents and vent systems.

**Committee Reason:** This code change provides a definition as to what the flood elevation is that triggers flood requirements that are already in the IPC and it is just a clarification. The modification changes the section reference to merely refer to Section 1612 of the IBC.

Assembly Action: None

PART III- IFGC Committee Action:

**Approved as Modified** 

#### Modify the proposal as follows:

**[B] 301.11 Flood hazard.** For structures located in flood hazard areas, the appliance, equipment and system installations regulated by this code shall be located at or above the elevation required by Section <u>1612.4</u> <u>1612</u> of the *International Building Code* for utilities and attendant equipment.

**Exception:** The appliance, equipment and system installations regulated by this code are permitted to be located below the elevation required by Section 1612.4 1612 of the *International Building Code* for utilities and attendant equipment\_provided that they are designed and installed to prevent water from entering or accumulating within the components and to resist hydrostatic and hydrodynamic loads and stresses, including the effects of buoyancy, during the occurrence of flooding to such elevation.

**Committee Reason:** This code change provides a definition as to what the flood elevation is that triggers flood requirements that are already in the IFGC and it is just a clarification. The modification changes the section reference to merely refer to Section 1612 of the IBC.

Assembly Action: None

PART IV- IMC Committee Action:

Approved as Modified

#### Modify the proposal as follows:

**[B] 301.13 Flood hazard**. For structures located in flood hazard areas, mechanical systems, equipment and appliances shall be located at or above the elevation required by Section 1612.4 1612 of the *International Building Code* for utilities and attendant equipment.

**Exception:** Mechanical systems, equipment and appliances are permitted to be located below the elevation required by Section 1612.4 1612 of the of the *International Building Code* for utilities and attendant equipment provided that they are designed and installed to prevent water from entering or accumulating within the components and to resist hydrostatic and hydrodynamic loads and stresses, including the effects of buoyancy, during the occurrence of flooding up to such elevation.

401.4 Intake opening location. Air intake openings shall comply with all of the following:

4. Intake openings on structures in flood hazard areas shall be at or above the elevation required by Section 4612.4 1612 of the *International Building Code* for utilities and attendant equipment.

**501.2.1 Location of exhaust outlets.** The termination point of exhaust outlets and ducts discharging to the outdoors shall be located with the following minimum distances:

- 1. For ducts conveying explosive or flammable vapors, fumes or dusts: 30 feet (9144 mm) from property lines; 10 feet (3048 mm) from operable openings into buildings; 6 feet (1829 mm) from exterior walls and roofs; 30 feet (9144 mm) from combustible walls and operable openings into buildings which are in the direction of the exhaust discharge; 10 feet (3048 mm) above adjoining grade.
- 2. For other product-conveying outlets: 10 feet (3048 mm) from the property lines; 3 feet (914 mm) from exterior walls and roofs; 10 feet (3048 mm) from operable openings into buildings; 10 feet (3048 mm) above adjoining grade.
- 3. For all *environmental air* exhaust: 3 feet (914 mm) from property lines; 3 feet (914 mm) from operable openings into buildings for all occupancies other than Group U, and 10 feet (3048 mm) from mechanical air intakes. Such exhaust shall not be considered hazardous or noxious.
- 4. Exhaust outlets serving structures in flood hazard areas shall be installed at or above the elevation required by Section 1612.4 1612 of the *International Building Code* for utilities and attendant equipment.
- 5. For specific systems see the following sections:
  - 5.1. Clothes dryer exhaust, Section 504.4.
  - 5.2. Kitchen hoods and other kitchen exhaust *equipment*, Sections 506.3.12, 506.4 and 506.5.
  - 5.3. Dust stock and refuse conveying systems, Section 511.
  - 5.4. Subslab soil exhaust systems, Section 512.4
  - 5.5. Smoke control systems, Section 513.10.3
  - 5.6. Refrigerant discharge, Section1105.7
  - 5.7. Machinery room discharge, Section 1105.6.1

**[B] 602.4 Flood hazard.** For structures located in flood hazard areas, plenum spaces shall be located above the elevation required by Section <u>1612.4</u> <u>1612</u> of the *International Building Code* for utilities and attendant equipment-or shall be designed and constructed to prevent water from entering or accumulating within the plenum spaces during floods up to such elevation. If the plenum spaces are located below the elevation required by Section <u>1612.4</u> <u>1612</u> of the *International Building Code* for utilities and attendant equipment, they shall be capable of resisting hydrostatic and hydrodynamic loads and stresses, including the effects of buoyancy, during the occurrence of flooding up to such elevation.

**[B] 603.13 Flood hazard areas.** For structures in flood hazard areas, ducts shall be located above the elevation required by Section 1612.4 1612 of the *International Building Code* for utilities and attendant equipment-or shall be designed and constructed to prevent water from entering or accumulating within the ducts during floods up to such elevation. If the ducts are located below the elevation required by Section 1612.4 1612 of the *International Building Code* for utilities and attendant equipment, the ducts shall be capable of resisting hydrostatic and hydrodynamic loads and stresses, including the effects of buoyancy, during the occurrence of flooding up to such elevation.

**1305.2.1 Flood hazard.** All fuel oil pipe, equipment and appliances located in flood hazard areas shall be located above the elevation required by Section 4612.4 1612 of the *International Building Code* for utilities and attendant equipment-or shall be capable of resisting hydrostatic and hydrodynamic loads and stresses, including the effects of buoyancy, during the occurrence of flooding up to such elevation.

**Committee Reason:** This code change provides a definition as to what the flood elevation is that triggers flood requirements that are already in the IMC and it is just a clarification. The modification changes the section reference to merely refer to Section 1612 of the IBC.

Assembly Action: None

## S93-09/10

#### **Committee Action:**

#### Approved as Modified

#### Modify the proposal as follows:

**1612.5 Flood hazard documentation.** The following documentation shall be prepared and sealed by a registered design professional and shall be submitted to the building official:

- I. For construction in flood hazard areas not subject to high-velocity wave action:
  - 1.1. The elevation of the lowest floor, including basement, as required by the lowest floor elevation inspection in Section 110.3.3.

- 1.2. For fully enclosed areas below the design flood elevation where provisions to allow for the automatic entry and exit of floodwaters do not meet the minimum requirements in Section 2.6.2.1, ASCE 24, construction documents shall include a statement that the design will provide for equalization of hydrostatic flood forces in accordance with Section 2.6.2.2 of ASCE 24.
- 1.3. For dry floodproofed nonresidential buildings, construction documents shall include a statement that the dry floodproofing is designed in accordance with ASCE 24.
- 2. For construction in flood hazard areas subject to high-velocity wave action:
- 2.1. The elevation of the bottom of the lowest horizontal structural member as required by the lowest floor elevation inspection in Section 110.3.3.
- 2.2. Construction documents shall include a statement that the building is designed in accordance with ASCE 24, including that the pile or column foundation and building or structure to be attached thereto is designed to be anchored to resist flotation, collapse and lateral movement due to the effects of wind and flood loads acting simultaneously on all building components, and other load requirements of Chapter 16.
- 2.3. For breakaway walls designed to resist a nominal load have a resistance of more than 20 psf (0.96 kN/m²) determined using allowable stress design, construction documents shall include a statement that the breakaway wall is designed in accordance with ASCE 24.

**Committee Re ason:** This proposal clarifies the requirement for the design of breakaway walls and the modification makes it clear that the loading threshold applies to allowable stress design loads.

Assembly Action: None

## S94-09/10

**Note:** The following analysis was not in the Code Change monograph but was published on the ICC website at <a href="http://www.iccsafe.org/cs/codes/Documents/2009-10cycle/ProposedChanges/Standards-Analysis.pdf">http://www.iccsafe.org/cs/codes/Documents/2009-10cycle/ProposedChanges/Standards-Analysis.pdf</a> :

**Analysis:** Review of proposed new standard, FEMA P646, indicated that, in the opinion of ICC Staff, the standard did not comply with ICC standards criteria, Section 3.6.2(1) Mandatory language, 3.6.3(2) Consensus process.

#### **Committee Action:**

**Approved as Modified** 

Modify the proposal as follows:

**1612.6 Tsunami-generated flood hazard.** Construction within a Tsunami Hazard Inundation Zone shall be in accordance with this section.

# APPENDIX L TSUNAMI-GENERATED FLOOD HAZARD

**L101.1 General.** The purpose of this appendix is to provide tsunami regulatory criteria for those communities that have a tsunami hazard and have elected to develop and adopt a map of their tsunami hazard inundation zone.

4612.6.1 <u>L101.2</u> **Definitions**. The following words and terms shall, for the purposes of this section appendix, have the meanings shown herein.

**TSUNAMI HAZARD INUNDATION MAP.** A map that designates the extent of inundation by a design event tsunami which is developed and provided to a community by either the State or the National Atmospheric and Oceanic Administration (NOAA) under the National Tsunami Hazard Mitigation Program, using NOAA mapping criteria.

**TSUNAMI HAZARD INUNDATION ZONE.** The area anticipated to be flooded or inundated by a design event tsunami as identified on a community's Tsunami Hazard Inundation Map.

4612.6.2 <u>L101.3</u> Establishment of Tsunami Hazard Inundation Zone. Where a community has adopted a Tsunami Hazard Inundation Map, that map shall be used to establish a community's Tsunami Hazard Inundation Zone.

**1612.6.3** <u>L101.4</u> Construction within the Tsunami Hazard Inundation Zone. Buildings and structures designated Occupancy Category III or IV in accordance with Section 1604.5 shall be prohibited within a Tsunami Hazard Inundation Zone.

**Exception:** A vertical evacuation tsunami refuge shall be permitted to be located in a Tsunami Hazard Inundation Zone provided it is constructed in accordance with FEMA P646.

(Portions of proposal not shown are unchanged)

**Committee Re ason:** This code change provides a good start, giving guidance on tsunami hazards. The modification places the provisions In an appendix, making them available for jurisdictions to adopt them.

Assembly Action: None

## S95-09/10

Committee Action: Disapproved

Committee Reason: Disapproval was requested by the proponent. This proposal would delete too much of the seismic criteria.

Assembly Action: None

S96-09/10

Committee Action: Disapproved

Committee Reason: Code change S97 – 09/10 is preferred.

Assembly Action: None

## S97-09/10

# PART I- IBC STRUCTURAL Committee Action:

Approved as Modified

Modify the proposal as follows:

**1613.2 Definitions.** The following words and terms shall, for the purposes of this section, have the meanings shown herein.

**MAXIMUM CONSIDERED EARTHQUAKE GROUND MOTION (MCE**<sub>R</sub>). The most severe earthquake effects considered by this code.

(No changes to definitions not shown)

**1613.5.1 Mapped Acceleration Parameters.** The parameters  $S_S$  and  $S_I$  shall be determined from the 0.2 and 1 s spectral response accelerations shown on Figures 1613.5(1) and 1613.5(2) through 1613.5(6). Where  $S_I$  is less than or equal to 0.04 and  $S_S$  is less than or equal to 0.15, the structure is permitted to be assigned to Seismic Design Category A.

