

# INTERNATIONAL CODE COUNCIL

2021 – 2022 CODE DEVELOPMENT CYCLE Group A (2021)

2021 REPORT OF THE COMMITTEE ACTION HEARINGS ON THE 2021 EDITIONS OF THE GROUP A INTERNATIONAL CODES

HELD VIRTUALLY APRIL 11 – MAY 4, 2021

PUBLIC COMMENT DEADLINE: JULY 2, 2021



### INTERNATIONAL CODE COUNCIL 2021-2022 CODE DEVELOPMENT CYCLE

# 2021 REPORT OF THE COMMITTEE ACTION HEARING ON THE 2021 EDITIONS OF THE

INTERNATIONAL BUILDING CODE®

**Egress** 

Fire Safety

General

Structural (heard by IBC – FS or IBC – G)

INTERNATIONAL CODE COUNCIL PERFORMANCE 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®

Mechanical

**Plumbing** 

INTERNATIONAL SWIMMING POOL AND SPA CODE®
INTERNATIONAL WILDLAND AND URBAN INTERFACE CODE®
INTERNATIONAL ZONING CODE®

VIRTUAL COMMITTEE ACTION HEARINGS APRIL 11 – MAY 4, 2021

PUBLIC COMMENT DEADLINE: JULY 2, 2021



#### First Printing

Publication Date: May 2021

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### INTRODUCTION

This publication contains the 2021 Group A Report of the Committee Action Hearing (ROCAH) on the proposed revisions to the 2021 editions of the *International Building Code* (Egress, Fire Safety, General and Structural provisions (heard by either the Fire Safety or General committee)), 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 (Mechanical and Plumbing), International Swimming Pool and Spa Code and the International Wildland-Urban Interface Code. The hearing was held virtually, April 11 – May 4, 2021

This report includes the recommendation of the code development committee and the committee's reason on each proposed item and the committee's numerical vote. Where the committee 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 Where this report indicates "Withdrawn by Proponent" the proposed change was withdrawn by the proponent and is not subject to any further consideration. Note that total votes per code change for a given committee will vary based on committee members recusing themselves from voting, abstentions, or loss of connectivity of committee members participating virtually. For this cycle and future cycles, assembly consideration has been removed from the process.

Click here for the text of the original code change proposals.

#### **PUBLIC COMMENT DEADLINE JULY 2, 2021**

Persons who wish to recommend an action other than that taken at the Committee Action Hearing may submit a public comment in accordance with Section 6.0 of the CP28. The deadline for receipt of public comments is July 2, 2021. Public comments must be submitted online via cdpACCESS by 11:59 pm Pacific. Proposals, which receive a public comment, will be included on the Public Comment Hearing Agenda for Individual Consideration and voting by eligible voting members in accordance with Section 7.5 of CP28. Proposals, which do not receive a public comment will be included in the consent agenda and be voted with a motion to sustain the action taken at the Committee Action Hearing.

# SUBMIT PUBLIC COMMENTS ONLINE AT THE cdpACCESS WEBSITE: www.cdpACCESS.com

Please note: The word processing software utilized by cdpACCESS, for submittal of public comments, does not permit the use of the "cut and paste" feature from Word documents.

#### **ICC WEBSITE**

While great care has been exercised in the publication of this document, errata may occur. Errata will be posted on the <u>Current Code Development Cycle Website</u>.

#### MODIFICATIONS BY PUBLIC COMMENT

Section 6.4.4 of CP28 allows modifications to be proposed by a public comment to a code change proposal for consideration at the Public Comment Hearing. For the modification to be considered at the Public Comment Hearing, the public comment must request Approval as Modified with the specific modification included in the public comment. In accordance with Section 6.4.1, the modification must be within the scope of the original code change proposal, committee action or successful assembly action.

#### PUBLIC COMMENT HEARING CONSIDERATION

The Public Comment Hearing (PCH) will be held September 21 – 28, 2021 in Pittsburgh, PA (see the schedule on page iv). Note that the dates of the PCH have been revised from the original posting of the 2021/2022 ICC Code Development Schedule.

The items that will be on the PCH agenda for Individual Consideration and action are proposed changes that received a public comment (CP28 Section 6.0).

Following the Public Comment Hearings, the results of the Individual Consideration Agenda will be the basis for the Online Governmental Consensus Vote to determine the final action on these proposals (CP28 Section 8.0). The Online Governmental Consensus Vote is scheduled to start approximately two weeks after the conclusion of the Public Comment Hearings.

#### cdpACCESS UPDATE

#### Current 2021 Group A Cycle

Public comment submittal assistance will be provided on the <u>cdpACCESS webpage</u>. We will be posting video tutorials, which outline the navigation steps.

#### 2022 Group B Cycle

The deadline for Group B code change proposal submittals is January 10, 2022. When cdpACCESS is open for Group B submittals, a notice will be posted on our website. Be sure to consult the 2021/2022 ICC Code Development Schedule on page iv for the applicable codes and important scoping information. Note that the schedule has been updated to reflect the decision to remove the IECC from the 2022 Group B Cycle and update the IECC by utilizing ICC's Consensus Procedures for developing and updating standards.

ICC continues to receive feedback from users. Be sure to visit the "Support Options" on the <a href="mailto:cdpACCESS">cdpACCESS</a> webpage for more information.

# ELECTRONIC VOTER VALIDATION REMINDER (August 22, 2021 deadline)

Attention all Governmental Member Voting Representatives: If your Primary Representative has not validated your voting credentials for 2021, there's still time. The Electronic Voter Validation site is open and will remain available until August 22, 2021. If you wish to vote at the Pittsburgh, PA 2021 Annual Conference and Public Comment Hearings on September 21-28, 2021, or the Online Governmental Consensus Vote that follows the Public Comment Hearings, your voting credentials must be validated by August 21, 2021.

If your voting credentials have already been validated in the 2021 calendar year, you do **not** have to be revalidated. Not sure if your credentials are up to date? **Check your GMVRs' status online today!** 

#### CALL FOR ADOPTION INFORMATION

Please take a minute to visit the <u>International Code Adoptions</u> to update information as it relates to your jurisdiction.

#### **CODE CHANGE NUMBERS NOT USED**

Where the tentative order of discussion in the code change agenda indicates that a code change number is "Not Used", it was identified in the posted Committee Action Hearing Results as "NU" (e.g. FS13-21.....NU). The following is a list of code change number(s) not used and as such are not listed in this Report of the Committee Action Hearing: FS13-21.

### 2021/2022 ICC CODE DEVELOPMENT SCHEDULE

(Posted March 17, 2020)

(Updated December 1, 2020 - red)

### (Updated January 20, 2021- strikeout/underline)

(Updated May 24, 2021 - see Notes 1 & 2)

	DATE		
STEP IN CODE DEVELOPMENT CYCLE	2021 – Group A Codes (see pg. xi)  IBC- E, IBC - FS, IBC -G, IFC, IFGC,  IMC, IPC, IPMC, IPSDC, IRC – M,  IRC- P, ISPSC, IWUIC, IZC	2022 – Group B Codes (see pg. xi)  Admin, IBC-S, IEBC, IgCC (Ch. 1),  IRC – B  (see note 2)	
2021 EDITION OF I-CODES PUBLISHED	IMC and IPC are published. Remaining I-Codes in the Fall/2020 (See Group B Codes on page vi for the 2021 IgCC)		
DEADLINE FOR RECEIPT OF APPLICATIONS FOR ALL CODE COMMITTEES	June 1, 2020 for the 2021/2022 Cycle.  Call for Committee posted in March/2020.		
DEADLINE FOR cdpACCESS ONLINE RECEIPT OF CODE CHANGE PROPOSALS	January 11, 2021	January 10, 2022	
WEB POSTING OF "PROPOSED CHANGES TO THE I-CODES"	March 1, 2021*	February 23, 2022*	
COMMITTEE ACTION HEARING (CAH)	2021 CAH to be held virtually during the period of April 11 – May 5, 2021 See general notes	March 27 – April 6, 2022 Rochester Riverside Convention Center Rochester, NY	
ONLINE CAH ASSEMBLY FLOOR MOTION VOTE	Assembly consideration removed from process. See CP 28 dated 12/3/20;  Section 5.7 (see notes)	Assembly consideration removed from process. See CP 28 dated 12/3/20;  Section 5.7 (see notes)	
WEB POSTING OF "REPORT OF THE COMMITTEE ACTION HEARING"	May 24, 2021	May 9, 2022	
DEADLINE FOR cdpACCESS ONLINE RECEIPT OF PUBLIC COMMENTS	July 2, 2021	June 20, 2022	
WEB POSTING OF "PUBLIC COMMENT AGENDA"	August 13, 2021*	August 4, 2022*	
PUBLIC COMMENT HEARING (PCH)  ANNUAL CONFERENCE DATES  NOTED BY AC	September 21 –28, 2021 David L Lawrence Convention Center Pittsburgh, PA AC: September 19 – 22 (see note 1)	September 14 - 21, 2022 Kentucky International Convention Center Louisville, KY AC: September 11 - 14	

	DATE	
STEP IN CODE DEVELOPMENT CYCLE	2021 – Group A Codes (see pg. xi) IBC- E, IBC - FS, IBC -G, IFC, IFGC, IMC, IPC, IPMC, IPSDC, IRC – M, IRC- P, ISPSC, IWUIC, IZC	2022 – Group B Codes (see pg. xi) Admin, IBC-S, IEBC, IgCC (Ch. 1), IRC – B (see note 2)
ONLINE GOVERNMENTAL CONSENUS VOTE (OGCV)	Starts approx. two weeks after last day of the PCH. Open for 2 weeks.	Starts approx. two weeks after last day of the PCH. Open for 2 weeks.
WEB POSTING OF FINAL ACTION	Following Validation Committee certification of OGCV and ICC Board confirmation.	Following Validation Committee certification of OGCV and ICC Board confirmation.

<sup>\*</sup> Web posting of the "Proposed Changes to the I-Codes" and "Public Comment Agenda" will be posted no later than scheduled. ICC will make every effort to post these documents earlier, subject to code change/public comment volume and processing time.

2021/2022 Cycle notes referenced from the table:

Note 1: PCH dates revised from the original schedule dates of September 22 – 29 to September 21 – 28

Note 2: The 2022 Group B codes noted in the table reflect the Code Council Board of Directors decision to update the energy provisions of the 2021 International Energy Conservation Code and Chapter 11 of the International Residential Code by utilizing ICC's Consensus Procedures for developing and updating standards. Both codes will be published with the remaining I-Codes in the fall of 2023. Based on this new development, the CAH dates of March 27 – April 6 are subject to change.

SEE NEXT PAGE FOR IDENTIFICATION OF THE 2021 GROUP A & 2022 GROUP B CODES/CODE COMMITTEES AS WELL AS OTHER CODE DEVELOPMENT PROCESS NOTES.

#### 2021 Group A Codes/Code committees:

- IBC-E: IBC Egress provisions. Chapters 10 and 11.
- IBC-FS: IBC Fire Safety provisions. Chapters 7, 8, 9 (partial), 14 and 26. Majority of IBC Chapter 9 is maintained by the IFC. See notes.
- IBC-G: IBC General provisions. Chapters 3 6, 12, 13, 27 33.
- IFC: The majority of IFC Chapter 10 is maintained by IBC-E. See notes.
- IFGC
- IMC
- IPC
- IPMC: Code changes heard by the IPM/ZC (combined IPMC & IZC code committee)
- IPSDC (code changes heard by the IPC code committee)
- IRC-M: IRC Mechanical provisions. Chapters 12 23 (code changes heard by the IRC MP code committee)
- IRC-P: IRC Plumbing provisions. Chapters 25 33 (code changes heard by the IRC MP code committee)
- ISPSC
- IWUIC (code changes heard by the IFC code committee)
- IZC: Code changes heard by the IPM/ZC (combined IPMC & IZC code committee)

#### 2022 Group B Codes/Code committees:

- Admin: Chapter 1 of all the I-Codes except the IECC, IgCC and IRC. Also includes the update of currently referenced standards in all of the 2021 Codes, except the IgCC.
- IBC-S: IBC Structural provisions. IBC Chapters 15 25 and IEBC structural provisions. See notes.
- IEBC: IEBC Non-structural provisions. See notes.
- IgCC: Chapter 1 of the IgCC. Remainder of the code is based on the provisions of ASHRAE Standard 189.1 Standard for the Design of High-Performance Green Buildings, Except Low-Rise Residential Buildings. The 2021 IgCC is scheduled to be published in the Spring/2021.
- IRC-B: IRC Building provisions. Chapters 1 − 10.

#### Process Notes:

- **2021 Virtual CAH**: The 2021 CAH, originally scheduled for April 11 21, 2021 in Rochester, NY has been rescheduled to be held virtually. The hearings will be held in two consecutive tracks, with a break in between. The tentative schedule is as follows:
  - o Track 1: April 11 21, 2021: IBC E; IBC FS; IBC G; IPMC/IZC; ISPSC
  - o No Hearings: April 22 24
  - Track 2: April 25 May 5, 2021: IFC/IWUIC; IFGC; IMC; IPC/IPSDC; IRC M; IRC P

Definitive tracks, codes, order of codes and track end date(s) may change based on code change volume and the creation of the hearing schedule. This document as well as all other updates are posted on a dedicated <a href="webpage">webpage</a> to keep participants apprised of the virtual CAH progress/logistics. The webpage is also linked from the top of the <a href="2021/2022 Cycle">2021/2022 Cycle</a> webpage.