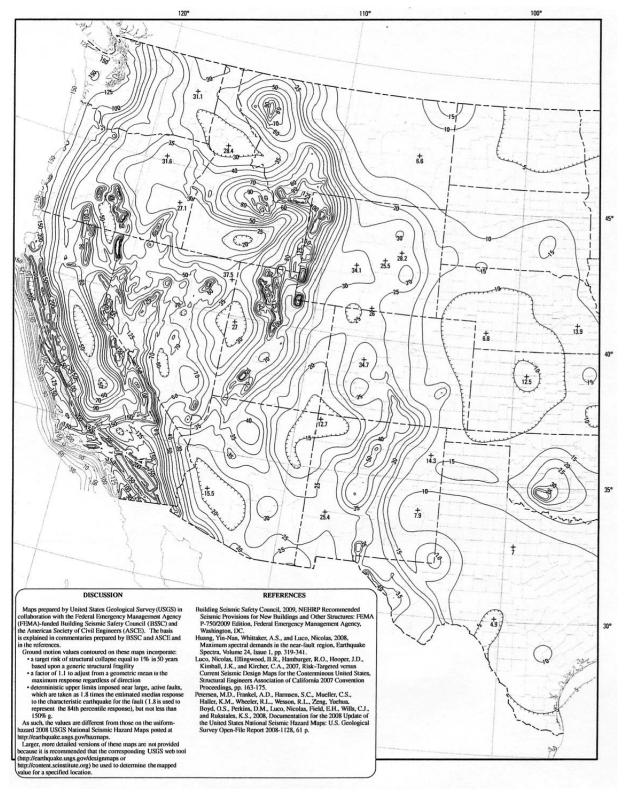


FIGURE 1613.5(1) MAXIMUM CONSIDERED EARTHQUAKE GROUND MOTION ( $\underline{MCE_R}$ ) FOR THE CONTERMINOUS UNITED STATES OF 0.2 SECOND SPECTRAL RESPONSE ACCELERATION (5% OF CRITICAL DAMPING), SITE CLASS B

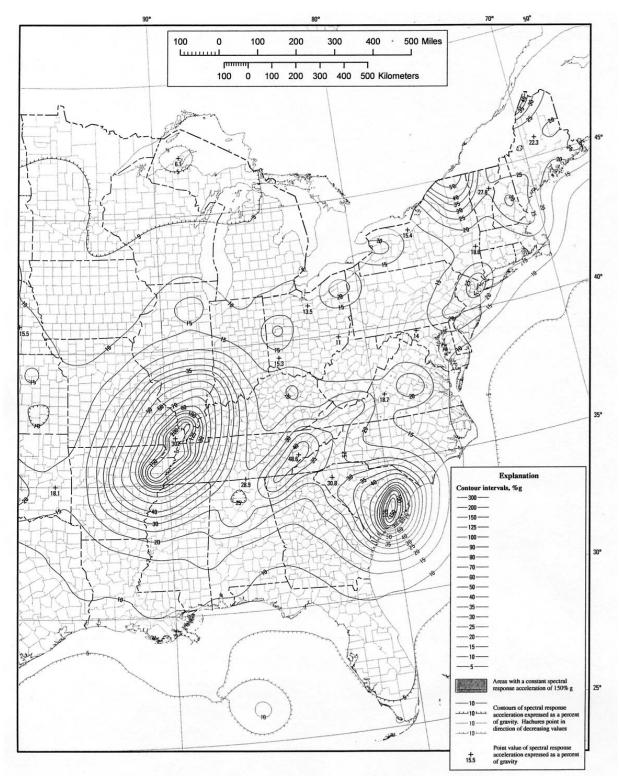


FIGURE 1613.5(1)(CONTINUED) MAXIMUM CONSIDERED EARTHQUAKE GROUND MOTION  $(\underline{\mathsf{MCE}}_R)$  FOR THE CONTERMINOUS UNITED STATES OF 0.2 SECOND SPECTRAL RESPONSE ACCELERATION (5% OF CRITICAL DAMPING), SITE CLASS B

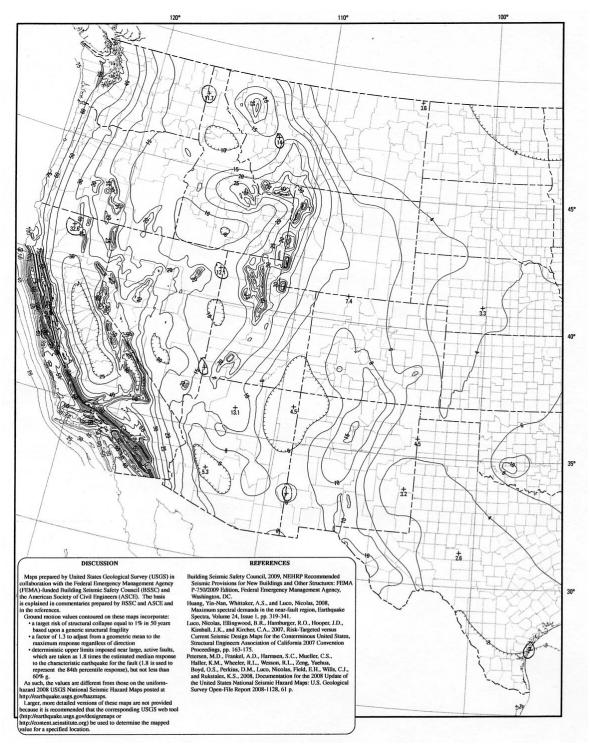


FIGURE 1613.5(2) MAXIMUM CONSIDERED EARTHQUAKE GROUND MOTION  $(\underline{MCE_R})$  FOR THE CONTERMINOUS UNITED STATES OF 1 SECOND SPECTRAL RESPONSE ACCELERATION (5% OF CRITICAL DAMPING), SITE CLASS B

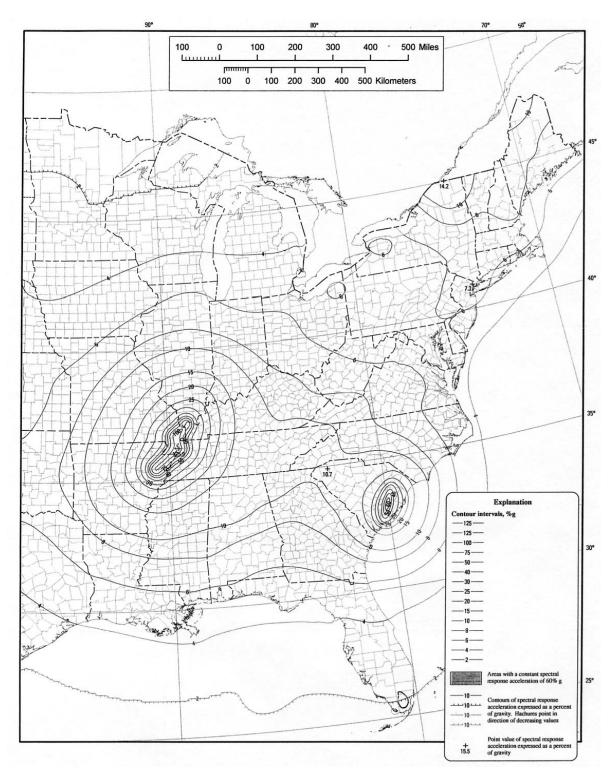
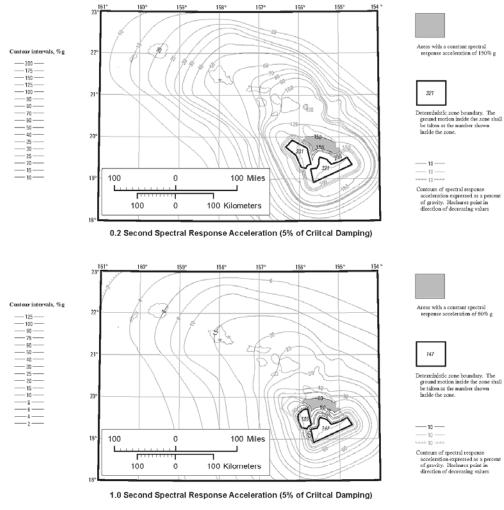


FIGURE 1613.5(2)(CONTINUED) MAXIMUM CONSIDERED EARTHQUAKE GROUND MOTION (MCE<sub>R</sub>) FOR THE CONTERMINOUS UNITED STATES OF 1 SECOND SPECTRAL RESPONSE ACCELERATION (5% OF CRITICAL DAMPING), SITE CLASS B



# Maps prepared by United States Geological Survey (USGS) in collaboration with the Federal Emergency Management Agency (PEMA) Andread Building Seimis Safety Council (1955C) and the American Society of Civil Engineers (ASCE). The basis is explained in commentative prepared by BSC and ASCE and in the reference given below. Cround motion values concurred on these maps incorporate: • a target risk of structural cellapse equal to 1% in 50 years based upon a genetic structural fregility • deterministic upper limits imposed near large, active faults, which are stems as 1.8 times the estimated median response to the characteristic earthquake for the fault (1.8 is used to represent the 54th percentils response), but not less than 150 and 60% g for 0.2 and 1.0 see, respectively. As such, the values are different from those on the uniformhazed 1998 USGS National Seismic Hazard Maps for Hawaii protect at https://caracters.earthquake.org.gov/hazmaps. Lager, mote éstuiled verrions of their mips see not provided because it is recommended that the corresponding USGS web coals of the commendation of the corresponding USGS web coals of the commendation of the corresponding USGS web coals of the commendation of the corresponding USGS web coals of the commendation of the corresponding USGS web coals of the commendation of the corresponding USGS web coals of the commendation of the corresponding USGS web coals of the commendation of the corresponding USGS web coals of the commendation of the corresponding USGS web coals of the commendation of the corresponding USGS web coals of the commendation of the corresponding USGS web coals of the commendation of the corresponding USGS web coals of the commendation of the corresponding USGS web coals of the commendation of the commendation of the corresponding USGS web coals of the commendation of the corresponding USGS web coals of the commendation of the corresponding USGS web coals of the commendation of the corresponding USGS web coals of the commendation of the corresponding USGS web

FIGURE 1613.5(3) MAXIMUM CONSIDERED EARTHQUAKE GROUND MOTION (MCE<sub>R</sub>)
FOR HAWAII OF 0.2 AND 1 SECOND SPECTRAL RESPONSE ACCELERATION (5%
OF CRITICAL DAMPING), SITE CLASS B

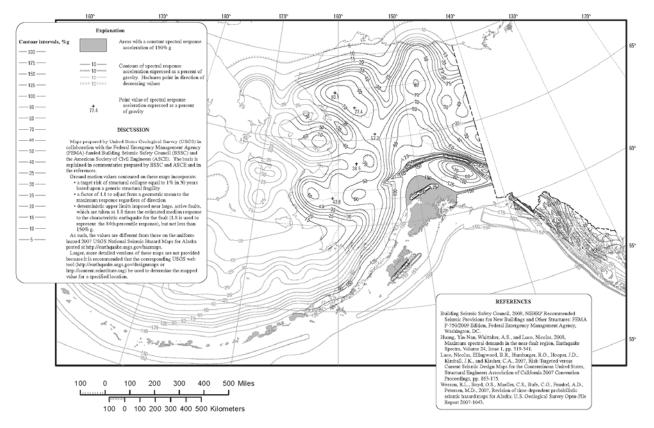
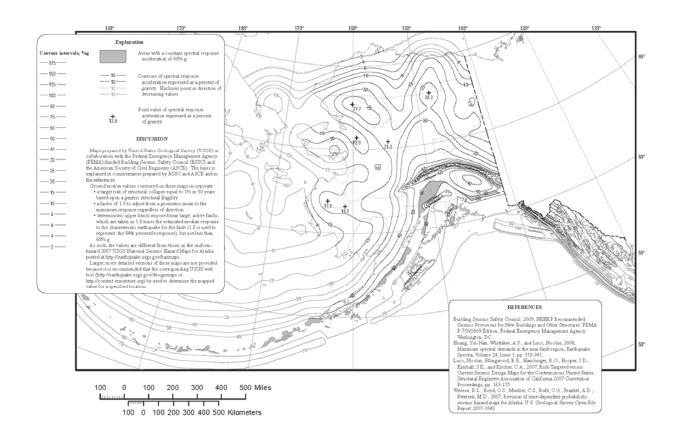
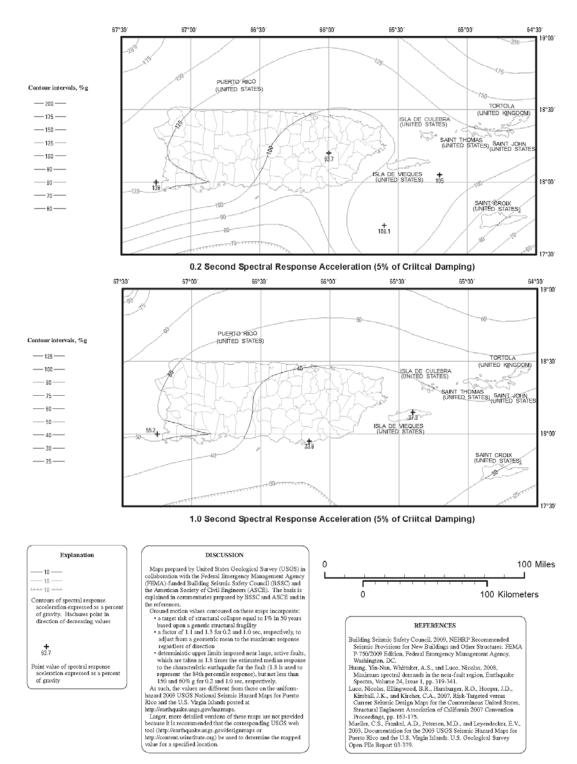