Be sure to consult updated <u>Council Policy 28</u> (12/3/20) for procedural revisions applicable to the 2021 Virtual CAH (noted in CP 28 section titles as "2021 virtual CAH only").

- Be sure to review the document entitled "2021/2022 Code Committee Responsibilities" which will be posted. This identifies responsibilities which are different than Group A and B codes and committees which may impact the applicable code change cycle and resulting code change deadline. As an example, throughout Chapter 9 of the IBC (IBC- Fire Safety), there are numerous sections which include the designation "[F]" which indicates that the provisions of the section are maintained by the IFC code committee. Similarly, there are numerous sections in the IEBC which include the designation "[BS]". These are structural provisions which will be heard by the IBC Structural committee. The designations in the code are identified in the Code Committee Responsibilities document.
- I-Code Chapter 1: Proposed changes to the provisions in Chapter 1 of the majority of the I-Codes are heard in Group B (see Admin above for exceptions). Be sure to review the brackets ([ ]) of the applicable code.
- Definitions. Be sure to review the brackets ([]) in Chapter 2 of the applicable code and the Code Committee Responsibilities document to determine which code committee will consider proposed changes to the definitions.
- Proposed changes to the ICC Performance Code will be heard by the code committee noted in brackets ([ ]) in the section of the code and in the Code Committee Responsibilities document



### **CP#28-05 – Code Development**

**Approved:** 09/24/05 | **Revised:** 12/03/20

#### 1.1 Introduction

- **1.2 Purpose of Council Policy:** 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).
- **1.3 Objectives:** The ICC Code Development Process has the following objectives:
  - **1.3.1** The timely evaluation and recognition of technological developments pertaining to construction regulations.
  - **1.3.2** The open discussion of code change proposals by all parties desiring to participate.
  - **1.3.3** The final determination of Code text by public officials actively engaged in the administration, formulation or enforcement of laws, ordinances, rules or regulations relating to the public health, safety and welfare and by honorary members.
  - **1.3.4** The increased participation of all parties desiring to participate through an online submittal and voting process that includes opportunities for online collaboration.
- **1.4 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.
  - 1.4.1 Code Correlation: The provisions of all Codes shall be consistent with one another so that conflicts between the Codes do not occur. A Code Scoping Coordination Matrix shall determine which Code shall be the primary document, and therefore which code development committee shall be responsible for maintenance of the code text where a given subject matter or code text could appear in more than one Code. The Code Scoping Coordination Matrix shall be administered by the Code Correlation Committee as approved by the ICC Board. 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 4.5.
- 1.5 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 Codes are developed embodies core principles of the organization. One of those principles is that the final content of the Codes is determined by a majority vote of the governmental and honorary members. It is the policy of the ICC Board that there shall be no change to this principle without the affirmation of two-thirds of the governmental and honorary members responding.
- **1.6** 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. The Secretariat shall have the authority to facilitate unforeseen situations which arise in the implementation of this council policy. Staff shall maintain a record of such actions.

1.7 Recording: Individuals requesting permission to record any meeting or hearing, or portion thereof, shall be required to provide the ICC with a release of responsibility disclaimer and shall acknowledge that ICC shall retain sole ownership of the recording, and that they have insurance coverage for liability and misuse of recording materials. Equipment and the process used to record 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 recording. An unedited copy of the recording shall be forwarded to ICC within 30 days of the meeting. Recordings shall not otherwise be copied, reproduced or distributed in any manner. Recordings shall be returned to ICC or destroyed upon the request of ICC.

#### 2.1 Code Development Cycle

- **2.2 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 the Final Action on the code change proposals (see Section 10.4).
- **2.3 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 previous edition.
- **2.4 Supplements:** The results of code development activity between editions may be published.
- 2.5 Interim Code Amendments: All revisions to the International Codes shall be processed in accordance with other sections of this Council Policy except for Emergency Actions by the ICC Board complying with Section 2.4.1 and Interim Critical Amendments (ICA) complying with Section 2.4.2.
  - **2.5.1** Emergency Actions by the ICC Board: Emergency actions by the ICC Board are limited to those issues representing an immediate threat to health and safety that warrant a more timely response than allowed by the Code Development Process schedule.
    - **2.5.1.1 Initial Request:** A request for an emergency action shall be based upon perceived immediate threats to health and safety and shall be reviewed by the Codes and Standards Council for referral to the ICC Board for action with their analysis and recommendation.
    - **2.5.1.2 Board and Member Action:** In the event that the ICC Board determines that an emergency amendment to any Code or supplement thereto 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 Governmental Member Voting 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.

#### 2.5.2 Interim Critical Amendments (ICA)

- **2.5.2.1 Submittal**. Anyone may propose an ICA by providing the following information:
  - a) Name of submitter
  - b) Contact information
  - c) Submitters representation
  - d) Date
  - e) Relevant section(s) and code edition(s) under consideration
  - f) Proposed modifications with text changes identified using underlines for new text and strikethroughs for deleted text
  - g) A statement that substantiates the need for proposed changes and why the proposed submission is of such a critical nature in accordance with Section 2.4.2.3 that it cannot be left to be addressed during the next code development cycle.
  - h) Written endorsement of the proposed ICA by not less than two members of the Code Development Committee(s) responsible for maintaining the affected code section(s)
- 2.5.2.2 Preliminary Review. An ICA will only be processed if the Codes and Standards Council determines that the proposed ICA appears to be of a critical nature requiring prompt action based on the criteria specified in Section 2.4.2.3. If processed, the question of critical nature shall be further considered by the responsible Code Development Committee(s) and the Codes and Standards Council. The text of a proposed ICA shall be processed as submitted or shall be changed with the approval of the submitter. The Codes and Standards Council shall process their preliminary "critical nature" determination within 45 days of the ICA submission.
- **2.5.2.3 Determination of Critical Nature.** Qualification for critical nature shall be based on one or more of the following factors:
  - a) The proposed ICA corrects an error or an omission that was overlooked during a regular code development process.
  - b) The proposed ICA resolves a conflict within an individual code or a conflict involving two or more ICC codes.
  - c) The proposed ICA mitigates a previously unknown hazard.

2.5.2.4 Code Development Committee. A proposed ICA that meets the provisions in Sections 2.4.2.2 and 2.4.2.3 shall be submitted to the Code Development Committee(s) responsible for the affected section(s) for a ballot and comment period of 30 calendar days. The committee(s) shall be separately balloted on both the technical merit of the ICA and whether the ICA satisfies the critical nature criteria. Negative votes in the initial ballot, if any, shall require a reason statement and shall be circulated to the full committee(s) to allow initial ballot votes to be changed.

A committee recommendation for approval shall require an affirmative vote of at least three-fourths of members who voted, on both technical merit and critical nature. The following shall be omitted from the three-fourths vote calculation:

- a) Committee members who have abstained.
- b) Committee members whose negative ballots do not include a statement conveying the reason for casting a negative vote.
- c) Committee members who do not return their ballots prior to the announced ballot return deadline.

In addition to the three-fourths majority described above, the number of affirmative votes shall be not less than 50% of all committee members who are eligible to vote. Committee members eligible to vote shall be the total number of individuals who are members of the committee on the date of ballot distribution and shall not be adjusted based on abstentions or ballots that were not returned.

ICAs that achieve the required number of affirmative votes on both technical merit and critical nature are approved for further processing in accordance with Sections 2.4.2.5 through 2.4.2.9. ICAs that do not achieve the required number of affirmative votes on both technical merit and critical nature are rejected.

- 2.5.2.5 Publication of Proposed ICA for Public Comment. An ICA that is approved in accordance with Section 2.4.2.4 shall be published by ICC in appropriate media with a notice inviting public comments on the proposed ICA. The public comment period shall be open for at least 30 calendar days from the date of posting of the notice. When a proposed ICA revises text that was changed in the most recent code development cycle, the ICA public comment notice shall also be directly provided to submitters of proposals and public comments to the affected section in the most recent code development cycle.
- 2.5.2.6 Additional Code Development Committee Review. All public comments shall be circulated to the responsible Code Development Committee(s) for a 30-calendar day ballot and comment period allowing an opportunity for committee members to change votes taken prior to the public comment period. If any votes are changed to negative, negative votes shall be circulated to the full committee, followed by a final ballot following the voting procedures Section 2.4.2.4.

Approved ICAs shall be forwarded to the Codes and Standards Council with a staff report that includes all public comments, ballots, committee member comments on ballots and concurrence by staff on which code editions should be affected by the ICA.

- 2.5.2.7 Action of the Codes and Standards Council. The Codes and Standards Council shall review the material submitted in accordance with Section 2.4.2.6 at the next Codes and Standards Council meeting. Approval of an ICA shall require an affirmative vote of at least two-thirds of the Codes and Standards Council members who cast a vote at the meeting.
- 2.5.2.8 Effective Date and Publication. ICAs that are approved by the Codes and Standards Council shall become effective 30 calendar days after approval, or in the case of an appeal in accordance with Section 2.4.2.9, 30 calendar days after a decision by the ICC Board upholding a Codes and Standards Council decision to issue an ICA.

An ICA shall apply to code editions specified by the ICC Codes and Standards Council, and ICC staff shall, by an appropriate method, publish approved ICAs and ensure that approved ICAs are distributed with future sales of affected codes. ICAs shall be distributed as a separate document and shall not be incorporated into the text of a published code until such time that the ICA has been approved by the full code development process, following submittal as a proposal in accordance with Section 2.4.2.11.

- 2.5.2.9 Appeals. A decision of the Codes and Standards Council to approve an ICA shall be appealable to the ICC Board in accordance with Council Policy 1.
- **2.5.2.10 Applicability.** ICAs shall not be considered retroactive requirements.
- **2.5.2.11 Subsequent Processing.** An approved ICA shall automatically become a code change proposal from the Codes and Standards Council in the following code cycle.
- **2.6 Code Development Record.** The code development record shall include the official documents and records developed in support of the given code development cycle. This includes the following:
  - 1. Code Change Agenda (Section 4.8)
  - 2. Audio and video recording of the Committee Action Hearing (Section 5.1)
  - 3. Report of the Committee Action Hearing (Section 5.8)
  - 4. Public Comment Agenda (Section 6.6)
  - 5. Public Comment Hearing results (Section 7.5.8.10)
  - 6. Audio and video recording of the Public Comment Hearing (Section 7.1)
  - 7. The Online Governmental Consensus Ballot (Section 8.2)
  - 8. Final Action results (Section 10.4)
  - 9. Errata to the documents noted above

The information resulting from online collaboration between interested parties shall not be part of the code development record.

#### 3.1 Submittal of Code Change Proposals

- **3.2 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.
- **3.3 Withdrawal of Proposal:** A code change proposal may be withdrawn by the proponent (WP) at any time prior to membership action on the consent agenda at the Public Comment Hearing or prior to testimony on the code change proposal on the individual consideration agenda at the Public Comment Hearing. All actions on the code change proposal shall cease immediately upon the withdrawal of the code change proposal.
- **3.4** 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:
  - **3.4.1 Proponent:** Each code change proposal shall include the name, title, mailing address, telephone number, and email address of the proponent. Email addresses shall be published with the code change proposals unless the proponent otherwise requests on the submittal form.
    - **3.4.1.1** If a group, organization or committee submits a code change proposal, an individual with prime responsibility shall be indicated.
    - **3.4.1.2** If a proponent submits a code change proposal on behalf of a client, group, organization or committee, the name and mailing address of the client, group, organization or committee shall be indicated.
  - **3.4.2 Code Reference:** Each code change proposal shall relate to the applicable code sections(s) in the latest edition of the Code.
    - **3.4.2.1** 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.
    - 3.4.2.2 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.
  - 3.4.3 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.
  - **3.4.4 Text Presentation:** The text of the code change 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.
    - 3.4.4.1 A charging statement shall indicate the referenced code

- section(s) and whether the code change proposal is intended to be an addition, a deletion or a revision to existing Code text.
- **3.4.4.2** Whenever practical, the existing wording of the text shall be preserved with only such deletions and additions as necessary to accomplish the desired change.
- **3.4.4.3** Each code change proposal shall be in proper code format and terminology.
- **3.4.4.4** Each code change proposal shall be complete and specific in the text to eliminate unnecessary confusion or misinterpretation.
- **3.4.4.5** The proposed text shall be in mandatory terms.
- **3.4.5 Supporting Information:** Each code change proposal shall include sufficient supporting information to indicate how the code change proposal is intended to affect the intent and application of the Code.
  - **3.4.5.1 Purpose:** The proponent shall clearly state the purpose of the code change proposal (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.)
  - **Reasons:** The proponent shall justify changing the current Code provisions, stating why the code change proposal is superior to the current provisions of the Code. Code change 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 code change proposals will improve the Code.
  - 3.4.5.3 Substantiation: The proponent shall substantiate the code change proposal 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 code change proposal may be identified as such. The proponent shall be notified that the code change 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. Supporting documentation may be provided via a link to a website provided by the proponent and included in the reason statement. The reason statement shall include the date the link was created. All substantiating material published by ICC is material that has been provided by the proponent and in so publishing ICC makes no representations or warranties about its quality or accuracy.
  - 3.4.5.4 Bibliography (2021 virtual CAH only): 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 proposal and the proponent shall submit the substantiating materials electronically to the appropriate ICC office. The substantiating information will be

posted on the ICC website. Supporting documentation may be provided via a link to a website provided by the proponent and included in the bibliography. The reason statement shall include the date the link was created.