FIGURE 1613.5(4) MAXIMUM CONSIDERED EARTHQUAKE GROUND MOTION (MCE $_{\mathbb{R}}$ ) FOR ALASKA OF 0.2 SECOND SPECTRAL RESPONSE ACCELERATION (5% OF CRITICAL DAMPING). SITE CLASS B



 $\frac{\text{FIGURE 1613.5(5) MAXIMUM CONSIDERED EARTHQUAKE GROUND MOTION (MCE}_{\text{R}}) \, \text{FOR}}{\text{ALASKA OF 1.0 SECOND SPECTRAL RESPONSE ACCELERATION (5% OF CRITICAL DAMPING).}}{\text{SITE CLASS B}}$ 



zure 22-6 Maximum Considered Earth Ground Motion (MCE<sub>o</sub>) for Puerto Rico. Culebra. Viegues. St. Thomas. St. John and St. Croix

# FIGURE 1613.5(6) MAXIMUM CONSIDERED EARTHQUAKE GROUND MOTION (MCE $_{\mathbb{R}}$ ) FOR PUERTO RICO, CULEBRA, VIEQUES, ST. THOMAS, ST. JOHN AND ST. CROIX OF 0.2 AND 1 SECOND SPECTRAL RESPONSE ACCELERATION (5% OF CRITICAL DAMPING), SITE CLASS B

**Committee R eason:** This proposal incorporates the latest USGS ground motion maps. The modification updates the map titles and provides reformatted versions of the maps with no technical changes. It also separates areas outside the conterminous United States, on individual maps.

# PART II- IRC B/E Committee Action:

#### **Approved as Submitted**

**Committee Rea son:** This change brings the latest and improved Seismic Maps into the code. This will correlate the maps with the IBC and ASCE 7-10. One benefit of the new map is that some Seismic Design Category E regions will be smaller in area. This will result in some previous Seismic Design Category E structures to now be Seismic Design Category D structures.

Assembly Action: None

## S98-09/10

#### **Committee Action:**

#### **Approved as Submitted**

**Committee Reason:** This code change replaces site class requirements in the IBC with a reference to the ASCE 7 provisions, removing conflicts from the code.

Assembly Action: None

## S99-09/10

**Note:** The following analysis was not in the Code Change monograph but was published on the ICC website at <a href="http://www.iccsafe.org/cs/codes/Documents/2009-10cycle/ProposedChanges/Standards-Analysis.pdf">http://www.iccsafe.org/cs/codes/Documents/2009-10cycle/ProposedChanges/Standards-Analysis.pdf</a> :

**Analysis:** Review of proposed new standards ASTM D 4428/D 4428M and ASTM D 7400 indicated that, in the opinion of ICC Staff, the standards did not comply with ICC standards criteria, 3.6.2(1) Mandatory language.

Committee Action: Disapproved

**Committee Reason:** Approval of S98 – 09/10 replaced the site class requirements with an ASCE 7 reference. In addition the proposed referenced standards, ASTM D 4428 and ASTM D 7400 are not compliant with ICC criteria due to non-mandatory language.

Assembly Action: None

## S100-09/10

#### **Committee Action:**

#### Approved as Submitted

**Committee Reason:** This code change removes an earthquake load provision on flexible diaphragms from the IBC, because it will be covered by the next edition of ASCE 7.

Assembly Action: None

## S101-09/10

#### **Committee Action:**

#### Approved as Submitted

**Committee Reason:** This code change removes an earthquake load provision on automatic sprinkler systems from the IBC, because it will be covered by the next edition of ASCE 7.

Assembly Action: None

## S102-09/10

#### **Committee Action:**

## Approved as Submitted

**Committee Rea son:** This code change removes an earthquake load provision on design coefficients for autoclaved aerated concrete masonry shear walls from the IBC, because it will be covered by the next edition of ASCE 7.

## S103-09/10

#### **Committee Action:**

## **Approved as Submitted**

**Committee Reason:** This code change removes an earthquake load provision on controls for elevators from the IBC, because it will be covered by the next edition of ASCE 7.

**Assembly Action:** 

None

## S104-09/10

#### **Committee Action:**

#### **Approved as Submitted**

**Committee Reason:** This code change removes an earthquake load provision on steel plate shear wall height limits from the IBC, because it will be covered by the next edition of ASCE 7.

**Assembly Action:** 

None

## S105-09/10

#### **Committee Action:**

#### Approved as Submitted

**Committee Reason:** This code change removes an earthquake load provision on seismic separations from the IBC, because it will be covered by the next edition of ASCE 7.

**Assembly Action:** 

None

## S106-09/10

#### **Committee Action:**

#### Approved as Submitted

Committee Reason: This code change removes an earthquake load provision on ductwork with component importance factor of 1.5 from the IBC, because it will be covered by the next edition of ASCE 7.

**Assembly Action:** 

None

## S107-09/10

**Note:** The following analysis was not in the Code Change monograph but was published on the ICC website at <a href="http://www.iccsafe.org/cs/codes/Documents/2009-10cycle/ProposedChanges/Standards-Analysis.pdf">http://www.iccsafe.org/cs/codes/Documents/2009-10cycle/ProposedChanges/Standards-Analysis.pdf</a> :

**Analysis:** Review of proposed new standard AISI S110 indicated that, in the opinion of ICC Staff, the standard complies with ICC standards criteria.

**Committee Action:** 

Disapproved

**Committee Rea son:** The proposed earthquake load provision on cold-formed steel special bolted moment frames is not needed in the IBC, because it will be covered by the next edition of ASCE 7.

**Assembly Action:** 

None

## S108-09/10

**Committee Action:** 

**Approved as Modified** 

Modify the proposal as follows:

1613.8 Earthquake-Recording Instrumentations. For earthquake-recording instrumentations, see Appendix L.

**L101.1 General.** Every <u>structure building located</u> where the 1-second spectral response acceleration,  $S_1$ , in accordance with Section 1613.5 is greater than 0.40 that either 1) exceeds six stories <u>in height above grade plane</u>-with an aggregate floor area of 60,000 square feet (5574  $\text{m}^2$ ) or more, or 2) exceeds <u>ten 10</u>-stories <u>in</u>

height above grade plane regardless of floor area, shall be equipped provided with not less than three approved recording accelerographs. The accelerographs shall be interconnected for common start and common timing.

The accelerographs shall be interconnected for common start and common timing.

**L 101.2 Location.** As a minimum, instruments shall be located at the lowest level, mid\_height, and near the top of the <u>structure building</u>. Each instrument shall be located so that access is maintained at all times and is unobstructed by room contents. A sign stating <u>"MAINTAIN CLEAR ACCESS TO THIS INSTRUMENT" in one inch block letters</u> shall be posted in a conspicuous location.

**L 101.3 Maintenance**. Maintenance and service of the instrumentation shall be provided by the owner of the <u>structure</u> building, subject to the approval of the building official. Data produced by the instrument shall be made available to the building official on request.

Maintenance and service of the instruments shall be performed annually by an approved testing agency. The owner shall file with the building official a written report from an approved testing agency certifying that each instrument has been serviced and is in proper working condition. This report shall be submitted when the instruments are installed and annually thereafter. Each instrument shall have affixed to it an externally visible tag specifying the date of the last maintenance or service and the printed name and address of the testing agency.

Portions of the proposal not shown are unchanged.

Committee Reason: An appendix chapter on earthquake recording instrumentation is an important addition to the IBC for those jurisdictions that have typically adopted such provisions. The data collected is valuable in understanding how earthquakes affect structures. The modification removes an unnecessary reference to the appendix from Chapter 16. "Building" has been appropriately changed to the more general term, "structure". The reference to the building official's approval was removed from the section on maintenance since this would be difficult to enforce after a certificate of occupancy is issued. Other changes are consistent with similar requirements in the LA City Building Code.

Assembly Action: None

## S109-09/10

#### **Committee Action:**

#### **Approved as Submitted**

**Committee Rea son:** This proposal makes design of ice-sensitive structures for atmospheric ice loads a requirement under the IBC by referencing those ASCE 7 provisions. The requisite definition of "ice-sensitive structure" is added to make the application clear.

Assembly Action: None

## S110-09/10

Committee Action:

Disapproved

**Committee Reason:** This code change is disapproved because it is preferable to maintain the references to specific ACI 318 sections in the structural integrity requirements.

Assembly Action: None

## S111-09/10

**Committee Action:** 

Disapproved

**Committee Reason:** There was concern over striking "at the completion of the work" from the definition of periodic special inspection. The proposed revisions should be reconciled with S115 – 09/10

Assembly Action: None

## S112-09/10

**Committee Action:** 

**Disapproved** 

**Committee Reason:** The proposed definition of "statement of special inspection" is not needed, since the code adequately describes the requirements. It would include administrative issues that need to be addressed by each jurisdiction, making it needlessly wordy and potentially conflicting with other code requirements.

**Assembly Action:** 

None

## S113-09/10

Committee Action: Disapproved

Committee Rea son: The proposed definition is not needed since Section 1704.1 currently contains this information.

Assembly Action: None

## S114-09/10

Committee Action: Disapproved

**Committee Reason:** The proposed revisions to the definitions of continuous and periodic special inspection are not appropriate code language. Though it was disapproved, S111–09/10 is preferable.

Assembly Action: None

## S115-09/10

**Note:** The following analysis was not in the Code Change monograph but was published on the ICC website at <a href="http://www.iccsafe.org/cs/codes/Documents/2009-10cycle/ProposedChanges/Standards-Analysis.pdf">http://www.iccsafe.org/cs/codes/Documents/2009-10cycle/ProposedChanges/Standards-Analysis.pdf</a> :

**Analysis:** Review of proposed new standard ASHRAE 171 indicated that, in the opinion of ICC Staff, the standard did not comply with ICC standards criteria, Section 3.6.3(1) Readily available.

Committee Action: Disapproved

**Committee Reason:** This code change proposes deletion of needed definitions and portions of Chapter 17 without providing sufficient explanations. As written, these revisions are not correlated with the entire code. This proposal incorporates too much on accreditation and takes away the building officials ability to approve such agencies.

Assembly Action: None

## S116-09/10

Committee Action: Approved as Modified

#### Modify the proposal as follows:

**1704.1 General.** This section provides minimum requirements for special inspections, the statement of special inspections, contractor responsibility and structural observations.