- **3.4.5.4.1 Bibliography (2022 CAH and after):** 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 proposal and the proponent shall make the substantiating materials available for review at the appropriate ICC office and during the public hearing. Supporting documentation may be provided via a link to a website provided by the proponent and included in the bibliography. The reason statement shall include the date the link was created.
- **3.4.5.5 Copyright Release:** The proponent of code change proposals, floor modifications and public comments shall sign a copyright release developed and posted by ICC.
- **3.4.5.6 Cost Impact:** The proponent shall indicate one of the following regarding the cost impact of the code change proposal:
  - **3.4.5.6.1** The code change proposal will increase the cost of construction:
  - **3.4.5.6.2** The code change proposal will decrease the cost of construction; or
  - **3.4.5.6.3** The code change proposal will not increase or decrease the cost of construction.

The proponent shall submit information which substantiates such assertion. This information will be considered by the code development committee and will be included in the published code change proposal. Supporting documentation may be provided via a link to a website provided by the proponent and included in the cost substantiation statement. The cost substantiation statement shall include the date the link was created.

Any proposal submitted which does not include the requisite cost impact information shall be considered incomplete and shall not be processed.

- 3.5 Online Submittal: Each code change proposal and all substantiating information shall be submitted online at the website designated by ICC. Two copies of each proposed new referenced standard in hard copy or one copy in electronic form 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.
- **3.6 Submittal Deadline:** ICC shall establish and post the submittal deadline for each cycle. The posting of the deadline shall occur no later than 120 days prior to the code change deadline. Each code change proposal shall be submitted online at

the website designated by ICC by the posted deadline. The submitter of a code change proposal is responsible for the proper and timely receipt of all pertinent materials by the Secretariat.

**3.7** 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:

#### 3.7.1 Code References:

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

#### 3.7.2 Standard Content:

- **3.7.2.1** A standard or portions of a standard intended to be enforced shall be written in mandatory language.
- **3.7.2.2** The standard shall be appropriate for the subject covered.
- **3.7.2.3** All terms shall be defined when they deviate from an ordinarily accepted meaning or a dictionary definition.
- 3.7.2.4 The scope or application of a standard shall be clearly described.
- **3.7.2.5** The standard shall not have the effect of requiring proprietary materials.
- **3.7.2.6** The standard shall not prescribe a proprietary agency for quality control or testing.
- **3.7.2.7** The test standard shall describe, in detail, preparation of the test sample, sample selection or both.
- 3.7.2.8 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.
- **3.7.2.9** The measure of performance for which the test is conducted shall be clearly defined in either the test standard or in Code text.
- **3.7.2.10** The standard shall not state that its provisions shall govern whenever the referenced standard is in conflict with the requirements of the referencing Code.
- **3.7.2.11** The preface to the standard shall announce that the standard is promulgated according to a consensus procedure.

#### 3.7.3 Standard Promulgation:

- 3.7.3.1 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 standard shall comply with this section.
  - **3.7.3.1.1 Proposed New Standards.** 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. If the proposed new standard is not submitted in at least consensus draft form, the code change proposal shall be considered incomplete and shall not be processed. The code change proposal shall be considered at

the Committee Action Hearing by the applicable code development committee responsible for the corresponding proposed changes to the code text. If the committee action at the Committee Action Hearing is either As Submitted or As Modified and the standard is not completed, the code change proposal shall automatically be placed on the Public Comment Agenda with the recommendation stating that in order for the public comment to be considered, the new standard shall be completed and readily available prior to the Public Comment Hearing. If the committee action at the Committee Action Hearing is Disapproval, further consideration on the Public Comment Agenda shall include a recommendation stating that in order for the public comment to be considered, the new standard shall be completed and readily available prior to the Public Comment Hearing.

3.7.3.1.2 Update of Existing Standards. Code change proposals which include technical revisions to the code text to coordinate with a proposed update of an existing referenced standard shall include the submission of the proposed update to the standard in at least a consensus draft form in accordance with Section 3.4. If the proposed update of the existing standard is not submitted in at least consensus draft form, the code change proposal shall be considered incomplete and shall not be processed. The code change proposal, including the update of the existing referenced standard, shall be considered at the Committee Action Hearing by the applicable code development committee responsible for the corresponding changes to the code text. If the committee action at the Committee Action Hearing is either As Submitted or As Modified and the updated standard is not completed, the code change proposal shall automatically be placed on the Public Comment Agenda with the recommendation stating that in order for the public comment to be considered, the updated standard shall be completed and readily available prior to the Public Comment Hearing. If the committee action at the Committee Action Hearing is Disapproval, further consideration on the Public Comment Agenda shall include a recommendation stating that in order for the public comment to be considered, the updated standard shall be completed and readily available prior to the Public Comment Hearing.

Updating of standards without corresponding code text changes shall be accomplished administratively in accordance with Section 4.6.

**3.7.3.2** The standard shall be developed and maintained through a consensus process such as ASTM or ANSI.

#### 4.1 Processing of Code Change Proposals

**4.2 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 code change proposal accurately reflects that proponent's intent.

- 4.3 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 and the Code Scoping Coordination Matrix (see Section 1.3.1).
- Incomplete Code Change 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 code change 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 code change proposal that incorporates a new referenced standard shall be processed with an analysis of the referenced standard's compliance with the criteria set forth in Section 3.6.
- 4.5 Editorial Code Change Proposals. When a code change proposal is submitted that proposes an editorial or format change that, in the opinion of the Secretariat, does not affect the scope or application of the code, the proposal shall be submitted to the Code Correlation Committee who shall deem the code change proposal as editorial or send the proposal back to the Secretariat to be considered by the appropriate code development committee. To be deemed editorial, such proposal shall require a majority vote of the Code Correlation Committee. Editorial proposals shall be published in the Code Change Agenda. Such proposals shall be added to the hearing agenda for consideration by the appropriate code development committee upon written request to ICC by any individual. The deadline to submit such requests shall be 14 days prior to the first day of the Committee Action Hearing. Code Correlation Committee proposals that are not added to a code development committee hearing agenda shall be published in the next edition of the code with no further consideration.
- 4.6 Copy Editing Code Text: The Chief Executive Officer shall have the authority at all times to make editorial style and format changes to the Code text, or any approved changes, consistent with the intent, provisions and style of the Code. Such editorial style or format changes shall not affect the scope or application of the Code requirements.
- 4.7 Updating Standards Referenced in the Codes: Standards referenced by the Codes that do not require coordination with a code change proposal to the code text shall be updated 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 of the third year of each code cycle. The published version of the new edition of the Code which references the standard will refer to the updated edition of the standard. If the standard is not available by the December 1st 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.

- 4.6.1 Updating ICC Standards Referenced in the Codes. All standards developed by ICC and referenced by the Codes which are undergoing an update shall be announced by ICC to allow stakeholders to participate in the update process. Where the updated standard is completed and available by December 1 of the third year of the code cycle, the published version of the new edition of the Code which references the standard shall refer to the updated edition of the standard. If the standard is not available by the December 1<sup>st</sup> 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.
- **4.8 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.
- 4.9 Code Change Agenda: All code change proposals shall be posted on the ICC website at least 30 days prior to the Committee Action Hearing on those proposals and shall constitute the agenda for the Committee Action Hearing. Any errata to the Code Change Agenda shall be posted on the ICC website as soon as possible. Code change proposals which have not been published in the original posting or subsequent errata shall not be considered.

#### 5.1 Committee Action Hearing

- **5.2 Intent:** The intent of the Committee Action 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 code change proposals.
- **5.3 Committee:** The Codes and Standards Council shall review all applications and make committee appointment recommendations to the ICC Board. The Code Development Committees shall be appointed by the ICC Board.
  - **5.3.1 Chairman/Moderator:** The Chairman and Vice-Chairman shall be appointed by the Codes and Standards Council from the appointed members of the committee. The ICC President shall appoint one or more Moderators who shall act as presiding officer for the Committee Action Hearing.
  - 5.3.2 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 or any committee vote on the matter in which they have an undisclosed interest. A committee member who is a proponent of a code change 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.
  - **5.3.3 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.

- **5.3.4 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.
- **5.4 Date and Location:** The date and location of the Committee Action Hearing shall be announced not less than 60 days prior to the date of the hearing.
- **5.5 General Procedures:** *The Robert's Rules of Order* shall be the formal procedure for the conduct of the Committee Action 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.
  - **5.5.1 Chair Voting:** The Chairman of the committee shall vote only when the vote cast will break a tie vote of the committee.
  - **5.5.2 Open Hearing:** The Committee Action Hearing is an open hearing. Any interested person may attend and participate in the floor discussion. Only code development committee members may participate in the committee action portion of the hearings (see Section 5.6). Participants shall not advocate a position on specific code change proposals with committee members other than through the methods provided in this policy.
  - 5.5.3 Presentation of Material at the Public Hearing (2021 virtual CAH only): Information to be provided at the hearing shall be limited to verbal presentations and modifications submitted in accordance with Section 5.5.2. Each individual presenting information at the hearing shall state their name and affiliation, and shall identify any entities or individuals they are representing in connection with their testimony. Audio-visual presentations are not permitted. Substantiating material submitted in accordance with Section 3.3.5.3 and other material submitted in response to a code change proposal shall be submitted electronically to the appropriate ICC office. The material will be posted on the ICC website..
    - **5.4.3.1 Presentation of Material at the Public Hearing (2022 CAH and after):** Information to be provided at the hearing shall be limited to verbal presentations and modifications submitted in accordance with Section 5.5.2. Each individual presenting information at the hearing shall state their name and affiliation, and shall identify any entities or individuals they are representing in connection with their testimony. Audio-visual presentations are not permitted. Substantiating material submitted in accordance with Section 3.3.5.3 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.
  - 5.5.4 Agenda Order: The Secretariat shall publish a Code Change Agenda for the Committee Action 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 code change 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.

- **Proponent Approval (2021 virtual CAH only):** A motion to revise the agenda order is considered in order unless the proponent(s) of the moved code change proposals are participating in the virtual hearing and object to the move. Where such objections are raised, the motion to revise the hearing order shall be ruled out of order by the Moderator. The ruling of the Moderator shall be final and not subject to a point of order in accordance with Section 5.4.8. The motion to change the hearing order is not debatable.
- 5.5.4.2 Proponent Approval (2022 CAH and after): A motion to revise the agenda order is considered in order unless the proponent(s) of the moved code change proposals are in attendance in the hearing room and object to the move. Where such objections are raised, the motion to revise the hearing order shall be ruled out of order by the Moderator. The ruling of the Moderator shall be final and not subject to a point of order in accordance with Section 5.4.8. The motion to change the hearing order is not debatable.
- **5.5.4.3** Revised Agenda Order Approved (2021 virtual CAH only): If the motion to revise the agenda order is not ruled out of order, the Moderator shall declare the motion approved.
- **5.5.4.4** Revised Agenda Order Approved (2022 CAH and after): A motion to revise the agenda order is subject to a 2/3 vote of those present.
- 5.5.5 Tabling (2021 virtual CAH only): Tabling of code change proposals shall be permitted. The motion to table is considered in order unless the proponent(s) of the tabled code change proposals are participating in the virtual hearing and object to the tabling. Where such objections are raised, the motion to table shall be ruled out of order by the Moderator. The ruling of the Moderator shall be final and not subject to a point of order in accordance with Section 5.4.8. The motion to table is not debatable.

The motion to table must identify one of the following as to the location in the agenda when or where the code change proposal(s) will be considered:

- To a specific date and time within the timeframe of the Code Change Agenda for the code change proposals under consideration, or
- 2. To a specific location in the Code Change Agenda for the code change proposals under consideration.
- **Tabling (2022 CAH and after):** Tabling of code change proposals shall be permitted. The motion to table is considered in order unless the proponent(s) of the tabled code change proposals are in attendance at the hearing and object to the tabling. Where such objections are raised, the motion to table shall be ruled out of order by the Moderator. The ruling of the Moderator shall be final and not subject to a point of order in accordance with Section 5.4.8. The motion to table is not debatable.

The motion to table must identify one of the following as to the location in the agenda when or where the code change proposal(s) will be considered:

- To a specific date and time within the timeframe of the Code Change Agenda for the code change proposals under consideration, or
- 2. To a specific location in the Code Change Agenda for the code change proposals under consideration.
- **Tabling approved (2021 virtual CAH only):** If the motion to table is not ruled out of order, the Moderator shall declare the motion approved.
- **Tabling approved (2022 CAH and after):** A motion to table is subject to a 2/3 vote of those present.
- **Tabled code change proposals back to the floor:** The Moderator shall bring the tabled code change proposal(s) back to the floor at the applicable time/agenda location in accordance with Section 5.4.5 Items 1 or 2. The testimony on the code change proposal shall resume at the point in the process where the tabling occurred.
- **5.5.6 Reconsideration:** There shall be no reconsideration of a code change proposal after it has been voted on by the committee in accordance with Section 5.6.
- 5.5.7 Time Limits: Time limits shall be established as part of the agenda for testimony on all code change proposals at the beginning of each hearing session. Each person requesting to testify on a code change proposal 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.
  - **5.5.7.1 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.
  - **5.5.7.2 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.
- **5.5.8** Points of Order (2021 virtual CAH): Any person participating in the public hearing may challenge a procedural ruling of the Moderator or the Chairman. The decision on such challenges shall be determined by a vote of the committee, which requires a majority vote.

- **5.5.8.1** Points of Order (2022 CAH and after): Any person participating in the public hearing may challenge a procedural ruling of the Moderator or the Chairman. A majority vote of ICC Members in attendance shall determine the decision.
- **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:

#### 5.6.1 Discussion Order:

- 1. Proponents. The Moderator shall begin by asking the proponent and then others in support of the code change proposal for their comments.
- 2. Opponents. After discussion by those in support of a code change 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. Re-rebuttal in opposition. Opponents shall then have the opportunity to respond to the proponent's rebuttal.
- **5.6.2 Modifications:** Modifications to code change proposals may be suggested from the floor by any person participating in the public hearing. The person proposing the modification, or his/her designee, is deemed to be the proponent of the modification.
  - **Submission.** All modifications shall be submitted electronically to the ICC Secretariat in a format determined by ICC unless determined by the Chairman to be either editorial or minor in nature. The modification will be forwarded electronically to the members of the code development committee during the hearing and will be projected on the screen in the hearing room.
  - **5.6.2.2 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. changes the scope of the original code change proposal; or
    - 2. is not readily understood to allow a proper assessment of its impact on the original code change 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 5.4.8.

- **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.
- **5.7 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.

- **5.8** [Deleted as part of November 2, 2020 Revision]
- **5.9** Report of the Committee Action Hearing: The results of the Committee Action Hearing, including committee action and reason, shall be posted on the ICC website not less than 60 days prior to the Public Comment Hearing, except as approved by the ICC Board.

#### 6.1 Public Comments

- 6.2 Intent: The public comment process gives attendees at the Public Comment Hearing an opportunity to consider specific objections to the results of the Committee Action Hearing and more thoughtfully prepare for the discussion for public comment consideration. The public comment process expedites the Public Comment Hearing by limiting the items discussed to consideration of items for which a public comment has been submitted.
- **6.3 Deadline:** The deadline for receipt of a public comment to the results of the Committee Action Hearing\_shall be announced at the Committee Action Hearing but shall not be less than 30 days subsequent to the availability of the Report of the Committee Action Hearing (see Section 5.8).
- 6.4 Withdrawal of Public Comment: A public comment may be withdrawn by the public commenter at any time prior to public comment consideration of that comment. A withdrawn public comment shall not be subject to public comment 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 7.5.5, 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 7.5.5, the proposal shall continue as part of the individual consideration agenda in accordance with Section 7.5.6, however the public comment shall not be subject

to public comment consideration.

- **6.5 Form and Content of Public Comments:** Any interested person, persons, or group may submit a public comment to the results of the Committee Action 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:
  - **6.5.1 Public comment:** Each public comment shall include the name, title, mailing address, telephone number and email address of the public commenter. Email addresses shall be published with the public comments unless the commenter otherwise requests on the submittal form.

If a 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 or committee action. Public comments which are determined as not within the scope of 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. A copyright release in accordance with Section 3.3.5.5 shall be provided with the public comment.

- **6.5.2 Code Reference:** Each public comment shall include the code change proposal number.
- **6.5.3 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.
- **6.5.4 Desired Final Action:** In order for a public comment to be considered, 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 by the committee modification published in the Report of the Committee Action Hearing (AM) or published in a public comment in the Public Comment Agenda (AMPC), or
  - 3. Disapprove the code change proposal (D)
- **6.5.5 Supporting Information:** The public comment shall include 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 6.5 and determined as not germane to the technical issues addressed in the code change proposal or committee

action may 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 Public Comment Hearing. Supporting documentation may be provided via a link to a website provided by the public commenter and included in the reason statement and bibliography. The reason statement shall include the date the link was created. All substantiating material published by ICC is material that has been provided by the proponent and in so publishing ICC makes no representations or warranties about its quality or accuracy.

- **6.5.6 Cost Impact:** The proponent of the public comment shall indicate one of the following regarding the cost impact of the public comment to the code change proposal:
  - 1) The net effect of the public comment and code change proposal will increase the cost of construction;
  - The net effect of the public comment and code change proposal will decrease the cost of construction; or
  - 3) The net effect of the public comment and code change proposal will not increase or decrease the cost of construction.

The public commenter shall submit information which substantiates such assertion. This information will be considered at the Public Comment Hearing and will be included in the published public comment. Supporting documentation may be provided via a link to a website provided by the public commenter and included in the cost substantiation statement. The cost substantiation statement shall include the date the link was created.

Any public comment submitted which does not include the requisite cost impact information shall be considered incomplete and shall not be processed.

- **6.5.7 Online submittal:** Each public comment and substantiating information shall be submitted online at the website designated by ICC. Additional copies may be requested when determined necessary by the Secretariat.
- 6.5.8 Submittal Deadline: ICC shall establish and post the submittal deadline for each cycle. The posting of the deadline shall occur no later than 120 days prior to the public comment deadline. Each public comment shall be submitted online at the website designated by ICC by the posted deadline. The submitter of a public comment is responsible for the proper and timely receipt of all pertinent materials by the Secretariat.
- **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).
  - **6.6.1 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.
- **6.6.2 Duplications**: On receipt of duplicate or parallel public comments, the Secretariat may consolidate such public comments for public comment consideration. Each public commenter shall be notified of this action when it occurs.
- 6.6.3 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 public comment consideration. This deadline shall not apply to public comments submitted by the Code Correlation Committee. In order to correlate submitted public comments with action taken at the Committee Action Hearing on code change proposals that did receive a public comment, the Code Correlation Committee, in conjunction with staff processing of public comments, shall review the submitted public comments and submit the necessary public comments in order to facilitate the coordination of code change proposals. Such review and submittal shall not delay the posting of the Public Comment Agenda as required in Section 6.6.
- 6.7 Public Comment Agenda: The Committee Action Hearing results on code change proposals that have not received a public comment and code change proposals which received public comments shall constitute the Public Comment Agenda. The Public Comment Agenda shall be posted on the ICC website at least 30 days prior the Public Comment Hearing. Any errata to the Public Comment Agenda shall be posted on the ICC website as soon as possible. Code change proposals and public comments which have not been published in the original posting or subsequent errata shall not be considered.

#### 7.1 Public Comment Hearing

- **7.2 Intent:** The Public Comment Hearing is the first of two steps to make a final determination on all code change proposals which have been considered in a code development cycle by a vote cast by eligible voters (see Section 9.0). The second step, which follows the Public Comment Hearing, is the Online Governmental Consensus Vote that is conducted in accordance with Section 8.0.
- **7.3 Date and Location:** The date and location of the Public Comment Hearing shall be announced not less than 60 days prior to the date of the hearing.
- **7.4 Moderator:** The ICC President shall appoint one or more Moderators who shall act as presiding officer for the Public Comment Hearing.
- **7.5 Public Comment Agenda:** The Public Comment Consent Agenda shall be comprised of code change proposals which have not received a public comment. The agenda for public testimony and individual consideration shall be comprised of proposals which have a public comment (see Section 6.1).
- **7.6 Procedure:** The Robert's Rules of Order shall be the formal procedure for the conduct of the Public Comment Hearing except as these Rules of Procedure may otherwise dictate.

- **7.6.1 Open Hearing:** The Public Comment Hearing is an open hearing. Any interested person may attend and participate in the floor discussion.
- 7.6.2 Agenda Order: The Secretariat shall publish a Public Comment Agenda for the Public Comment Hearing, placing individual code change proposals and public comments in a logical order to facilitate the hearing. The proponents or opponents of any code change 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.
  - **7.6.2.1 Proponent Approval**: A motion to revise the agenda order is considered in order unless the proponent(s) of the moved code change proposals are in attendance at the hearing and object to the move. Where such objections are raised, the motion to revise the hearing order shall be ruled out of order by the Moderator. The ruling of the Moderator shall be final and not subject to a point of order in accordance with Section 5.4.8. The motion to change the hearing order is not debatable.
  - **7.6.2.2 Revised Agenda Order Approved:** A motion to revise the agenda order is subject to a 2/3 vote of those present.
- **7.6.3 Tabling:** Tabling of code change proposals shall be permitted. The motion to table is considered in order unless the proponent(s) of the tabled code change proposals are in attendance at the hearing and object to the tabling. Where such objections are raised, the motion to table shall be ruled out of order by the Moderator. The ruling of the Moderator shall be final and not subject to a point of order in accordance with Section 5.4.8. The motion to table is not debatable.

The motion to table must identify one of the following as to the location in the agenda when or where the code change proposal(s) will be considered:

- To a specific date and time within the timeframe of the Public Comment Agenda for the code change proposals under consideration, or
- 2. To a specific location in the Public Comment Agenda for the code change proposals under consideration.
- **7.6.3.1 Tabling approved:** A motion to table is subject to a 2/3 vote of those present.
- **7.6.3.2 Tabled code change proposals back to the floor:** The Moderator shall bring the tabled code change proposal(s) back to the floor at the applicable time/agenda location in accordance with Section 7.5.3 Items 1 or 2. The testimony on the code change proposal shall resume at the point in the process where the tabling occurred.
- 7.6.4 Presentation of Material at the Public Comment Hearing: Information to be provided at the hearing shall be limited to verbal presentations. Each individual presenting information at the hearing shall state their name and affiliation, and shall identify any entities or individuals they are representing in connection with their testimony. Audio-visual presentations are not permitted. Substantiating material submitted in accordance with Section

- 6.4.5 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.
- 7.6.5 Public Comment Consent Agenda: The Public Comment Consent Agenda (see Section 7.4) shall be placed before the assembly with a single motion for Final Action in accordance with the results of the Committee Action 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. This action shall not be subject to the Online Governmental Consensus Vote following the Public Comment Hearing (see Section 8.0).
- **7.6.6 Public Comment Individual Consideration Agenda:** Upon completion of the Public Comment Consent Agenda vote, all code change proposals not on the Public Comment Consent Agenda shall be placed before the assembly for individual consideration of each item (see Section 7.4).
- **7.6.7 Reconsideration:** There shall be no reconsideration of a code change proposal after it has been voted on in accordance with Section 7.5.9.
- 7.6.8 Time Limits: Time limits shall be established as part of the agenda for testimony on all code change proposals at the beginning of each hearing session. Each person requesting to testify on a code change proposal 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.
  - **7.6.8.1 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.
- **7.6.9 Discussion and Voting:** Discussion and voting on code change proposals being individually considered shall be in accordance with the following procedures and the voting majorities in Section 7.6:
  - **7.6.9.1 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.
  - **7.6.9.2 Points of Order:** Any person participating in the public hearing may challenge a procedural ruling of the Moderator. A majority vote of ICC Members in attendance shall determine the decision.
  - **7.6.9.3** Eligible voters: Voting shall be limited to eligible voters in accordance with Section 9.0.