(Portions of proposal not shown are unchanged)

**Committee Reason:** This proposal is an editorial reorganization of currant sections 1704 through 1708 that provides better distinction between structural and other issues. The modification clarifies that the intent of Section 1704.1 includes the statement of special inspections.

Assembly Action: None

## S117-09/10

### Committee Action: Approved as Submitted

**Committee Reason:** This code change deletes current Exception 2 in Section 1704.1. The exception applies to "building components" which is an undefined term that leads to confusion. Furthermore the exemption should not be based on whether or not the design is by a registered design professional.

## S118-09/10

Committee Action: Disapproved

**Committee R eason:** The wording of the proposed exception in Section 1704.1 is potentially confusing, specifically the reference to "portions of structures". Furthermore, the reference solely to section 2308 would be too narrow since it would not include other types of light-frame construction.

Assembly Action: None

## S119-09/10

#### Committee Action:

#### **Approved as Submitted**

**Committee Reason:** This code change will require access for special inspections, similar to that required in Section 110.1 for other inspections.

Assembly Action: None

## S120-09/10

#### **Committee Action:**

#### **Approved as Submitted**

**Committee Re ason:** Agreement with proponent's reason which indicates this code change improves the scoping provisions applicable to the statement of special inspections, by moving the exception from Section 1704.1.1 to Section 1705.1.

Assembly Action:

None

## S121-09/10

#### **Committee Action:**

#### Approved as Submitted

**Committee Rea son:** This proposal makes use of the more comprehensive inspection requirements for structural steel by referencing AISC 360 quality assurance inspections. Replacing the IBC provisions with this reference is similar to the reference to AISC 341 for steel seismic systems.

**Assembly Action:** 

None

## S122-09/10

**Committee Action:** 

**Approved as Modified** 

Modify the proposal as follows:

# TABLE 1704.4 REQUIRED VERIFICATION AND INSPECTION OF CONCRETE CONSTRUCTION

REGULES VERMI 103 (1101) AND INC. E0110N 01 CONTONELLE CONTONECTION						
VERIFICATION AND INSPECTION	CONTIN- UOUS PE	RIODI C	REFERENCED STANDARD <sup>a</sup>	IBC REFERENCE		
4. Inspection of anchors post-installed in hardened concrete members and designed in accordance with Section 1912. b	=×	<u>-x</u>	ACI 318; 3.8.6, 8.1.3, 21.2.8	1912.1		
5. Inspection of anchors post-installed in hardened concrete members and qualified for installation through Section 104.11	Note b	Note b				

b. Special inspection of anchors qualified for installation through Section 104.11 shall be conducted in accordance with the requirements specified in the report of qualification, such as an Evaluation Report issued by ICC ES. Specific requirements for special inspection shall be included in the research report for the anchor issued by an approved source in accordance with ACI 355.2 or other qualification procedures. Where specific requirements are not provided, special inspection requirements shall be specified by the registered design professional and shall be approved by the building official prior to the commencement of the work.

(Portions of proposal not shown are unchanged)

**Committee Reason:** Agreement with the proponent's reason which indicates the proposal adjusts the special inspection of concrete anchors for consistency with the access provided to perform the required verifications. The modification adjusts the wording in item 4 to more closely match the current wording and revises footnote b to more appropriately refer to research reports.

Assembly Action: None

## S123-09/10

#### **Committee Action:**

#### **Approved as Submitted**

**Committee Reason:** Replacement of the IBC special inspection provisions with a direct reference to the MSJC code and specification is consistent with the use of other referenced material standards.

Assembly Action: None

## S124-09/10

#### **Committee Action:**

## Disapproved

Committee Reason: Based on the historical performance of light-frame construction of wood and cold-formed steel, the proposed changes in special inspections were too substantial to make without better substantiation by the proponent. There was nothing in the way of case studies, calculation or rational analysis offered to the committee. Additionally the proponent's rather extensive floor modification would indicate that this proposal needs work before it can be approved. Clarification of inspection for prefabricated structural assemblies and components may be necessary but these need to be clearer so that it can be implemented both with building inspectors and third party inspectors. Since the proposal is getting into new territory, it would be preferable to treat wood and cold-formed steel separately so they can be discussed and voted on individually.

Assembly Action: None

## S125-09/10

#### **Committee Action:**

Disapproved

**Committee Reason:** This proposal would reduce the required inspection and testing of compacted fill. The proponent's reason does not provide adequate justification to support this change.

Assembly Action:

None

## S126-09/10

#### This code change was heard by the IBC Fire Safety code development committee.

**Note:** The following analysis was not in the Code Change monograph but was published on the ICC website at <a href="http://www.iccsafe.org/cs/codes/Documents/2009-10cycle/ProposedChanges/Standards-Analysis.pdf">http://www.iccsafe.org/cs/codes/Documents/2009-10cycle/ProposedChanges/Standards-Analysis.pdf</a> :

**Analysis:** Review of proposed new standards ASTM E 2174 and ASTM E 2393 indicated that, in the opinion of ICC Staff, the standards comply with ICC standards criteria.

Committee Action: Disapproved

**Committee Reason:** The committee disapproved this change to be consistent with actions they took on S127 and S128-09/10.

## S127-09/10

This code change was contained in the errata posted on the ICC website. Please go to <a href="http://www.iccsafe.org/cs/codes/Pages/09-10ProposedChanges.aspx">http://www.iccsafe.org/cs/codes/Pages/09-10ProposedChanges.aspx</a>.

## This code change was heard by the IBC Fire Safety code development committee.

**Note:** The following analysis was not in the Code Change monograph but was published on the ICC website at <a href="http://www.iccsafe.org/cs/codes/Documents/2009-10cycle/ProposedChanges/Standards-Analysis.pdf">http://www.iccsafe.org/cs/codes/Documents/2009-10cycle/ProposedChanges/Standards-Analysis.pdf</a> :

**Analysis:** Review of proposed new standards ASTM E 2174 and ASTM E 2393 indicated that, in the opinion of ICC Staff, the standards comply with ICC standards criteria.

#### **Committee Action:**

#### **Approved as Modified**

#### Modify the proposal as follows:

**1704.15 Fire-resistant penetrations and joints.** In buildings assigned an Occupancy Category of III or IV in accordance with Section 1604.5, special inspections for through penetrations, membrane penetration firestops, fire resistant joint systems, and perimeter fire barrier systems of the types specified in tested and listed in accordance with Sections 713.3.1.2, 713.4.1.2, 714.3 and 714.4 shall be in accordance with Sections 1704.15.1 or 1704.15.2.

**1704.15.1 Penetration firestops.** Inspections of penetration firestop systems of the types specified in tested and listed in accordance with Sections 713.3.1.2 and 713.4.1.2 shall be conducted by an approved inspection agency in accordance with ASTM E 2174.

**1704.15.2 Fire-resistant joint systems.** Inspection of fire resistant joint systems of the types specified in tested and listed in accordance with Sections 714.3 and 714.4 shall be conducted by an approved inspection agency in accordance with ASTM E 2393.

(Portions of the proposal not shown remain unchanged)

**Committee Reason:** The committee agreed that these installations were critical and that special inspections should be required for these installations in buildings assigned an Occupancy Category of III or IV. The modification more appropriately identifies the systems as those that are tested and listed.

#### Assembly Action: None

## S128-09/10

This code change was contained in the errata posted on the ICC website. Please go to <a href="http://www.iccsafe.org/cs/codes/Pages/09-10ProposedChanges.aspx">http://www.iccsafe.org/cs/codes/Pages/09-10ProposedChanges.aspx</a>.

#### This code change was heard by the IBC Fire Safety code development committee.

**Note:** The following analysis was not in the Code Change monograph but was published on the ICC website at <a href="http://www.iccsafe.org/cs/codes/Documents/2009-10cycle/ProposedChanges/Standards-Analysis.pdf">http://www.iccsafe.org/cs/codes/Documents/2009-10cycle/ProposedChanges/Standards-Analysis.pdf</a> :

**Analysis:** Review of proposed new standards ASTM E 2174 and ASTM E 2393 indicated that, in the opinion of ICC Staff, the standards comply with ICC standards criteria.

#### **Committee Action:**

#### Approved as Modified

#### Modify the proposal as follows:

**1704.15 Fire-resistant penetrations and joints.** In buildings having occupied floors located more than 75 feet (22860 mm) above the lowest level of fire department vehicle access, special inspections for through penetrations, membrane penetration firestops, fire resistant joint systems, and perimeter fire barrier systems of the types specified in tested and listed in accordance with Sections 713.3.1.2, 713.4.1.2, 714.3 and 714.4 shall be in accordance with Sections 1704.15.1 or 1704.15.2.

**1704.15.1 Penetration firestops.** Inspections of penetration firestop systems of the types specified in tested and listed in accordance with Sections 713.3.1.2 and 713.4.1.2 shall be conducted by an approved inspection agency in accordance with ASTM E 2174.

**1704.15.2 Fire-resistant joint systems.** Inspection of fire resistant joint systems of the types specified in tested and listed in accordance with Sections 714.3 and 714.4 shall be conducted by an approved inspection agency in accordance with ASTM E 2393.

(Portions of the proposal not shown remain unchanged)

**Committee Reason:** The committee agreed that these installations were critical and that special inspections should be required for these installations in buildings having occupied floors located more than 75 feet above the lowest level of fire department vehicle access. The modification more appropriately identifies the systems as those that are tested and listed.

Assembly Action: None

S129-09/10

Committee Action: Approved as Submitted

**Committee Rea son:** This code change cleans up the statement of special inspection requirements by removing redundant text and correlating with the section requiring the special inspections.

Assembly Action: None

S130-09/10

Withdrawn by Proponent

S131-09/10

Committee Action: Approved as Submitted

**Committee Reason:** This proposal removes suspended ceiling systems from the list on items requiring special inspections, since these inspections do not require the skill and knowledge that warrant the special inspections.

Assembly Action: None

S132-09/10

Committee Action: Approved as Submitted

Committee Re ason: This code change removes redundant text and clarifies the seismic and wind requirements in the statement of special inspections. Consistent with committee action on S129-09/10.

Assembly Action: None

S133-09/10

Committee Action: Approved as Submitted

**Committee Rea son:** This proposal corrects the terminology relating to special inspections for seismic resistance in order to clarify these requirements and correlate with the ASCE 7 standard.

Assembly Action: None

S134-09/10

Committee Action: Approved as Submitted

**Committee Reason:** This code change relocates the exception to special inspections for seismic resistance from the statement of special inspection section to a more appropriate location under Section 1707.1. It is consistent with the actions taken on S129 – 09/10 and S132 – 09/10.

Assembly Action: None

S135-09/10 Withdrawn by Proponent

## S136-09/10

#### **Committee Action:**

#### **Approved as Modified**

Modify the proposal as follows:

**1707.2 Structural steel.** Special inspection for structural steel shall be in accordance with the quality assurance plan requirements of AISC 341.

**Exception:** Special inspections of structural steel in structures assigned to Seismic Design Category C that are not specifically detailed for seismic resistance, with a response modification coefficient, *R*, of 3 or less, excluding cantilever column systems.

**Committee Reason:** This proposal removes an exception to special inspection of structural steel systems since the latest edition of AISC 341 now addresses the issue. The modification makes the reference to AISC 341 qualify assurance more general.

**Assembly Action:** 

None

S137-09/10

**Committee Action:** 

**Approved as Submitted** 

**Committee Reason:** This code change removes conflicting and extraneous requirements related to testing for seismic resistance. This provides better alignment with the ASCE 7 seismic provisions.

**Assembly Action:** 

None

S138-09/10

**Committee Action:** 

**Approved as Modified** 

Modify the proposal as follows:

**1708.3 Structural steel.** Testing for structural steel shall be in accordance with the quality assurance <del>plan</del> requirements of AISC 341.