- 7.6.9.4 Allowable Final Action Motions: The only allowable motions for Final Action are Approval as Submitted (AS), Approval as Modified by the committee (AM) or by one or more modifications published in the Public Comment Agenda (AMPC), and Disapproval (D).
- **7.6.9.5 Initial Motion:** The code development committee action shall be the initial motion considered.
- 7.6.9.6 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 Public Comment Agenda may be made (see Section 6.4.4). 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.
- 7.6.9.7 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. The vote on the main motion shall be taken electronically with the vote recorded and each vote assigned to the eligible voting member. In the event the electronic voting system is determined not to be used by ICC, a hand/standing count will be taken by the Moderator. If the motion fails to receive the majority required in Section 7.6, the Moderator shall ask for a new motion.
- 7.6.9.8 Subsequent Motion: If the initial motion is unsuccessful, a motion for either Approval as Submitted or Approval as Modified by one or more published modifications is in order. A motion for Disapproval is not in order. The vote on the main motion shall be taken electronically with the vote recorded and each vote assigned to the eligible voting member. In the event the electronic voting system is determined not to be used by ICC, a hand/standing count will be taken by the Moderator. If a successful vote is not achieved, Section 7.5.9.9 shall apply.
- 7.6.9.9 Failure to Achieve Majority Vote at the Public Comment Hearing. In the event that a code change proposal does not receive any of the required majorities in Section 7.6, the results of the Public Comment Hearing for the code change proposal in question shall be Disapproval. The vote count that will be reported as the Public Comment Hearing result will be the vote count on the main motion in accordance with Section 7.5.9.7.
- 7.6.9.10 Public Comment Hearing Results: The result and vote count on each code change proposal considered at the Public Comment Hearing shall be announced at the hearing. In the event the electronic voting system is not utilized and a hand/standing count is taken in accordance with Sections 7.5.9.7 and 7.5.9.8, the vote count will not be announced if an individual standing vote count is not taken. The results shall be posted and included in the Online Governmental Consensus

#### Ballot (see Section 8.2).

7.7 Majorities for Final Action: The required voting majority for code change proposals individually considered shall be based on the number of votes cast of eligible voters at the Public Comment Hearing shall be in accordance with the following table:

Committee Action	Desired Final Action			
	AS	AM/AMPC	D	
AS	Simple Majority	2/3 Majority	Simple Majority	
АМ	2/3 Majority	Simple Majority to sustain the Committee Action or; 2/3 Majority on each additional modification and 2/3 Majority on entire code change proposal for AMPC	Simple Majority	
D	2/3 Majority	2/3 Majority	Simple Majority	

#### 8.1 Online Governmental Consensus Vote

**8.2 Public Comment Hearing Results:** The results from the Individual Consideration Agenda at the Public Comment Hearing (see Sections 7.5.6 and 7.5.9.10) shall be the basis for the Online Governmental Consensus Vote. The ballot shall include the voting options in accordance with the following table:

Committee Action	Public Comment Hearing result and Voting Majority	Online Governmental Consensus Ballot and Voting Majority	
AS	AS: Simple Majority	AS: Simple Majority D: Simple Majority	
	AMPC: 2/3 Majority	AMPC: 2/3 Majority D: Simple Majority	
	<b>D:</b> Simple Majority	AS: Simple Majority D: Simple Majority	
AM	AS: 2/3 Majority	AS: 2/3 Majority D: Simple Majority	
	AM: Simple Majority	AM: Simple Majority D: Simple Majority	
	AMPC: 2/3 Majority	AMPC: 2/3 Majority D: Simple Majority	
	<b>D:</b> Simple Majority	AM: Simple Majority D: Simple Majority	
D	AS: 2/3 Majority	AS: 2/3 Majority D: Simple Majority	
	AMPC: 2/3 Majority	AMPC: 2/3 Majority D: Simple Majority	
	<b>D:</b> Simple Majority	AS: 2/3 Majority D: Simple Majority	

- **8.3 Online Governmental Consensus Ballot:** The ballot for each code change proposal considered at the Public Comment Hearing will include:
  - 1. The Public Comment Hearing result and vote count.
  - 2. The allowable Online Governmental Consensus Vote actions in accordance with Section 8.1.
  - 3. Where the Public Comment Hearing result is As Submitted (AS) or Disapproval (D), the original code change proposal will be presented.
  - 4. Where the Public Comment Hearing result is As Modified by the committee (AM) or As Modified by one or more Public Comments (AMPC), the original code change and approved modification(s) will be presented.
  - 5. The committee action taken at the Committee Action Hearing.
  - 6. ICC staff identification of correlation issues.
  - 7. For those who voted at the Public Comment Hearing, the ballot will indicate

- how they voted, unless an electronic vote count is not taken in accordance with Section 7.5.9.10.
- 8. An optional comment box to provide comments.
- 9. Access to the Public Comment Agenda which includes: the original code change, the report of the committee action and the submitted public comments.
- 10. Access to the audio and video of the Committee Action and Public Comment Hearing proceedings.
- 11. Identification of the ballot period for which the online balloting will be open.
- **8.4 Voting process:** Voting shall be limited to eligible voters in accordance with Section 9.0. Eligible voters are authorized to vote during the Public Comment Hearing and during the Online Governmental Consensus Vote; however, only the last vote cast will be included in the final vote tabulation. The ballot period will not be extended beyond the published period except as approved by the ICC Board.
  - **8.3.1 Participation requirement**: A minimum number of participants to conduct the Online Governmental Consensus Vote shall not be required unless the code change proposal(s) were not voted upon utilizing the electronic voting devices at the Public Comment Hearing and the resulting vote was not assigned to each eligible voting member in accordance with Sections 7.5.9.7 and 7.5.9.8. If this occurs, a minimum number of participants shall be required for those code change proposal(s) based on an assessment of the minimum number of votes cast during the entire Public Comment Hearing and the Online Governmental Consensus Vote shall determine the final on action on the code change proposal(s) in accordance with Section 10.1.

#### 9.1 Eligible Final Action Voters

- 9.2 Eligible Final Action Voters: Eligible Final Action voters include ICC Governmental Member Voting Representatives and Honorary Members in good standing who have been confirmed by ICC in accordance with the Electronic Voter Validation System. Such confirmations are required to be revalidated once each code development cycle. After initial validation, changes to the list of GMVRs for the remainder of the code development cycle shall be made in accordance with Section 9.2. Eligible Final Action voters in attendance at the Public Comment Hearing and those participating in the Online Governmental Consensus Vote shall have one vote per eligible voter on all Codes. Individuals who represent more than one Governmental Member shall be limited to a single vote.
- 9.3 Applications: Applications for Governmental Membership must be received by the ICC at least 30 days prior to the Committee Action Hearing in order for its designated representatives to be eligible to vote at the Public Comment Hearing or Online Governmental Consensus Vote. Applications, whether new or updated, for Governmental Member Voting Representative status must be received by the Code Council 30 days prior to the commencement of the first day of the Public Comment Hearing in order for any designated representative to be eligible to vote. An individual designated as a Governmental Member Voting Representative shall provide sufficient information to establish eligibility as defined in the ICC Bylaws. The Executive Committee of the ICC Board, in its discretion, shall have the authority to address questions related to eligibility.

#### 10.1 Tabulation, certification and posting of results

- 10.2 Tabulation and Validation: Following the closing of the online ballot period, the votes received will be combined with the vote tally at the Public Comment Hearing to determine the final vote on the code change proposal. If a hand/standing count is utilized per Subsection 7.5.9.7 or 7.5.9.8, those votes of the Public Comment Hearing will not be combined with the online ballot. ICC shall retain a record of the votes cast and the results shall be certified by a validation committee appointed by the ICC Board. The validation committee shall report the results to the ICC Board, either confirming a valid voting process and result or citing irregularities in accordance with Section 10.2.
- 10.3 Voting Irregularities: Where voting irregularities or other concerns with the Online Governmental Consensus Voting process which are material to the outcome or the disposition of a code change proposal(s) are identified by the validation committee, such irregularities or concerns shall be immediately brought to the attention of the ICC Board. The ICC Board shall take whatever action necessary to ensure a fair and impartial Final Action vote on all code change proposals, including but not limited to:
  - 1. Set aside the results of the Online Governmental Consensus Vote and have the vote taken again.
  - 2. Set aside the results of the Online Governmental Consensus Vote and declare the Final Action on all code change proposals to be in accordance with the results of the Public Comment Hearing.
  - 3. Other actions as determined by the ICC Board.
- **10.4 Failure to Achieve Majority Vote:** In the event a code change proposal does not receive any of the required majorities for Final Action in Section 8.0, Final Action on the code change proposal in question shall be Disapproval.
- 10.5 Final Action Results: The Final Action on all code change proposals shall be published as soon as practicable after certification of the results. The results shall include the Final Action taken, including the vote tallies from both the Public Comment Hearing and Online Governmental Consensus Vote, as well the required majority in accordance with Section 8.0. ICC shall maintain a record of individual votes for auditing purposes, however, the record shall not be made public. The exact wording of any resulting text modifications shall be made available to any interested party.

#### 11.1 Code Publication

- **11.2 Next Edition of the Codes:** The Final Action results on code change proposals shall be the basis for the subsequent edition of the respective Code.
- 11.3 Code Correlation: The Code Correlation Committee is authorized to resolve technical or editorial inconsistencies resulting from actions taken during the code development process by making appropriate changes to the text of the affected code. The process to resolve technical or editorial inconsistencies shall be conducted in accordance with CP#44 Code Correlation Committee.

#### 12.1 Appeals

**12.2 Right to Appeal:** Any person may appeal an action or inaction in accordance with Council Policy 1 Appeals. Any appeal made regarding voter eligibility, voter fraud, voter misrepresentation or breach of ethical conduct must be supported by credible evidence and must be material to the outcome of the final disposition of a code

change proposal(s).

The following actions are not appealable:

- 1. Variations of the results of the Public Comment Hearing compared to the Final Action result in accordance with Section 10.4.
- 2. Denied requests to extend the voter balloting period in accordance with Sections 5.7.4 or 8.3.
- 3. Lack of access to the internet based online collaboration and voting platform to submit a code change proposal, to submit a public comment or to vote.
- 4. Code Correlation Committee changes made in accordance with Section 11.2.

#### 13.1 Violations

13.2 ICC Board Action on Violations: Violations of the policies and procedures contained in this Council Policy shall be brought to the immediate attention of the ICC Board for response and resolution. Additionally, the ICC Board may take any actions it deems necessary to maintain the integrity of the code development process.

#### Sections revised in December 3, 2020 revision to CP-28:

3.3.5.4 3.3.5.4.1 5.4.3 5.4.3.1 5.4.4.1 5.4.4.2 5.4.4.3 5.4.4.4

5.4.4.4 5.4.5

<u>5.4.5.1</u>

5.4.5.2

5.4.5.3 5.4.5.4

5.4.5.4 5.4.8

5.4.8.1

### Sections revised in November 2, 2020 revisions to CP-28:

5.7 (removal of entire section)

2.5 5.1

<u>5.1</u> 5.4.2

5.4.2 5.8

6.1

6.4.1

6.6 7.4

# Section revised in January 1, 2019 revision to CP-28:

9.1

### Sections revised in October 20, 2018 revision to CP-28:

2.4 2.4.1

2.4.1.1

2.4.1.2

2.4.2

<u>2.4.2</u>.1

2.4.2.2

2.4.2.3

2.4.2.4

2.4.2.5

2.4.2.6

2.4.2.7 2.4.2.8

2.4.2.9

2.4.2.10 2.4.2.11

#### Sections revised in July 27, 2018 revision to CP-28:

4.6.1

#### Sections revised in December 8. 2017 revision to CP-28:

3.3.5.5

8.3.1

#### Sections revised in September 9, 2017 revision to CP-28:

3.2 3.3.5.3

3.3.5.4

3.3.5.6

3.6.3.1.1 3.6.3.1.2

4.6

5.4.4

<u>5.4.4</u>.1

5.4.4.2

<u>5.4.5</u>

<u>5.4.5.1</u>

5.4.5.2

5.5.2

5.5.2.2

6.4.5

6.4.6

7.5.2

7.5.2.1

7.5.2.2 7.5.3

7.5.3.1 7.5.3.2

7.5.9.10

8.2 - Number 7

11.2

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# **International Building Code - Fire Safety**

2021 Group A - Report of the Committee Action Hearing Results

#### FS1-21

Committee Action: Disapproved

Committee Reason: The committee indicated that ASTM E119 or UL 263 were not missed from section 703.2. Section 703.2 refers to subsections that include ASTM E119 or UL 263. The committee also discussed that adding "determined in accordance" to the charging language creates confusion. (Vote: 10-3)

FS1-21

#### **FS2-21**

Committee Action: Disapproved

Committee Reason: The committee concluded that the proposal is problematic regarding the loaded horizontal building elements and assemblies. The committee mentioned that the proposed text is already covered by ASTM E119 and UL 263. (Vote: 12-1)

FS2-21

# FS3-21

Committee Action: Disapproved

**Committee Reason:** The committee concluded that the proposed item 6 text to section 703.2.2 is similar to the existing section 703.2.2 item 4. Adding proposed item 6 text to section 703.2.2 will create confusion. (Vote: 7-6)

FS3-21

# FS4-21

Committee Action: Disapproved

Committee Reason: The proposal was disapproved as requested by the proponent and based on the committee's action on FS2-21. (Vote: 13-0)

FS4-21

# FS5-21

Committee Action: Disapproved

**Committee Reason:** The committee concluded that the proposed text is already addressed in section 703.2.2 option 4. The proposed text takes away possible options. The proposal also includes unnecessary restrictions on alternative methods. (Vote: 13-0)

### FS6-21

Committee Action: Withdrawn

FS6-21

#### **FS7-21**

Committee Action: Disapproved

**Committee Reason:** The committee indicated there is not enough substantiation for the proposal. The condition is not clear and could be misinterpreted. (Vote: 13-0)

FS7-21

## FS8-21

This proposal includes unpublished errata

Section 704.1.1Exception, deleting the extra "F" in " Structural members and assemblies that support F fire barriers"

Committee Action: As Submitted

Committee Reason: The committee concluded that this proposal is editorial and clarifies the language of the section. (Vote: 9-3)

FS8-21

# FS9-21

Committee Action: Disapproved

**Committee Reason:** The committee concluded that the proposed text is not editorial. The proposal is making technical changes without providing technical justification. (Vote: 13-0)

FS9-21

# FS10-21

Committee Action: Withdrawn

FS10-21

# FS11-21

Committee Action: As Modified

#### **Committee Modification:**

704.6.1 Secondary attachments to structural members

Where primary and secondary structural steel members require fire protection, secondary tubular steel attachments to those structural members any additional structural steel members having direct connection to the primary structural frame or secondary structural members shall be protected with the same fire-resistive material and thickness as required for the structural member. The protection shall extend away from the structural member a distance of not less than 12 inches (305 mm), or shall be applied to the entire length where the attachment is less than 12 inches (305 mm) long. Where an attachment is hollow and the ends are open, the fire-resistive material and thickness shall be applied to both exterior and interior of the hollow steel attachment.