**Exception:** Testing for structural steel in structures assigned to *Seismic Design Category* C that are not specifically detailed for seismic resistance, with a response modification coefficient, *R*, of 3 or less, excluding cantilever column systems.

**Committee Reason:** This proposal removes an exception to testing of structural steel systems since the latest edition of AISC 341, now addressed the issue. The modification makes the reference to AISC 341 quality assurance more general.

Assembly Action:

None

S139-09/10

**Committee Action:** 

Disapproved

**Committee Reason:** The committee prefers retaining the provisions allowing the registered design professional (RDP) or the building official to require structural observation.

Assembly Action:

None

S140-09/10

**Committee Action:** 

**Disapproved** 

**Committee Reason:** There is not enough evidence to indicate that the current provision for testing and labeling exterior windows and doors is incorrect. There was no evidence presented to justify treating Group R occupancies differently.

**Assembly Action:** 

None

## S141-09/10

Committee Action: Disapproved

Committee Reason: Disapproved for same reasoning as S140 - 09/10.

Assembly Action: None

## S142-09/10

Committee Action: Approved as Submitted

Committee Rea son: This code change provides a needed reference to rolling doors in order to establish acceptance criteria.

Assembly Action: None

## S143-09/10

**Note:** The following analysis was not in the Code Change monograph but was published on the ICC website at <a href="http://www.iccsafe.org/cs/codes/Documents/2009-10cycle/ProposedChanges/Standards-Analysis.pdf">http://www.iccsafe.org/cs/codes/Documents/2009-10cycle/ProposedChanges/Standards-Analysis.pdf</a> :

**Analysis:** Review of proposed new standard ANSI A250.13 indicated that, in the opinion of ICC Staff, the standard complies with ICC standards criteria.

Committee Action: Disapproved

**Committee Re ason:** There are concerns on the applicability of the proposed referenced standard to this portion of the IBC. There is also a question of who takes responsibility for the entire door assembly, when only the individual parts are tested by the standard.

Assembly Action: None

## S144-09/10

PART I- IBC STRUCTURAL

Committee Action: Disapproved

Committee Reason: There was concern with the proposed Section 1715.6 being located in the section on testing.

Assembly Action: None

PART II- IRC B/E Committee Action:

Approved as Submitted

**Committee Reason:** This change clarifies that a tubular daylighting devices (TDDs) is a unit skylight. The TDD was added to the energy conservation part of the code.

Assembly Action: None

S145-09/10

Withdrawn by Proponent

## S146-09/10

PART I- IBC STRUCTURAL

Committee Action: Disapproved

**Committee Reason:** The proposed exception in Chapter 18 would provide a loop hole for temporary structures, since manufacturers instructions would supercede Chapter 18. It is not tied to specific criteria and does not indicate that the building official should approve. There may be a need to address foundations for temporary

structures, but even with some better wording it should be in Chapter 31.

Assembly Action: None

**PART II- IEBC** 

Committee Action: Disapproved

Committee Reason: The proposed exceptions for temporary structures in the IEBC are not appropriate in Chapter 12 which covers relocated buildings.

Assembly Action: None

## S147-09/10

Committee Action: Disapproved

**Committee Reason:** The current exception to geo-technical investigations is adequate, making the proposed exception redundant. It is not an appropriate location for addressing additions. It appears to address a problem occurring where jurisdictions are not adopting the IRC.

Assembly Action: None

## S148-09/10

Committee Action: Approved as Modified

#### Modify the proposal as follows:

**1803.5.12 Seismic Design Categories D through F.** For structures assigned to Seismic Design Category D, E or F in accordance with Section 1613, the geotechnical investigation required by Section 1803.5.11 shall also include all of the following, as applicable:

- The determination of dynamic seismic lateral earth pressures on foundation walls and retaining walls due to design earthquake ground motions.
- 2. The potential for liquefaction and soil strength loss evaluated for site peak ground acceleratione, earthquake magnitudes, and source characteristics consistent with the maximum considered earthquake ground motions. Peak ground acceleration shall be determined based on:
  - 2.1 A site-specific study-in accordance with Section 41.4.7 21.5 of ASCE 7; or
  - 2.2 The maximum considered earthquake geometric mean peak ground acceleration adjusted for site class in accordance with Section 11.8.3 of ASCE 7.
- An assessment of potential consequences of liquefaction and soil strength loss, including, but not limited to:
  - 3.1 Estimation of total and differential settlement;
  - 3.2 Lateral soil movement;
  - 3.3 Lateral soil loads on foundations:
  - 3.4 Reduction in foundation soil-bearing capacity and lateral soil reaction;
  - 3.5 Soil downdrag and reduction in axial and lateral soil reaction for pile foundations;
  - 3.6 <u>Increases in soil lateral pressures on retaining walls; and</u>
  - 3.7 Flotation of buried structures.
- 4. Discussion of mitigation measures such as, but not limited to:
  - 4.1 Selection of appropriate foundation type and depths;
  - 4.2 Selection of appropriate structural systems to accommodate anticipated displacements and forces:
  - 4.3 Ground stabilization; or
  - 4.4 Any combination of these measures and how they shall be considered in the design of the structure.

(Portions of proposal not shown are unchanged)

**Committee Reason:** These changes in the geo-technical investigation requirements that are based on seismic design category provide wording that is better correlated with ASCE 7 earthquake load provisions. The modification reflects further correlation based on changes made in process of updating ASCE 7

## S149-09/10

#### **Committee Action:**

#### **Approved as Submitted**

**Committee Reason:** This code change relieves the geo-technical requirement for determination of lateral earth pressure on small structures as well as retaining walls that support backfill no more than 12 feet in height. It is the height of the backfill that imposes the inertial force. This is based on a California Building Code requirement that recognizes earthquake is not controlling loading on these structures.

**Assembly Action:** 

None

S150-09/10

**Committee Action:** 

Disapproved

Committee Reason: Disapproved because code change S148 – 09/10 was preferred.

**Assembly Action:** 

None

S151-09/10

**Committee Action:** 

Disapproved

**Committee Rea son:** The proposed revision to the embedment depth limit on pole foundations was not adequately substantiated by the proponent.

**Assembly Action:** 

None

S152-09/10

**Committee Action:** 

Disapproved

**Committee Reason:** The proposed explanation of units is not needed as is the case for all dimensionally consistent equations throughout the code.

**Assembly Action:** 

None

S153-09/10

**Committee Action:** 

Disapproved

Committee Reason: The proposed limit on embedment depth is not consistent with the original basis of the pole foundation formula.

**Assembly Action:** 

None

S154-09/10

**Committee Action:** 

Disapproved

Committee Reason: Disapproval is consistent with the committee's action on S162-09/10.

**Assembly Action:** 

None

## S155-09/10

Committee Action: Disapproved

**Committee Rea son:** No evidence was provided to validate the proposed Factor of Safety on pile uplift capacity. Load tests and analysis are not equivalent.

Assembly Action: None

## S156-09/10

Committee Action: Approved as Submitted

**Committee Reason:** This code change allows a reasonable approach for determining uplift capacity of pile groups, by accounting for the shear resistance of the soil block. The current limit is overly conservative.

Assembly Action: None

## S157-09/10

Committee Action: Disapproved

**Committee Reason:** The proposed method of verifying pile integrity is currently permitted if it is needed, but there is a concern with the proprietary nature a product that would become mandatory for all piles if it were approved.

Assembly Action: None

## S158-09/10

Committee Action: Disapproved

**Committee Reason:** It is not necessary to require automated monitoring of all cast-in-place deep foundation elements. Other acceptable methods could be permitted and this is a contractor's means and methods decision.

Assembly Action: None

## S159-09/10

Committee Action: Disapproved

Committee Reason: see S158 - 09/10.

Assembly Action: None

## S160-09/10

Committee Action: Approved as Submitted

**Committee Reason:** This proposal removes provisions in Chapter 19 that are merely a list of references to the ACI 318 standard and are not useful in their current form.

## S161-09/10

**Note:** The following analysis was not in the Code Change monograph but was published on the ICC website at <a href="http://www.iccsafe.org/cs/codes/Documents/2009-10cycle/ProposedChanges/Standards-Analysis.pdf">http://www.iccsafe.org/cs/codes/Documents/2009-10cycle/ProposedChanges/Standards-Analysis.pdf</a> :

**Analysis:** Review of proposed new standard ASTM E 2634 indicated that, in the opinion of ICC Staff, the standard complies with ICC standards criteria.

**Committee Action:** 

**Approved as Submitted** 

**Committee Reason:** This code change adds a material reference standard for flat wall insulating concrete form systems. These forms are part of the completed construction.

**Assembly Action:** 

None

## S162-09/10

**PART I- IBC STRUCTURAL** 

**Committee Action:** 

Disapproved

**Committee Rea son:** Removing specific ACI 318 section references in favor of nebulous references would present problems. The lack of specific references in Table 1704.4 would confuse inspectors.

**Assembly Action:** 

None

PART II- IRC B/E

**Committee Action:** 

Disapproved

**Committee Reason:** This change would remove reference to specific areas of the referenced standard. The updated reference ACI-318 is not ready at this time. This is consistent with the IBC.

**Assembly Action:** 

None

## S163-09/10

**Committee Action:** 

Disapproved

**Committee Reason:** The committee prefers retaining specific section references to ACI 318, consistent with actions on S162 – 09/10 and S110 – 09/10.

**Assembly Action:** 

None

## S164-09/10

**Committee Action:** 

**Disapproved** 

Committee Rea son: The current requirements on intermediate precast structural wall systems are clear, making this proposal unnecessary.

Assembly Action:

None

## S165-09/10

**Committee Action:** 

Approved as Submitted

**Committee Reason:** This code change adds requirements for wall pier detailing that are warranted as an ACI 318 modification.

**Assembly Action:** 

None

## S166-09/10

Committee Action: Disapproved

Committee Reason: There are concerns with revising the exemption to now apply to Group U. In addition these proposed changes would be inconsistent with the NEHRP Provisions.

Assembly Action: None

## S167-09/10

#### Committee Action: Approved as Modified

#### Modify the proposal as follows:

**1908.1.9 ACI 318, Section D.3.3**. Modify ACI 318, Sections <del>D.3.3.1,</del> D3.3.4 and D3.3.5<del>, and add Section D.3.3.7</del> to read as follows:

D.3.3.1 — The provisions of Appendix D do not apply to the design of anchors in plastic hinge zones of concrete structures under earthquake forces or to anchors that meet the requirements of Section D.3.3.7.

D.3.3.4 – Anchors shall be designed to be governed by the steel strength of a ductile steel element as determined in accordance with D.5.1 and D.6.1, unless either D.3.3.5 or D.3.3.6 is satisfied.

#### **Exceptions:**

- 1. Anchors in concrete designed to support nonstructural components in accordance with ASCE 7 Section 13.4.2 need not satisfy Section D.3.3.4.
- 2 1. Anchors designed to resist wall out-of-plane forces with design strengths equal to or greater than the force determined in accordance with ASCE 7 Equation 12.11-1 or 12.14-10 need not satisfy Section D.3.3.4.
- 2. In light-frame wood structure bearing or non-bearing walls, for the design of anchors used to attach wood sill plates to foundations or foundation stem walls, it shall be permitted to take the allowable in-plane shear strength of the anchors in accordance with Section 2305.1.2 of the International Building Code.
- D.3.3.5 Instead of D.3.3.4, the attachment that the anchor is connecting to the structure shall be designed so that the attachment will undergo ductile yielding at a force level corresponding to anchor forces no greater than the design strength of anchors specified in D.3.3.3.

#### Exceptions:

- 1. Anchors in concrete designed to support nonstructural components in accordance with ASCE 7 Section 13.4.2 need not satisfy Section D.3.3.5.
- 2. Anchors designed to resist wall out-of-plane forces with design strengths equal to or greater than the force determined in accordance with ASCE 7 Equation 12.11-1 or 12.14-10 need not satisfy Section D.3.3.5.

D.3.3.7 — For anchors installed in wood sill plates a maximum of 2 ½ inches (38 mm) in net thickness, the allowable lateral design values for shear in the cast-in-place anchor, parallel to the grain of the wood sill plate, are permitted to be determined in accordance with Section 2305 of the *International Building Code*, provided the anchor installation complies with all of the following:

2305.1.2 Sill plate anchor bolts. For sill plates of 2x or 3x nominal thickness, the allowable lateral design for shear parallel to the grain of sill plate anchor bolts is permitted to be determined using the lateral design value for a bolt attaching a wood sill plate to concrete, as specified in AF&PA NDS Table 11E, provide the anchor bolts comply with all of the following:

- 1. The maximum anchor nominal diameter is 5/8 inches (16 mm);
- 2. Anchors are embedded into concrete a minimum of 7 inches (178 mm):
- 3. Anchors are located a minimum of 2.1/2 anchor diameters 1-3/4 inches (45 mm) from the edge of the concrete parallel to the length of the wood sill plate; and
- 4. Anchors are located a minimum of 15 anchor diameters from the edge of the concrete perpendicular to the length of the wood sill plate.

**Committee Reason:** This proposal revises the determination of anchor bolt capacity under Appendix D of ACI 318, in recognition that both lab tests and field experience show that failure of the wood sill plate controls the capacity. In these instances there is no need for laborious concrete strength calculations. The modification removes an exception that is no longer needed with the updates in the next edition of the ASCE 7 Standard. It also reformats the proposal as new Exception 3 and places the sill plate anchor details in new Section 2305.1.2. This also combines and addresses issues raised by code changes S170- 09/10 and S209 – 09/10.

## S168-09/10

Committee Action: Disapproved

**Committee Reason:** With the liberalization of concrete anchorage approved in S167–09/10 a significant portion of problems posed in light-frame construction has been addressed. There is concern about the proposed extrapolation of data from testing that is ongoing. When dealing with an edge distance of only a little over an inch and considering typical construction tolerances, some anchor bolts could be installed awfully close to the edge of the concrete. Approval could possibly conflict with some portions of S167-09/10. The proponent is encouraged to provide better justification in the public comment phase.

Assembly Action: None

S169-09/10

Committee Action: Disapproved

Committee Reason: The proposed requirement for patio cover slab/foundations does not address supporting soil conditions.

Assembly Action: None

S170-09/10

Committee Action: Disapproved

Committee Reason: Disapproval is consistent with committee's action on S167 – 09/10.

Assembly Action: None

S171-09/10

**Note:** The following analysis was not in the Code Change monograph but was published on the ICC website at <a href="http://www.iccsafe.org/cs/codes/Documents/2009-10cycle/ProposedChanges/Standards-Analysis.pdf">http://www.iccsafe.org/cs/codes/Documents/2009-10cycle/ProposedChanges/Standards-Analysis.pdf</a> :

**Analysis:** Review of proposed new standard TMS 403 indicated that, in the opinion of ICC Staff, the standard did not comply with ICC standards criteria, Section 3.6.3(1) Readily available.

PART I- IBC STRUCTURAL Committee Action:

Approved as Submitted

**Committee Reason:** The addition of TMS 403 as a referenced standard is valuable to the masonry industry. It will provide a prescriptive alternative to the empirical design method for masonry.

Assembly Action: None

PART II- IRC B/E Committee Action:

**Approved as Submitted** 

**Committee Rea son:** This is a much needed change. The proposed new standard provides a simplified method for the design of masonry construction. The new reference standard is not yet complete but is a consensus draft and must be ready by Final Action.

Assembly Action: None

S172-09/10

Committee Action: Approved as Submitted

**Committee Reason:** This proposal clarifies the required information on construction documents in order to provide flexibility for designers since the exact location of conduits, pipes and sleeves isn't always known.

S173-09/10

Committee Action: Approved as Submitted

Committee Reason: This code change removes Chapter 21 definitions that are no longer used in the code.

Assembly Action: None

S174-09/10

Committee Action: Approved as Submitted

**Committee Reason:** This proposal updates the definitions in Chapter 21 for consistency with the referenced material standard for masonry.

Assembly Action: None

S175-09/10

**Note:** The following analysis was not in the Code Change monograph but was published on the ICC website at <a href="http://www.iccsafe.org/cs/codes/Documents/2009-10cycle/ProposedChanges/Standards-Analysis.pdf">http://www.iccsafe.org/cs/codes/Documents/2009-10cycle/ProposedChanges/Standards-Analysis.pdf</a> :

**Analysis:** Review of proposed new standard ASTM C 1364 indicated that, in the opinion of ICC Staff, the standard complies with ICC standards criteria.

Committee Action: Approved as Submitted

**Committee Reason:** This code change adds a material standard for architectural cast stone, a product that is currently in use.

Assembly Action: None

S176-09/10

Committee Action: Disapproved

Committee Rea son: The proposed clarification regarding load combinations and masonry allowable stress increases is not needed.

Assembly Action: None

S177-09/10

Committee Action: Approved as Submitted

**Committee Reason:** This code change adds flexibility to the determination of lap splice length, allowing the MSJC requirement in addition to the IBC approach.

Assembly Action: None

S178-09/10

Committee Action: Disapproved

**Committee Reason:** Disapproval is consistent with action on S162 – 09/10.

## S179-09/10

Committee Action: Disapproved

**Committee Reason:** The proposed correlation of wind speed triggers with the updated provisions approved in code change S84-09/10 need to be consistent with the wind terminology.

Assembly Action: None

S180-09/10

Committee Action: Approved as Submitted

**Committee Reason:** This change in terminology for masonry chimneys brings consistency with the remainder of Chapter 21 as well as the IRC.

Assembly Action: None

S181-09/10

Committee Action: Approved as Submitted

Committee Reason: This proposal removes an unnecessary restriction on chimney fireblocking.

Assembly Action: None

S182-09/10

PART I- IBC STRUCTURAL Committee Action:

Committee Action: Approved as Submitted

**Committee Reason:** This code change provides needed requirements for chimney caps and rain caps.

Assembly Action: None

PART II- IRC B/E Committee Action:

Approved as Submitted

**Committee Reason:** This change adds new language to address chimney caps and rain caps. The added language is consistent with the reference standards for flue liners.

Assembly Action: None

S183-09/10

Committee Action: Approved as Submitted

**Committee Reason:** This proposal requires non water soluble refractor mortar for clay flue liners in order to reduce the possibility of washout from rain.

Assembly Action: None

S184-09/10

Committee Action: Approved as Modified

Modify the proposal as follows:

**2204.2.1 Anchor rods.** Anchor rods shall be set in accordance with the *construction documents*. The protrusion of the threaded ends through the connected material shall <u>fully</u> engage the threads of the nuts, but shall not be greater than the length of the threads on the bolts.

**Committee Reason:** This code change removes extraneous text for the provision for anchor rods. The modification retains the word "fully" so that the required thread protrusion will be clear.

Assembly Action: None

S185-09/10

Withdrawn by Proponent

S186-09/10

**Committee Action:** 

Approved as Modified

Modify the proposal as follows:

**2208.1 Storage racks.** The design, testing and utilization of industrial steel storage racks made of cold-formed or hot-rolled steel structural members, shall be in accordance with the RMI/ANSI MH 16.1. Where required by ASCE 7, the seismic design of storage racks shall be in accordance with the additional provisions of Section 15.5.3 of ASCE 7.

**Committee Reason:** This proposal will correlate the reference to the RMI rack standard with the earthquake load requirements of ASCE 7. The modification removes a word that would cause confusion.

Assembly Action: None

S187-09/10

Committee Action: Disapproved

Committee Reason: The proposal was disapproved at the request of the proponent while work continues on the next edition of the RMI Steel Rack Standard.

Assembly Action: None

S188-09/10

**Committee Action:** 

Approved as Submitted

None

**Committee Reason:** This code removes the ASCE 3 standard for composite slab construction. The standard is out of print and availability is a problem. There are also some concerns such as not addressing serviceability.

Assembly Action:

# S189-09/10

**Note:** The following analysis was not in the Code Change monograph but was published on the ICC website at <a href="http://www.iccsafe.org/cs/codes/Documents/2009-10cycle/ProposedChanges/Standards-Analysis.pdf">http://www.iccsafe.org/cs/codes/Documents/2009-10cycle/ProposedChanges/Standards-Analysis.pdf</a> :

**Analysis:** Review of proposed new standard AISI S110 indicated that, in the opinion of ICC Staff, the standard complies with ICC standards criteria.

Committee Action:

Approved as Modified

Modify the proposal as follows:

2209.3.1 AISI S110, Section D1. Modify Section D1 by revising to read as follows.

D1 Cold-Formed Steel Special Bolted Moment Frames (CFS-SBMF)

Cold-formed steel–special bolted moment frames (CFS-SBMF) systems shall withstand significant inelastic deformations through friction and bearing at their bolted connections. Beams, columns, and connections shall satisfy the requirements in this section. CFS-SBMF systems shall be limited to one-story structures, no greater than 35 feet in height, without column splices and satisfying the requirements in this section. The CFS-SBMF shall engage all columns supporting the roof or floor above. The single size beam and single size column with the same bolted moment connection detail shall be used for each frame. The frame ie to-shall be supported on a level floor or foundation.

2209.3.3 AISI S110, Section D1.2.1. Modify Section D1.2.1 by revising to read as follows. D1.2.1 Beam Limitations In addition to the requirements of Section D1.2.3, beams in CFS-SBMF systems shall be ASTM A653 galvanized 55 ksi (374 MPa) yield stress cold-formed steel C-sections members with lips, and designed in accordance with Chapter C of AISI S100. The beams shall have a minimum design thickness of 0.105 inches (2.67 mm). The beam depth shall be not less than 12 in (305 mm) or greater than 20 in (508 mm). The flat depth-to-thickness ratio of the web shall

not exceed 6.18 
$$\sqrt{E/F_{_{\mathrm{y}}}}$$
 .

#### **D1.2.1.1 Single C-Section Beam Limitations**

In addition to the requirements of Section D1.2.1, when single C-section beams are used, torsional effects shall be accounted for in the design.

2209.3.6 AISI S110, Section D1.5. Add a new Section D1.5 as follows.

#### **D1.5 Period Determination**

The fundamental period of the structure, T, in the direction under consideration shall be established in accordance with the applicable building code using the structural properties and deformational characteristics of the resisting elements in a properly substantiated analysis. Use of the approximate building period, T<sub>a</sub>, as an alternative fundamental period shall not be permitted.

(Portions of proposal not shown are unchanged)

**Committee Reason:** This proposal adds requirements for cold-formed steel special bolted moment frames by reference to AISI S110. The modification coordinates the AISI S110 modifications for consistency with the updated earthquake load provisions in ASCE 7.

Assembly Action: None

S190-09/10

Committee Action: Disapproved

Committee Reason: Adding the ACI 318 reference under the composite slab provision is inappropriate and would create a conflict with ACI 318.

Assembly Action: None

# S191-09/10

**Note:** The following analysis was not in the Code Change monograph but was published on the ICC website at <a href="http://www.iccsafe.org/cs/codes/Documents/2009-10cycle/ProposedChanges/Standards-Analysis.pdf">http://www.iccsafe.org/cs/codes/Documents/2009-10cycle/ProposedChanges/Standards-Analysis.pdf</a> :

**Analysis:** Review of proposed new standard SDI-C1.0 indicated that, in the opinion of ICC Staff, the standard complies with ICC standards criteria.