**Committee Reason:** The committee deemed the modification is capturing what was missing from the original proposal. The committee also concluded that the reason statement is convincing that a modifier is needed before steel attachments. The committee encouraged the proponent to work with other suggested additions in the public comment phase, including addressing the word "structural" and addressing the heat transfer issue. (Vote: 13-0)

FS11-21

#### FS12-21

Committee Action: As Submitted

Committee Reason: The committee concluded that the proposal clarifies and corrects the type of construction within the exception. The committee encourages the proponent to fix the conflict with section 705.2.2. (Vote: 8-5)

FS12-21

## FS14-21

Committee Action: Disapproved

**Committee Reason:** The committee concluded that the proposal limits land use and references a section that is not in the code. The committee also discussed that the 15 ft would be challenging to use in some conditions. The committee encourages the proponent to look into section 706.6.1 for a better language and approach. (Vote: 13-0)

FS14-21

# FS15-21

Committee Action: Disapproved

**Committee Reason:** The committee concluded that the appropriate section is section 104.11 to address complex projects and that the subject is too complex to codify into the code. The proposed language is challenging to enforce and be aware of those changes since the use of the building does not change but the ownership change. It will be challenging for the building official to know when ownership changes. (Vote: 12-1)

FS15-21

# FS16-21

Committee Action: As Submitted

**Committee Reason:** The committee concluded that the proposed code change is a good adjustment and better coordination with other related code sections. The proposal does not introduce new technical changes. (Vote: 13-0)

FS16-21

### FS17-21

Committee Action: Disapproved

**Committee Reason:** The committee concluded that the proposed text is challenging to enforce. The committee also discussed that the proposed wording would be viewed as outside the scope of the building code. The committee encouraged the proponent to include a reasonable ratio of the length of the obstruction and to look into limitation of use. (Vote: 9-4)

FS17-21

### FS18-21

Committee Action: Disapproved

**Committee Reason:** The committee concluded that the proposal is not clear enough and missing significant technical aspects. The committee recommended that the proponent work on more clarification during the public comment phase. Such as addressing the intersection with a rated roof ceiling assembly and protecting the sides. (Vote: 13-0)

FS18-21

# FS19-21

Committee Action: Disapproved

**Committee Reason:** The committee concluded that the proposed language is confusing for the building official. The committee recommended that the proposed language is a good step in the right direction but needs to address more aspects, such as intersections and rated assemblies. (Vote: 7-5)

FS19-21

# FS20-21

Committee Action: Disapproved

Committee Reason: The committee determined that the proposed language is not clear and creates unintended consequences. (Vote: 13-0)

FS20-21

# FS21-21

Committee Action: As Modified

**Committee Modification:** 

TABLE 705.8 MAXIMUM AREA OF EXTERIOR WALL OPENINGS BASED ON FIRE SEPARATION DISTANCE AND DEGREE OF OPENING PROTECTION	à

FIRE SEPARATION DISTANCE (feet)	DEGREE OF OPENING PROTECTION	ALLOWABLE AREAª
0 to less than 3 <sup>b, c, k</sup>	Unprotected, Nonsprinklered (UP, NS)	Not Permitted <sup>k</sup>
	Unprotected, Sprinklered (UP, S)i	Not Permitted <sup>k</sup>
	Protected (P)	Not Permitted <sup>k</sup>
3 to less than 5 <sup>d, e</sup>	Unprotected, Nonsprinklered (UP, NS)	Not Permitted
	Unprotected, Sprinklered (UP, S)i	15%
	Protected (P)	15%
5 to less than 10 <sup>e, f, j</sup>	Unprotected, Nonsprinklered (UP, NS)	10% <sup>h</sup>
	Unprotected, Sprinklered (UP, S)i	25%
	Protected (P)	25%
10 to less than 15 <sup>e, f, g, j</sup>	Unprotected, Nonsprinklered (UP, NS)	15% <sup>h</sup>
	Unprotected, Sprinklered (UP, S)i	45%
	Protected (P)	45%
15 to less than 20 <sup>f, g, j</sup>	Unprotected, Nonsprinklered (UP, NS)	25%
	Unprotected, Sprinklered (UP, S)i	75%
	Protected (P)	75%
20 to less than 25 <sup>f, g, j</sup>	Unprotected, Nonsprinklered (UP, NS)	45%
	Unprotected, Sprinklered (UP, S)i	No Limit
	Protected (P)	No Limit
25 to less than 30 <sup>f, g, j</sup>	Unprotected, Nonsprinklered (UP, NS)	70%
	Unprotected, Sprinklered (UP, S)i	No Limit
	Protected (P)	No Limit
30 or greater	Unprotected, Nonsprinklered (UP, NS)	No Limit
	Unprotected, Sprinklered (UP, S)i	No Limit
	Protected (P)	No Limit

For SI: 1 foot = 304.8 mm.

UP, NS = Unprotected openings in buildings not equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1.

UP, S = Unprotected openings in buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1.

P = Openings protected with an opening protective assembly in accordance with Section 705.8.2.

- a. Values indicated are the percentage of the area of the exterior wall, per story.
- b. For the requirements for fire walls of buildings with differing heights, see Section 706.6.1.
- c. For openings in a fire wall for buildings on the same lot, see Section 706.8.
- d. The maximum percentage of unprotected and protected openings shall be 25 percent for Group R-3 occupancies.
- e. Unprotected openings shall not be permitted for openings with a fire separation distance of less than 15 feet for Group H-2 and H-3 occupancies.
- f. The area of unprotected and protected openings shall not be limited for Group R-3 occupancies, with a fire separation distance of 5 feet or greater
- g. The area of openings in an *open parking garage* that complies in accordance with Section 406.5 with a fire separation distance of 10 feet or greater shall not be limited.
- h. Includes buildings accessory to Group R-3.
- i. Not applicable to Group H-1, H-2 and H-3 occupancies.
- j. The area of openings in a building containing only a Group U occupancy private garage or carport with a fire separation distance of 5 feet or greater shall not be limited.
- k. For openings between S-2 parking garage and Group R-2 building, see Section 705.3, Exception 2.

**Committee Reason:** The committee concluded the modification supports the original intent and better clarifies the text by replacing "that complies" with "in accordance with" section 406.5. The committee based their approval on the proponent's reason statement and concluded the proposal clarifies what requirements must be met to allow unlimited openings. (Vote: 13-0)

FS21-21

### FS22-21

Committee Action: Disapproved

**Committee Reason:** The committee indicated the proposal would have unintended consequences as an exception, especially the separation of the windows. The committee also concluded that section 104.11 could be used instead. The committee encouraged the proponent to look into where this exception is intended to be used. The committee advised that chapter 7 is the correct location in the code. (Vote: 11-2)

FS22-21

### FS23-21

Committee Action: Disapproved

Committee Reason: The committee indicated the proposal is unnecessary, and there is no issue with the current code text. (Vote: 11-2)

FS23-21

### FS24-21

Committee Action: Withdrawn

FS24-21

# FS25-21

Committee Action: Disapproved

**Committee Reason:** The committee indicated the proposal is not needed since NFPA 221 already includes double firewalls provisions. The committee mentioned that the disapproval is based on the approval of FS 29-21. (Vote: 11-2)

FS25-21

# FS26-21

Committee Action: Disapproved

Committee Reason: The committee indicated that the code should not include design options in this section. The committee also mentioned that all the requirements are already addressed in code in section 706.2. (Vote: 12-1)

FS26-21

#### FS27-21

Committee Action: Disapproved

Committee Reason: The committee deemed the need to maintain the code language for structural stability on both sides. (Vote: 13-0)

FS27-21

#### FS28-21

Committee Action: Disapproved

**Committee Reason:** The committee deemed the proposed code change of adding exception two is not needed. The existing section 706.2 is sufficient. (Vote: 13-0)

FS28-21

### FS29-21

Committee Action: As Modified

**Committee Modification:** 

# 706.1.2 Double fire walls Deemed to comply.

Double f Fire walls designed and constructed in accordance with NFPA 221 and its Annex shall be deemed to comply with this section.

Committee Reason: The committee concluded the modification corrected the proposal by adding "Deemed to comply". The proposed change adds clarity to the code section by adding the Annex and NFPA 221. (Vote: 13-0)

FS29-21

# FS30-21

Committee Action: Disapproved

Committee Reason: The committee deemed the proposed text is not clear. Further, the proposal is unnecessary as this practice is not currently prohibited in the code. (Vote: 12-0)

FS30-21

# FS31-21

Committee Action: Disapproved

**Committee Reason:** The committee concluded there seems to be a lot of performance uncertainty and prefers to be careful on giving allowances to Type III and IV construction. (Vote: 8-5)

FS31-21

#### FS32-21

Committee Action: Disapproved

Committee Reason: The committee deemed the proposal does not stipulate the use of Fire-Retardant-Treated wood in Type III construction which is less conservative than the current requirements. (Vote: 11-1)

FS32-21

### FS33-21

Committee Action: Withdrawn

FS33-21

### FS34-21

Committee Action: Disapproved

Committee Reason: Based on the committee decision and comments on code changes FS31-21 and FS 32-21. (Vote: 7-5)

FS34-21

# FS35-21

Committee Action: As Submitted

Committee Reason: The committee concluded the proposed text clarifies that in order to qualify for Exception #2, all the subsections of #2 need to be complied with. (Vote: 13-0)

FS35-21

# FS36-21

Committee Action: Disapproved

Committee Reason: The committee determined the current code text is clear, and this is an unnecessary additional text. (Vote: 12-1)

FS36-21

# FS37-21

Committee Action: Disapproved

Committee Reason: The committee determined the existing sections are necessary and need to remain. (Vote: 13-0)

### FS38-21

Committee Action: As Submitted

**Committee Reason:** The committee concluded the proposed text clarifies the technical requirements and per the proponent's reason statement with respect to taking into account exit passageways that occur on the level of exit discharge in a multiple-story bldg. (Vote: 13-0)

FS38-21

# FS39-21

Committee Action: Disapproved

Committee Reason: The committee determined that the pointer in the current text is needed for clarification. (Vote: 13-0)

FS39-21

### FS40-21

Committee Action: As Submitted

Committee Reason: The committee determined this proposal clarifies the current text. (Vote: 12-1)

FS40-21

# FS41-21

Committee Action: As Submitted

#### Committee Reason:

The committee based their approval on the proponent's reason statement and concluded the code change clarifies existing criteria for doors to the elevator in an elevator shaft that needs to be limited by the size of the associated cab and addressed by the safety standards in ASME A17.1. (Vote: 13-0)

FS41-21

# FS42-21

Committee Action: As Submitted

Committee Reason: The committee concluded this code change reflects the common practice in review and construction with little or no reports of safety issues. (Vote: 13-0)

FS42-21

#### FS43-21

Committee Action: As Submitted

Committee Reason: The committee concluded this proposal clarifies the intersection of the exterior wall with other fire-resistance-rated wall assemblies. (Vote: 11-2)

FS43-21

#### FS44-21

This proposal includes unpublished errata

Errata: There is an extra paragraph in the reason statement about FCAC that has already been deleted in cdp access. See below:

This proposal is submitted by the ICC Fire Gode Action Committee (FCAC). The FCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance assigned International Codes with regard to fire and life safety in new and existing buildings and facilities as well as the protection of life and property in wildland urban interface areas. In 2020 and 2021 the Fire-CAC held multiple virtual meetings that were open to any interested party. In addition, there were numerous virtual specific working group meetings that were also open to any interested parties, to develop, discuss and debate the proposed changes. Related documentation and reports are posted on the FCAC website at: https://www.iccsafe.org/products-and-services/i-codes/code-development/cs/fire-code-action-committee-fcac/

Committee Action: As Modified

#### **Committee Modification:**

715.7 Exterior wall/vertical fire barrier intersections.

<u>Voids created at the intersection of nonfire-resistance-rated exterior wall assemblies and vertical fire barriers shall be filled with an approved material or system to retard the interior spread of fire and hot gases.</u>

**Committee Reason:** The committee concluded the modification is necessary to keep the intent of the original code text intact. As modified, the proposal removes redundant language. It also relocates the details on protecting the voids created at the intersection of a fire barrier and the underside of a nonfire-resistance-rated roof assembly to a more appropriate new section. (Vote: 13-0)

FS44-21

## FS45-21

Committee Action: As Modified

#### **Committee Modification:**

CONTINUITY HEAD-OF-WALL JOINT-SYSTEM. An assemblage of specific materials or products that are designed to resist the passage of fire through voids created at the intersection of *fire barriers* and the underside of nonfire-resistance-rated *roof assemblies* for a prescribed period of time.

[BF] F RATING. The time period that the through-penetration firestop system, perimeter fire containment system or continuity head-of-wall joint system limits the spread of fire through the penetration or void.

[BF] T RATING. The time period that the *penetration firestop system*, including the penetrating item, or *continuity head-of-wall <del>joint-system limits the maximum temperature rise to 325°F (181°C) above its initial temperature through the penetration or void on the nonfire side. 715.2Installation.*</del>

Systems or materials protecting

715.6Fire barriers/nonfire-resistance-rated roof assembly intersections.