Committee Action: Disapproved

**Committee Reason:** The proposed reference standard, SDI-C1.0 is still in need of work. Questions have been raised on its treatment of serviceability and wheel loads. The need to exclude fiber reinforcement should be clarified.

Assembly Action: None

S192-09/10 Withdrawn by Proponent

S193-09/10

Committee Action: Approved as Submitted

Committee Reason: Consistent with the committee's action on \$188 - 09/10.

## S194-09/10

**Committee Action:** 

**Approved as Submitted** 

Committee Reason: This code change removes a modification of SDI -NC1.0 that is unnecessary.

**Assembly Action:** 

None

## S195-09/10

**Committee Action:** 

**Approved as Submitted** 

Committee Reason: This proposal relocates the definition of naturally durable wood to a more appropriate location in Chapter 2.

Assembly Action:

None

## S196-09/10

**Committee Action:** 

Approved as Submitted

**Committee Reason:** The added definitions of structural composite lumber types will clear up some confusion with their use. The definitions include some requirements and this should be corrected in the public comment phase.

**Assembly Action:** 

None

# S197-09/10

**Committee Action:** 

Disapproved

**Committee R eason:** The proposed definition of "post-frame building system" does not relate to any requirements in the code. It contains vague language and is more of a description than a definition.

**Assembly Action:** 

None

# S198-09/10

**Committee Action:** 

**Approved as Modified** 

#### Modify the proposal as follows:

**2303.1.1.2 End-jointed lumber.** Approved end-jointed lumber is permitted to be used interchangeably with solid-sawn members of the same species and grade. End-jointed lumber used in an assembly required elsewhere in this code to have a fire resistance rating shall have the designation "Heat Resistant Adhesive" or "HRA" included in its grade mark.

(Portions of the proposal not shown are unchanged)

**Committee Reason:** This code change clarifies requirements for sawn lumber by separating the requirements for a certificate of inspection and end-jointed lumber. It also provides an important clarification relating to grade marks. The modification removes extraneous wording from the proposal that is of no value.

**Assembly Action:** 

None

# S199-09/10

**Note:** The following analysis was not in the Code Change monograph but was published on the ICC website at <a href="http://www.iccsafe.org/cs/codes/Documents/2009-10cycle/ProposedChanges/Standards-Analysis.pdf">http://www.iccsafe.org/cs/codes/Documents/2009-10cycle/ProposedChanges/Standards-Analysis.pdf</a> :

**Analysis:** Review of proposed new standard APA PRP 210 indicated that, in the opinion of ICC Staff, the standard complies with ICC standards criteria.

PART I- IBC STRUCTURAL Committee Action:

Approved as Submitted

Committee Reason: It is important to update the code to include a new industry standard for performancerated wood siding.

Assembly Action: None

PART II- IRC B/E Committee Action:

**Approved as Submitted** 

**Committee Reason:** This change provides a new standard for wood structural panel siding. The change is consistent with the IBC.

Assembly Action: None

# S200-09/10

PART I- IBC STRUCTURAL Committee Action:

**Approved as Submitted** 

**Committee Reason:** This proposal adds terminology that coordinates the IBC with the wood structure panel product standards. A public comment is in order to include a definition of the new term "Performance Class".

Assembly Action: None

PART II- IRC B/E Committee Action:

**Approved as Submitted** 

**Committee Reason:** This change updates the code for identification requirements for wood structural panels to be consistent with the latest versions of DOC PS1 and DOC PS2. This change is consistent with the IBC.

Assembly Action: None

# S201-09/10

PART I- IBC STRUCTURAL Committee Action:

Disapproved

**Committee Reason:** The proposal is not editorial as the reason suggests. If accepted, it would no longer allow fire-retardant treated wood products that currently comply with the code. If there are problems, they would appear to accent the need for education. Acceptability should be defined by the products performance not the means or method of manufacture.

Assembly Action: None

PART II- IRC B/E Committee Action:

Disapproved

**Committee Reason:** The proposal would have the effect of being exclusionary. It would provide language that appears to eliminate some products in the market. This proposal would hinder development of new products.

Assembly Action: None

# S202-09/10

Committee Action: Disapproved

**Committee Reason:** Stating that other nailing patterns are permitted is not necessary, since one can always provide an analysis and gain approval of an alternative. Also pre-drilling holes is a standard practice in wood, but permitting pre-drilling without limits opens the door for potential abuse.

## S203-09/10

## **PART I- IBC STRUCTURAL**

**Committee Action:** 

#### **Approved as Submitted**

**Committee Reason:** This proposal adds clarity to the requirements for fasteners in fire-retardant treated wood by stating that the nuts and washers are treated in the same manner as the fastener.

Assembly Action: None

PART II- IRC B/E Committee Action:

**Approved as Submitted** 

**Committee Reason:** This change provides clarity that the nuts and washers are to be included. Also, the change adds a needed exception to allow plain carbon steel fasteners when borates are used in dry locations. This is consistent with the IBC.

Assembly Action: None

## S204-09/10

Committee Action: Disapproved

**Committee R eason:** No test data was presented that would support the proposal to allow mechanical galvanizing for wood screws and lag screws.

Assembly Action: None

# S205-09/10

Committee Action: Disapproved

**Committee Reason:** The need for this requirement for termite protection is unclear, since Section 2304.11.2.1 already covers wood within 18 inches of exposed earth.

Assembly Action: None

# S206-09/10

Committee Action: Disapproved

**Committee Reason:** Chapter 23 is not the appropriate place for a requirement to placard buildings. Generally labeling is not a good idea and this may not solve the purported problem. A fire department should generally be aware of hazards that are present. There is no explanation why this should apply to "pre-fabricated" trusses only.

Assembly Action: None

# S207-09/10

**Note:** The following analysis was not in the Code Change monograph but was published on the ICC website at <a href="http://www.iccsafe.org/cs/codes/Documents/2009-10cycle/ProposedChanges/Standards-Analysis.pdf">http://www.iccsafe.org/cs/codes/Documents/2009-10cycle/ProposedChanges/Standards-Analysis.pdf</a> :

**Analysis:** Review of proposed new standard ASTM D 7032 indicated that, in the opinion of ICC Staff, the standard complies with ICC standards criteria.

#### PART I- IBC STRUCTURAL

**Committee Action:** 

**Disapproved** 

**Committee Re ason:** Wood plastic composite materials are currently qualified by evaluation reports and including them in the code is not appropriate at this time. It is important to be able to verify design capacities. The proposed term, structural capacities, may not correlate with the proposed reference standard.

Assembly Action: None

PART II- IRC B/E Committee Action:

**Disapproved** 

**Committee Rea son:** The labeling requirements are unclear and present a problem for inspectors after installation. There are no directions for how to label and the location of the label. The labeling should be similar to sheathing that allows the inspector to visibly, easily and readily verify that the proper material is installed.

Assembly Action: None

S208-09/10

Committee Action: Approved as Modified

Modify the proposal as follows:

**2306.3 Wood-frame shear walls.** Wood-frame shear walls shall be designed and constructed in accordance with AF&PA SDPWS. Where panels are fastened to framing members with staples, requirements and limitations of AF&PA SDPWS shall be met and the allowable shear values set forth in Table 2306.3(1), 2306.3(2) or 2306.3(3) shall be permitted. The allowable shear values in Tables 2306.3(1) and 2306.3(2) are permitted to be increased 40 percent for wind design. <a href="Panels complying with ANSI/APA PRP-210 shall be permitted to use design values for Plywood Siding in the AF&PA SDPWS.">Panels complying with ANSI/APA PRP-210 shall be permitted to use design values for Plywood Siding in the AF&PA SDPWS.</a>

(Portions of proposal not shown are unchanged)

**Committee Re ason:** The primary design document for lateral load design of wood systems is the AF&PA SDPWS and the removal of duplicate IBC requirements will assure its use. This makes the remaining code requirements more apparent and easier to understand. The modification provides additional correlation based on the approval of S199 – 09/10.

Assembly Action: None

S209-09/10

Committee Action: Disapproved

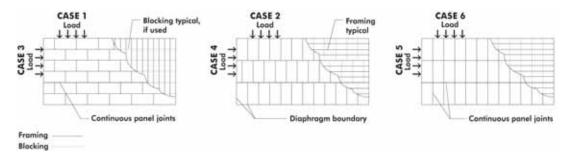
**Committee Reason:** Disapproved at the proponent's request because the modified version of S167 – 09/10 that was accepted has addressed sill plate anchorage.

Assembly Action: None

S210-09/10

Committee Action: Approved as Modified

Replace Table 2306.2.1(1) illustration with the following:



**Committee Reason:** This proposal provides clarification to the figures for diaphragm cases referred to in the allowable load table. The modification corrects an error in the original submittal.

### S211-09/10

#### **Committee Action:**

#### Approved as Modified

Modify the proposal as follows:

2308.3.2.2 Top plate connection. Where joists <u>and/</u>or rafters are used, braced wall line top plates shall be fastened to joists, rafters, <u>rimboards</u> or <u>full-depth</u> blocking above in accordance with Table 2304.9.1, Items 11, 12, 15 or 19 as applicable based on the orientation of the joists or rafters to the braced wall line. Blocking <u>at joists with walls above shall be a minimum of 2 inches (51 mm) nominal in thickness and <u>shall be</u> equal to the depth of the joist or rafter at the <u>braced</u> wall line <u>and shall be fastened to the braced wall line top plate as specified in Table 2304.9.1, Item 11. **Exception:** Blocking at rafters need not be full depth <u>when there are no braced wall lines above</u> but shall extend to within 2 inches (51 mm) from the <u>roof</u> sheathing above. <u>Blocking shall be a minimum of 2 inches (51 mm) nominal in thickness and shall be fastened to the braced wall line top plate as specified in Table 2304.9.1, Item 11.</u></u></u>

At exterior gable end walls braced wall panel sheathing in the top *story* shall be extended and fastened to roof framing where the spacing between parallel exterior braced wall lines is greater than 50 feet (15240 mm).

Where roof trusses are used and are installed perpendicular to an exterior braced wall line, lateral forces shall be transferred from the roof diaphragm to the braced wall by blocking of the ends of the trusses or by other approved methods providing equivalent lateral force transfer. Blocking shall be minimum 2 inch (51 mm) nominal thickness and equal to the depth of the truss at the wall line and shall be fastened to the braced wall line top plate as specified in Table 2304.9.1, Item 11

(Portions of proposal not shown are unchanged)

**Committee Reason:** This code change clarifies what's required for braced wall line connections by breaking out the requirements for top plate and bottom plate. This is often difficult to accommodate while addressing energy code and ventilation issues. There are unresolved issues with the 2 inch gap allowed at rafters, but it is considered acceptable. The modification cleans up the proposed wording and provides an acceptable starting point for getting these clarifications into the code.

Assembly Action:

None

# S212-09/10

**Committee Action:** 

Disapproved

**Committee Reason:** The proposed prescriptive requirements for braced wall panel top plate connections are not exactly like those in the IRC and there are different triggers. There were concerns expressed with the stability of the remote blocking option.

**Assembly Action:** 

None

S213-09/10

**Committee Action:** 

Disapproved

**Committee Rea son:** The proposal did not adequately justify reducing stud spacing from 28 to 24 inches. There may be some 28 inch applications currently that would be affected. The remainder of the proposal is acceptable but the proponent should consider an adjustment in a public comment.

**Assembly Action:** 

None

# S214-09/10

PART I- IBC STRUCTURAL

**Committee Action:** 

Disapproved

Committee Reason: The proposed revisions to cripple wall are poorly worded and would not make the code any clearer.

**Assembly Action:** 

None

PART II- IRC B/E

**Committee Action:** 

Disapproved

**Committee Rea son:** This proposal needs additional information to define "method to prevent studs from splitting". The added reference sections may create potential problems with other sections of the code in the previously approved RB105-09/10 and RB106-09/10.