Voids created at the intersection of a fire barrier and the underside of a nonfire-resistance-rated roof sheathing, slab or deck above shall be filled by

an approved material to retard the passage of fire and hot gases, or shall be protected by an approved continuity head-of-wall jeint-system tested in accordance with ASTM E2837 to provide an F rating/T rating for a time period not less than the required fire-resistance rating of the fire barrier in which it is installed.

**Committee Reason:** The committee concluded the modification enhances the proposed text by removing the word joint from the continuity head-of-wall system. The proposal removes redundant language and gives another option for voids to be protected by an approved continuity head-of-wall joint system tested in accordance with ASTM E2837 to provide an F rating/T rating. (Vote: 8-5)

FS45-21

### FS46-21

Committee Action: Disapproved

Committee Reason: The committee concluded disapproval in favor of previously approved FS45-21. (Vote: 10-3).

FS46-21

#### FS47-21 Part I

Committee Action: As Submitted

**Committee Reason:** The committee determined the proposal is an editorial change to correct the code text by using draftstops instead of draftstopping. (Vote: 11-2)

FS47-21 Part I

# FS47-21 Part II

Committee Action: As Submitted

Committee Reason: The committee stated that the reason for approval was that the proposal revises the current language to the proper terminology that is used in the code. (Vote: 14-0)

FS47-21 Part II

# FS47-21 Part III

Committee Action: As Submitted

Committee Reason: The committee all agree that the term "draftstop" is a more appropriate term than "draftstopping". The word draftstopping is used multiple times throughout the IBC, IFC, IMC and IPC. This term is used with no definition. However, the term draftstop is a defined term in the IBC and IFC. These are the same terms. This proposal replaces all occurrences of draftstopping with the defined term of draftstop. Additionally, this proposal inserts the definition for draftstop into the IMC and IPC. (Vote: 11-0)

FS47-21 Part III

# FS47-21 Part IV

Committee Action: Withdrawn

FS47-21 Part IV

#### FS48-21

Committee Action: As Modified

#### **Committee Modification:**

709.5 Openings.

Openings in a *smoke barrier* shall be protected in accordance with Section 716.

#### **Exceptions:**

- 1. In Group I-1, Condition 2, Group I-2 and ambulatory care facilities, where a pair of opposite-swinging doors are installed across a corridor in accordance with Section 709.5.1, the doors shall not be required to be protected in accordance with Section 716. The doors shall be close fitting within operational tolerances, and shall not have a center mullion or undercuts in excess of <sup>3</sup>/<sub>4</sub> inch (19.1 mm), louvers or grilles. The doors shall have head and jamb stops, and astragals or rabbets at meeting edges. Positive latching devices are not required. Factory-applied or field-applied protective plates are not required to be labeled.
- 2. In Group I-1, Condition 2, Group I-2 and *ambulatory care facilities*, special purpose horizontal sliding, accordion or folding doors installed in accordance with Section 1010.3.3 and protected in accordance with Section 716.

Committee Reason: The committee determined the modification is consistent with CMS (Centers for Medicare and Medicaid Services) regulation. The committee approved the deletions of the first part of the sentence since these cross corridor doors do not require a manufacturer's listing, so this sentence is confusing. The committee mentioned this proposal conflicts with section 909.5.3. Section 909.5.3 opening protection, exception #3 still states, "where permitted by the door manufacturer's listing, positive-latching devices are not required" that need to be fixed in the public comment phase. (Vote: 13-0)

FS48-21

# FS49-21

Committee Action: As Submitted

Committee Reason: The committee concluded the proposal clarifies the limitation of the transfer of smoke in Group I-2. (Vote: 11-2)

FS49-21

# FS50-21

Committee Action: Disapproved

**Committee Reason:** The committee concluded the proposed change is not needed since the exit stairway is a special type of shaft, and the requirements could be found in section 1023 as stated in section 713. (Vote: 13-0)

FS50-21

# FS51-21

Committee Action: Disapproved

Committee Reason: The committee objects to adding "listed or" in section 712.1.3.2, while it is not prohibited in the section. The proposal could be confusing by requiring listed as an alternative to "approved". The committee also disagrees with the cost impact statement since the proposal will increase the cost of construction. (Vote: 8-5)

FS51-21

### FS52-21

Committee Action: Withdrawn

FS52-21

### FS53-21

Committee Action: As Submitted

Committee Reason: The committee determined the proposed change is editorial and is a good clarification of the code requirements. (Vote: 13-0)

FS53-21

#### FS54-21

Committee Action: Disapproved

**Committee Reason:** The committee concluded there is no clear justification for applying section 712.1.15 to all openings and penetrations in a roof. (Vote: 13-0)

FS54-21

# FS55-21

Committee Action: As Submitted

Committee Reason: The committee concluded adding the exception is a helpful pointer back to the high-rise provisions; section 403.2.1.2 permits the fire-resistance rating of a shaft to be reduced. (Vote: 8-5)

FS55-21

# FS56-21

Committee Action: Disapproved

Committee Reason: The committee concluded deleting the sentence "Ductwork in the shaft shall be connected directly to HVAC equipment" from section 713.12.1 will cause confusion and misinterpretation. (Vote: 13-0)

#### FS57-21

Committee Action: As Submitted

Committee Reason: The committee determined the proposal is in line with the opening protective in Tables 716.1(2) and 716.1(3). (Vote: 13-0)

FS57-21

### FS58-21

Committee Action: Disapproved

Committee Reason: The committee concluded the standard is still under development and is not ready. The proposed definition does not reference the standard for a label or placard. Special inspection already addresses this issue. The proposal added cost without a lot of benefits. The committee advised the proponent to unify the proposed language with the proposed standard. (Vote: 13-0)

FS58-21

### FS59-21

Committee Action: Disapproved

Committee Reason: The committee concluded that qualifying contractors is an important issue; however, regulating labor is outside the scope of the IBC. Special inspection already addresses this issue. (Vote: 10-3)

FS59-21

# FS60-21

Committee Action: As Submitted

**Committee Reason:** The committee concluded the proposal clarifies the current language for sleeves. The committee advised the proponent to clarify the second sentence of the proposal in the public comment phase. (Vote: 13-0)

FS60-21

# FS61-21

Committee Action: Disapproved

Committee Reason: The committee concluded disapproval for the same reason as FS 58-21 .(Vote: 12-1)

FS61-21

#### FS62-21

Committee Action: Disapproved

Committee Reason: The committee concluded that this code change is confusing and unnecessary since section 104.11 provides alternative means and methods. (Vote: 8-5)

FS62-21

### FS63-21

Committee Action: Disapproved

**Committee Reason:** The committee concluded the code intent is a maximum edge to edge box distance of 24" unless the box has been listed. If the box has been listed, the reduction in separation allowed in section 714.4.2, Exception #2, #2.1, by the horizontal distance specified in the listing of the electrical boxes. The proposal could create conflict with tested systems. (Vote: 12-1)

FS63-21

#### FS64-21

Committee Action: As Submitted

**Committee Reason:** The committee concluded that this exception for "penetrations of concrete floors or ramps within parking garages or structures constructed per Sections 406.5 and 406.6 where the areas above and below the penetrations are parking areas" is common sense. (Vote: 10-3)

FS64-21

### FS65-21

Committee Action: Disapproved

**Committee Reason:** The committee concluded the condition included in the proposed exception is not a penetration issue. It is a fire barriers continuity issue already addressed in section 707.5. The committee also mentioned it is evident in the code the termination requirements for fire barriers. The committee encouraged the proponent to look into section 711 for floor and roof assemblies continuity. (Vote: 12-1)

FS65-21

# FS66-21

Committee Action: As Submitted

Committee Reason: The committee concluded the proposed text is needed to provide consistency with the code language for continuous metallic penetrants. (Vote: 13-0)

FS66-21

#### FS67-21

This proposal includes published errata

Errata: The proponent did not underline some new text. See the Consolidated Monograph Updates document; <a href="https://cdn-web.iccsafe.org/wpcontent/uploads/2021-GROUP-A-CONSOLIDATED-MONOGRAPH-UPDATES-Updated-4-02-2021-complete.pdf">https://cdn-web.iccsafe.org/wpcontent/uploads/2021-GROUP-A-CONSOLIDATED-MONOGRAPH-UPDATES-Updated-4-02-2021-complete.pdf</a>.

Committee Action: As Submitted

**Committee Reason:** The committee determined the proposal is a suitable acknowledgment of existing practice without any issues. The proposal allows the use of a single or double top plate. The committee is also concerned about the possible insufficient attachment of the gypsum wallboard to a single top plate. (Vote: 12-1)

FS67-21

#### FS68-21

Committee Action: As Submitted

Committee Reason: The committee concluded this proposal is a good clarification of the current code text without technical changes. The proposal introduced a defined phrase, "perimeter fire containment system," to describe the method of protecting the same void in section 715.2. (Vote: 13-0)

FS68-21

### FS69-21

Committee Action: Disapproved

**Committee Reason:** The committee concluded the proposed standard is not ready yet, and the definition needs to be correlated with the proposed standard text. (Vote: 13-0)

FS69-21

# FS70-21

Committee Action: As Submitted

Committee Reason: The committee concluded the proposal clarifies the current text by dividing one paragraph into two subsections. (Vote: 11-2)

FS70-21

# FS71-21

Committee Action: Disapproved

Committee Reason: The committee concluded disapproval for the same reason as FS 58-21 and FS61-21. (Vote: 11-2)

FS71-21

#### FS72-21

Committee Action: Disapproved

**Committee Reason:** The committee determined the use of the word minimum for the required fire-resistance rating of the joint protection where joint protection is installed between different assemblies with different fire-resistance ratings is not appropriate since it is not applicable in all conditions. (Vote: 11-2)

FS72-21

### FS73-21

Committee Action: Disapproved

**Committee Reason:** The committee concluded the proposal is too broad and could have unintended consequences. The difference between a large opening and a two-story opening is that it is visible for firefighters. If there is a seismic joint cover that is not protected, firefighters will not be able to see it. (Vote: 13-0)

FS73-21

### FS74-21

Committee Action: Disapproved

Committee Reason: The committee concluded that extending section 715.4 to all walls without any technical data is not acceptable because this section was initially introduced in the code to address exterior curtain wall/fire-resistance-rated floor intersections. (Vote: 11-2)

FS74-21

## FS75-21

This proposal includes unpublished errata

Errata: Proposal's reason statement. The proponent did not use the correct section. The <u>two</u> references in the reason statement to 715.1 should be 715.3 instead, based on the renumbering of the section in 2021 IBC.

Reason Statement: Section 715.3 715.1 for fire-resistant joint systems includes exceptions for several types of floors, which essentially allows open joints between fire-resistant floors or floor/ceiling assemblies. This proposal extends exceptions that are applicable to curtain wall/floor intersections to the void at the curtain wall/floor intersection. If an an open joint within these floors is acceptable, it goes to reason that it is also acceptable to have an open void between these floors and exterior curtain wall. The exceptions for this condition include floors within a dwelling unit, floors and ramps in parking garages or structures, and mezzanine floors. An example of the use of these exceptions is a parking garage on the lower floors of a building that have exterior curtain walls to "hide" the garage to match the exterior appearance of the building above the garage levels. Also, in Section 715.5, the words "between stories" is proposed to be deleted to align the wording of this section with that of 715.4 and 715.3 715.1.

Committee Action: As Submitted

**Committee Reason:** The committee based their approval on the proponent's reason statement and concluded the code change clarifies existing criteria. The committee also mentioned that the relocation is necessary and practical. (Vote: 11-2)

FS75-21

# FS76-21

Committee Action: As Submitted

**Committee Reason:** The committee concluded word "curtain" is not needed since the section addresses the intersection of an exterior wall with a vertical fire barrier. Although this code change has been approved, one committee member mentioned the proposal would contradict section 715.3, addressing fire-resistance-rated assembly intersections. (Vote: 9-4)

FS76-21

### FS77-21

Committee Action: Disapproved

**Committee Reason:** The committee determined this proposal is not needed since section 104.11, Alternative materials, design, and methods of construction and equipment, already addressed alternative means and methods. The committee also mentioned UL 10D does not include the hose stream test and should not be listed in this section with the other standards. (Vote: 13-0)

FS77-21

### FS78-21

Committee Action: Disapproved

Committee Reason: The committee is concerned that the full hourly rating has not been considered in the proposed footnotes. The footnotes are confusing on how to put one door in a double wall. (Vote: 13-0)

FS78-21

# FS79-21

Committee Action: As Submitted

**Committee Reason:** The committee concluded this code change brings the proper terminology by replacing "fire resistance" with "fire protection rating". (Vote: 13-0)

FS79-21

# FS80-21

Committee Action: As Submitted

**Committee Reason:** The committee based their approval of deleting procedure #2 on the proponent's reason statement. There are no approved calculation methods for open protectives, published by competent sources. (Vote: 12-1)

FS80-21

# FS81-21

Committee Action: Disapproved

Committee Reason: The committee concluded UL 10D standard is miss placed in this section, and the section could be miss applied. UL 10D is for "FIRE TESTS OF FIRE-PROTECTIVE CURTAIN ASSEMBLIES" and in the scope, "not intended to be substituted for structural hourly rated partitions or opening protectives that have been tested for fire endurance and hose stream performance.". Therefore, it is not appropriate for this application. Also, based on committee action on FS82-21. (Vote: 13-0)

FS81-21

### FS82-21

Committee Action: Disapproved

**Committee Reason:** The committee determined the proposed text is not in the correct location as section 716.2.2.1 specifically refers to table 716.1(2), which does not currently contain a reference to fire curtain assemblies. Section 716.2.2.1 is not the appropriate section. The proposed text could be included as a new section or subsection. (Vote: 13-0)

FS82-21

### FS83-21

Committee Action: Disapproved

Committee Reason: The committee concluded the proposed text is not clear on the number of stories. Based on the reason statement, "The intent of this proposal is to allow for two and three-story Group R and Group I-1 buildings". However, the proponent indicated the text could be applicable for five-story or six-story buildings. (Vote: 9-4)

FS83-21

## FS84-21

Committee Action: As Submitted

**Committee Reason:** The committee concluded the proposal clarifies the current text. For elevator hoistway door openings, section 3006.3 is applicable. (Vote: 13-0)

FS84-21

# FS85-21

Committee Action: As Submitted

**Committee Reason:** The committee determined the proposal is the appropriate application for the exception to the requirement for door closers in the situation where the fire-resistance-rated wall is only required to separate a storm shelter from a host building. The proposal utilizes protection per ICC 500 Standard for the Design and Construction of Storm Shelters. (Vote: 12-1)

FS85-21

# FS86-21

Committee Action: Disapproved

Committee Reason: The committee concluded the proposed standard is beneficial; however, technical issues need to be addressed. (Vote: 13-0)

FS86-21

#### FS87-21

Committee Action: Disapproved

Committee Reason: The committee determined the language does not coordinate with code language. It is not necessary to cross-reference the same section. The proponent can include all the applicable exceptions text from section 717.6.2.1.2 in section 717.2.3 Static dampers. (Vote: 13-0)

FS87-21

### FS88-21

Committee Action: As Modified

#### **Committee Modification:**

717.2.4 Mechanical, electrical and plumbing controls.

Mechanical, electrical and plumbing controls shall not be installed in air duct systems.