Assembly Action: None

## S215-09/10

#### **Committee Action:**

#### **Approved as Submitted**

**Committee Reason:** This code change makes the required amount of wall bracing clearer and more rational by showing the requirement as a percentage of the wall length.

Assembly Action:

None

# S216-09/10

#### **Committee Action:**

#### Approved as Submitted

Committee Rea son: This proposal provides needed instructions on how to allow alternate wall bracing in buildings classified as Seismic Design Category D or E. It is consistent with the intent of the wall bracing provisions.

**Assembly Action:** 

None

# S217-09/10

**Committee Action:** 

Disapproved

**Committee Reason:** The code has a test standard and labeling requirement for safety glazing. If the glazing meets these code criteria, it should be permitted.

Assembly Action:

None

# S218-09/10

# PART I- IBC STRUCTURAL Committee Action:

Approved as Modified

#### Modify the proposal as follows:

**2406.4.2 Glazing adjacent doors**. Glazing in an individual fixed or operable panel adjacent to a door where the nearest vertical edge of the glazing is within a 24-inch (610 mm) arc of either vertical edge of the door in a closed position and where the bottom exposed edge of the glazing is less than 60 inches (1524 mm) above the walking surface\_shall be considered a hazardous location.

#### **Exceptions:**

- Decorative glazing.
- 2. When there is an intervening wall or other permanent barrier between the door and glazing.
- Where access through the door is to a closet or storage area 3 feet (914 mm) or less in depth. Glazing in this application shall comply with Section 2406.4.3.
- 4. Glazing in walls on the latch side of and perpendicular to the plane of the door in a closed position in one- and two-family *dwellings* or within *dwelling units* in Group R-2.
- 5. Glazing that is adjacent to the fixed panel of patio doors.

(Portions of the proposal not shown are unchanged)

**Committee Rea son:** This proposal provides a good reorganization of the hazardous locations for safety glazing. The modification removes an exception previously added to the IRC, but it is not appropriate for buildings that are constructed under the IBC.

**Assembly Action:** 

None

PART II- IRC B/E Committee Action:

Approved as Submitted

**Committee Reason:** This change provides clarity and re-organization. It improves the ease of use of the code by grouping the glazing adjacent to water requirement. The impact test tables may need to be revised to accommodate the renumber of sections.

Assembly Action: None

S219-09/10

PART I- IBC STRUCTURAL

**Committee Action:** 

**Approved as Submitted** 

Committee Reason: This code change clarifies the code requirements for safety glazing by making the higher performance category the default.

Assembly Action: None

PART II- IRC B/E Committee Action:

Approved as Submitted

**Committee Reason:** This is an appropriate change. This change makes the default to the higher standard and permits a lower one for specific applications.

Assembly Action: None

S220-09/10

Committee Action: Disapproved

**Committee Reason:** No technical justification was provided for the fastener and adhesive requirements that were proposed for installing mirrors.

Assembly Action: None

S221-09/10

Committee Action: Disapproved

**Committee Reason:** There may be problems in Section 2407.1.1 with the safety factor and which load applies, but this proposal needs better substantiation. Removing the phrase "panels and their support system" is not justified.

Assembly Action: None

S222-09/10

PART I- IBC STRUCTURAL

**Committee Action:** 

**Approved as Submitted** 

**Committee Reason:** This code change completes the update of the IBC to the consolidated material standard for gypsum wallboard.

Assembly Action: None

PART II- IRC B/E Committee Action:

**Approved as Submitted** 

**Committee Re ason:** This change adds the proper reference standard for gypsum lath. Also, reference standards that are no longer available are removed from this section as stated in the proponent's published reason.

S223-09/10

Committee Action: Disapproved

**Committee Reason:** The documentation provided in the proponent's reason indicated these gypsum backers are not appropriate in the IBC for shower areas.

Assembly Action: None

S224-09/10

PART I- IBC STRUCTURAL

Committee Action: Approved as Submitted

Committee Reason: This code change correlates the IBC reference to ASTM C 1325 with revisions made in the title of that standard.

Assembly Action: None

PART II- IRC B/E Committee Action:

Approved as Submitted

Committee Reason: The change corrects the terminology to be consistent with the referenced ASTM C 1325.

Assembly Action: None

S225-09/10

PART I- IBC STRUCTURAL Committee Action:

Approved as Modified

Modify the proposal as follows:

**2510.6 Water-resistive barriers**. Water-resistive barriers shall be installed as required in Section 1404.2 and, where applied over wood-based sheathing, shall include a water-resistive vapor-permeable barrier with a performance at least equivalent to two layers of Grade D paper. The individual layers shall be installed <u>independently</u> such that each layer is installed ship lapped fashion provides a separate continuous plane and any flashing (installed in accordance with Section 1405.4) intended to drain to the water-resistive barrier is directed between the layers.

**Exception:** Where the water-resistive barrier that is applied over wood-based sheathing has a water resistance equal to or greater than that of 60-minute Grade D paper and is separated from the stucco by an intervening, substantially nonwater-absorbing layer or drainage space.

**Committee Reason:** This proposal provides needed instruction for installation of water-resistive barriers. The modification further clarifies the installation of a two layer system.

Assembly Action: None

PART II- IRC B/E Committee Action:

Approved as Modified

Modify the proposal as follows:

R703.6.3 Water-resistive barriers. Water-resistive barriers shall be installed as required in Section R703.2 and, where applied over wood-based sheathing, shall include a water-resistive vapor-permeable barrier with a performance at least equivalent to two layers of Grade D paper. The individual layers shall be installed independently such that each layer is installed ship lapped fashion provides a separate continuous plane and any flashing (installed in accordance with Section R703.8) intended to drain to the water-resistive barrier is directed between the layers.

**Exception:** Where the water-resistive barrier that is applied over wood-based sheathing has a water resistance equal to or greater than that of 60 minute Grade D paper and is separated from the stucco by an intervening, substantially nonwater-absorbing layer or designed drainage space.

**Committee Reason:** This change clarifies and improves the directions for installation of the 2 layer system for the water-resistive barrier. This improvement will be a benefit to the building official and the builder. The modification clarifies that each layer is independent and removes the term "ship lapped fashion".

Assembly Action: None

## S226-09/10

This code change was contained in the errata posted on the ICC website. Please go to <a href="http://www.iccsafe.org/cs/codes/Pages/09-10ProposedChanges.aspx">http://www.iccsafe.org/cs/codes/Pages/09-10ProposedChanges.aspx</a>.

# PART I- IBC FIRE SAFETY Committee Action:

Approved as Modified

Modify the proposal as follows:

**1505.2 Class A roof assemblies.** Class A roof assemblies are those that are effective against severe fire test exposure. Class A roof assemblies and roof coverings shall be listed and identified as Class A by any approved testing agency. Class A roof assemblies shall be permitted for use in buildings or structures of all types of construction.

#### Excepti ons:

- Class A roof assemblies include those with coverings of brick, masonry and exposed concrete roof deck.
- Class A roof assemblies also include ferrous or copper shingles or sheets, metal sheets and shingles, clay or concrete roof tile, or slate installed on non-combustible decks or ferrous, copper or metal sheets installed without a roof deck on noncombustible framing.
- Class A roof assemblies include minimum 16 oz/ft<sup>2</sup> copper sheets installed over combustible decks.

**Committee Reason:** The committee agreed that copper sheets over combustible decking was appropriate for a prescribed class A roof assembly based on the testing submitted with the proposal. The modification includes the necessary minimum copper sheet specifications that are tied to the testing performed.

Assembly Action: None

## PART II- IRC B/E Committee Action:

Approved as Submitted

**Committee Reason:** Copper sheets installed on a combustible deck are Class A and was inadvertently omitted last code change cycle as stated in the proponent's published reason. This change brings this roof covering back into the code as Class A and exempt from testing.

Assembly Action: None

# S227-09/10

This code change was contained in the errata posted on the ICC website. Please go to <a href="http://www.iccsafe.org/cs/codes/Pages/09-10ProposedChanges.aspx">http://www.iccsafe.org/cs/codes/Pages/09-10ProposedChanges.aspx</a>.

**Note:** The following analysis was not in the Code Change monograph but was published on the ICC website at <a href="http://www.iccsafe.org/cs/codes/Documents/2009-10cycle/ProposedChanges/Standards-Analysis.pdf">http://www.iccsafe.org/cs/codes/Documents/2009-10cycle/ProposedChanges/Standards-Analysis.pdf</a>:

**Analysis:** Review of proposed new standard AMCA 540 indicated that, in the opinion of ICC Staff, the standard complies with ICC standards criteria.

Committee Action: Approved as Submitted

Committee Reason: This code change adds a needed impact standard for testing louvers.

Assembly Action: None

# S228-09/10

Withdrawn by Proponent

This code change was contained in the errata posted on the ICC website. Please go to <a href="http://www.iccsafe.org/cs/codes/Pages/09-10ProposedChanges.aspx">http://www.iccsafe.org/cs/codes/Pages/09-10ProposedChanges.aspx</a>.

# S229-09/10

This code change was contained in the errata posted on the ICC website. Please go to <a href="http://www.iccsafe.org/cs/codes/Pages/09-10ProposedChanges.aspx">http://www.iccsafe.org/cs/codes/Pages/09-10ProposedChanges.aspx</a>.

**Note:** The following analysis was not in the Code Change monograph but was published on the ICC website at <a href="http://www.iccsafe.org/cs/codes/Documents/2009-10cycle/ProposedChanges/Standards-Analysis.pdf">http://www.iccsafe.org/cs/codes/Documents/2009-10cycle/ProposedChanges/Standards-Analysis.pdf</a> :

**Analysis:** Review of proposed new standard SMA MH28.3 indicated that, in the opinion of ICC Staff, the standard did not comply with ICC standards criteria, Section 3.6.3(1) Readily available.

Committee Action: Disapproved

**Committee Reason:** The code change includes a definition of the term "industrial steel work platform" which is unclear and is more of a description. It also is included within a provision rather than being listed separately in a definitions section. The proposed reference standard does not appear to allow anything that's not already in the code.

Assembly Action:

None

S230-09/10

Withdrawn by Proponent

This code change was contained in the errata posted on the ICC website. Please go to <a href="http://www.iccsafe.org/cs/codes/Pages/09-10ProposedChanges.aspx">http://www.iccsafe.org/cs/codes/Pages/09-10ProposedChanges.aspx</a>.

# S231-09/10

This code change was contained in the errata posted on the ICC website. Please go to <a href="http://www.iccsafe.org/cs/codes/Pages/09-10ProposedChanges.aspx">http://www.iccsafe.org/cs/codes/Pages/09-10ProposedChanges.aspx</a>.

#### **Committee Action:**

#### **Approved as Submitted**

**Committee Reason:** This proposal updates the code requirements for composite steel and concrete structures and correlates their seismic design coefficients with the earthquake load requirements in the latest edition of the ASCE 7 standard.

**Assembly Action:** 

None

# S232-09/10

#### Withdrawn by Proponent

This code change was contained in the errata posted on the ICC website. Please go to <a href="http://www.iccsafe.org/cs/codes/Pages/09-10ProposedChanges.aspx">http://www.iccsafe.org/cs/codes/Pages/09-10ProposedChanges.aspx</a>.

# S233-09/10

This code change was contained in the errata posted on the ICC website. Please go to <a href="http://www.iccsafe.org/cs/codes/Pages/09-10ProposedChanges.aspx">http://www.iccsafe.org/cs/codes/Pages/09-10ProposedChanges.aspx</a>.

#### **Committee Action:**

#### **Approved as Submitted**

**Committee Reason:** This code change provides correlation with the seismic design requirements for structural steel in the latest edition of ASCE 7.

**Assembly Action:** 

None