**Exception:** Controls shall be permitted to be installed in air duct systems only if the wiring is directly associated with the air distribution system. The wiring shall <u>comply with the requirements of Section 602 of the International Mechanical Code and be as short as practicable.</u>

**Committee Reason:** The committee concluded the modification had improved the original proposal; it brings IMC 602 for wiring with a duct. The proposal is a good addition to the code text. (Vote: 13-0).

FS88-21

# FS89-21

Committee Action: Disapproved

**Committee Reason:** The committee concluded the current code text does not prohibit the code users from using a removable duct section that could be removed and reinstalled without using tools. The proposal might create sourcing issues. Firefighters have other ways to get into the duct. (Vote: 13-0)

FS89-21

# FS90-21

Committee Action: Disapproved

Committee Reason: The committee concerns about the exception apply to all occupancies. Smoke dampers are essential to avoid fatalities. (Vote: 11-1)

#### FS91-21

Committee Action: As Modified

#### **Committee Modification:**

717.6.1Through penetrations.

In occupancies other than Groups I-2 and I-3, a A duct constructed of approved materials in accordance with the *International Mechanical Code* that penetrates a fire-resistance-rated floor/ceiling assembly that connects not more than two *stories* is permitted without *shaft enclosure* protection, provided that a *listed fire damper* is installed at the floor line or the duct is protected in accordance with Section 714.5. For air transfer openings, see Section 712.1.9.

Exception: In occupancies other than Group I-2 and I-3, a A duct is permitted to penetrate three floors or less without a *fire damper* at each floor, provided that such duct meets all of the following requirements:

- 1. The duct shall be contained and located within the cavity of a wall and shall be constructed of steel having a minimum wall thickness of 0.0187 inches (0.4712 mm) (No. 26 gage).
- 2. The duct shall open into only one *dwelling unit*or *sleeping unit* and the duct system shall be continuous from the unit to the exterior of the building.
- 3. The duct shall not exceed 4-inch (102 mm) nominal diameter and the total area of such ducts shall not exceed 100 square inches (0.065 m²) in any 100 square feet (9.3 m²) of floor area.
- 4. The annular space around the duct is protected with materials that prevent the passage of flame and hot gases sufficient to ignite cotton waste where subjected to ASTM E119 or UL 263 time-temperature conditions under a minimum positive pressure differential of 0.01 inch (2.49 Pa) of water at the location of the penetration for the time period equivalent to the fire-resistance rating of the construction penetrated.
- 5. Grille openings located in a ceiling of a fire-resistance-rated floor/ceiling or roof/ceiling assembly shall be protected with a *listed ceiling* radiation damper installed in accordance with Section 717.6.2.1.

#### 717.6.2Through penetration for Group I-2 and I-3.

In Group I-2 and I-3 occupancies a duet constructed of approved materials in accordance with the International Mechanical Gode that penetrates a fire-resistance-rated floor of floor/ceiling assembly that connects not more than two stories is permitted without shaft enclosure protection, provided that a listed fire damper is installed at the floor line.

Committee Reason: The committee concluded the modification clarifies the language by moving "In occupancies other than Group I-2 and I-3" into the exception. The proposal aligns IBC with the federal certification requirements for the Centers for Medicaid and Medicare Services. (Vote: 13-0)

FS91-21

# FS92-21

Committee Action: Disapproved

Committee Reason: The committee determined the proposal is complicated and does not clarify the code requirements for static ceiling radiation dampers installed in UL classified floor/ceiling and ceiling/roof designs. (Vote: 13-0)

FS92-21

# FS93-21

Committee Action: Disapproved

Committee Reason: The committee disapproval is based on the proponent's request to bring it back in the public comment phase. (Vote: 13-0)

FS93-21

### FS94-21

Committee Action: Disapproved

Committee Reason: The committee disapproval is based on the proponent's request to bring it back in the public comment phase. (Vote: 13-0)

FS94-21

### FS95-21

Committee Action: Disapproved

Committee Reason: The committee disapproval is based on the proponent's request to bring it back in the public comment phase. (Vote: 13-0)

FS95-21

#### FS96-21

This proposal includes unpublished errata

Errata: Editorial, the "IBC" in # 10 has been deleted. See below:

718.2.1 Fireblocking materials.

10. One thickness of 19/32-inch (15.1 mm) fire-retardant-treated wood structural panel complying with IBC Section 2303.2.

Committee Action: As Submitted

Committee Reason: The committee approval is based on the proponent's reason statement. (Vote: 12-0)

FS96-21

# FS97-21 Part I

Committee Action: As Submitted

**Committee Reason:** The committee determined the proposal provides consistency for the text throughout the code and replaces the current text of "may" with enforceable language. (Vote: 13-0)

FS97-21 Part I

# FS97-21 Part II

Committee Action: As Submitted

Committee Reason: This proposal was approved based upon the approval of Parts I and III and the fact that the proposal appropriately changes

### FS97-21 Part III

Committee Action: As Submitted

Committee Reason: The committee agreed that substituting the subjective term "may" with more enforceable language was appropriate. (Vote 11-0)

FS97-21 Part III

#### FS98-21

Committee Action: As Submitted

Committee Reason: The committee concluded the proposal gives another option for the rated fire-resistance periods for various walls and partitions and addresses the code's energy requirements. (Vote: 12-0)

FS98-21

### FS99-21

Committee Action: As Modified

#### **Committee Modification:**

TABLE 721.1(2) RATED FIRE-RESISTANCE PERIODS FOR VARIOUS WALLS AND PARTITIONS

q. The design stress of stude shall be equal to not more than that obtained with a load duration factor of 1.0 calculated in accordance with Section 2306. The stude in this assembly can be designed without fire-related capacity reductions.

**Committee Reason:** The committee determined the modification clarifies what was initially proposed and helps explain footnote q. The proposal does not change the technical content of the note. It clarifies the requirements. (Vote: 12-0)

FS99-21

# FS100-21

Committee Action: As Submitted

**Committee Reason:** The committee concluded the proposal provides the designer another option for minimum protection for floor and roof systems. (Vote: 11-0)

FS100-21

#### FS101-21

Committee Action: Disapproved

**Committee Reason:** The committee determined the proposal provides another option for fire resistance calculations, but it needs more work. The committee suggested including more reason statement language for non-structural engineers. The proponent is encouraged to look into a specific section of AISC instead of referencing the entire Appendix 4. (Vote: 13-0)

FS101-21

#### FS102-21

Committee Action: Disapproved

**Committee Reason:** The committee has several concerns with modifying table 722.2.1.4(1) title to include " Cast-in-place or precast concrete". CMU is included in the table but is not included in the proposed table title. The change does not correspond with the material shown in table 722.2.1.4(1). The proposal also creates a disconnect with the text in table 722.2.1.4(1). (Vote: 13-0)

FS102-21

### FS103-21

Committee Action: As Submitted

Committee Reason: The committee concluded the proposal appropriately fixes the code terms to be consistent with the terms used in industry publications. (Vote: 13-0)

FS103-21

# FS104-21

Committee Action: Disapproved

**Committee Reason:** The committee determined clarification is not needed for table 722.6.2(1). The requirements are clarified in Section 722.6.1.1. Section 722.6.1.1 specifies that Fire-resistance ratings calculated for assemblies using the methods in Section 722.6 shall be limited to not more than 1 hour. (Vote: 13-0)

FS104-21

# FS105-21

Committee Action: As Submitted

Committee Reason: The committee based their approval on the proponent's reason statement. (Vote: 10-1)

FS105-21

#### FS106-21

Committee Action: As Submitted

**Committee Reason:** The committee concluded that the proposal appropriately updates Table 722.6.2(5) to equate the required minimum density for glass fiber and rock and slag wool fiber insulations. (Vote: 12-1)

FS106-21

### FS107-21

Committee Action: Disapproved

Committee Reason: The committee determined that the proposal should be in the performance code. The appendix is for alternative means, not mandatory. However, the proposal makes it mandatory. The proposed text is overreaching, and chapter 7 could be used already. The examples included in ASCE published document "Performance-Based Structural Fire Design" do not apply to all conditions. The proposal requires the use of Appendix E only, but section 104.11, alternative means and method, could be used. The committee recommended adding language for peer review and add guidelines. (Vote: 12-1)

FS107-21

### FS108-21

Committee Action: Disapproved

**Committee Reason:** The committee determined that the proposed text is not clear. The reason statement does not state the hazards that need to be mitigated with this proposal. The cost impact is not minimal, as stated in the proposal. The proposal imposes a new restriction without justification. (Vote: 13-0)

FS108-21

# FS109-21

Committee Action: Disapproved

Committee Reason: The committee determined coated wood products will require maintenance over time. The Fire code only references section 803.4, Fire-retardant coatings; applications shall comply with NFPA 703. The maintenance of those coated wood panels will be challenging. The reference for section 803 is not applicable since this section is for decorative materials and trim. The proposed new section 803.13.1, Requirements, does not clarify that this is factory applied finish. The proposed text could apply to painting and evaluation on-site. The proposal as submitted will confuse the application of paints, coatings, stains, or other surface treatments to wood material. The proponent could add "manufactured" to the definition and the proposed new sections to clarify the proposal's intent. (Vote: 13-0)

FS109-21

# FS110-21

Committee Action: As Modified

**Committee Modification:** 

909.20.1Access.

Access to the

stairway or ramp shall be by way of a vestibule or an open exterior balcony. The minimum dimension of the vestibule shall be not less than the required width of the *corridor* leading to the vestibule but shall not have a clear width of less than 44 inches (1118 mm) and shall not have a length of less than 72 inches (1829 mm) in the direction of egress travel into the stairway, measured in a straight line between the centerline of the doorways into the vestibule and stairway.

**Committee Reason:** The committee determined the modification clarifies how to measure a length of less than 72" by adding " measured in a straight line". The proposal clarifies the size of a vestibule. (Vote: 13-0)

FS110-21

#### FS111-21

Committee Action: Disapproved

Committee Reason: The committee concluded disapproval as requested by the proponent to bring back in the public comment phase. (Vote: 13-0)

FS111-21

#### FS112-21

Committee Action: As Submitted

**Committee Reason:** As stated in the reason statement, the committee determined the proposal eliminates the mechanical ventilation alternative due to the complexity of the design and the additional equipment necessary to achieve the specified results. (Vote: 13-0)

FS112-21

# FS113-21

Committee Action: Disapproved

Committee Reason: The committee concluded the proposed text of "floor of fire origin" is confusing compared to checking any and every floor in practice. The general practice for stairwell pressurization systems is to check the pressure from a stairway ending to the floor or landing outside the door. (Vote: 13-0)

FS113-21

## FS114-21

Committee Action: Disapproved

**Committee Reason:** The committee determined the proposal provides a good tool for stair pressurization systems but did not support mandating it. Stair pressurization is used in a multi-story building and could cause temperature and thermal issues. Stair pressurization systems usually require a third-party reviewer. The committee mentioned that the code currently does not prohibit what is proposed. (Vote: 7-6)

FS114-21

#### FS115-21

Committee Action: As Submitted

Committee Reason: The committee concluded that the proposal provides consistency in the code regarding smoke detection requirements for pressurization systems. (Vote: 13-0)

FS115-21

#### FS116-21

Committee Action: As Submitted

**Committee Reason:** The committee determined that the proposal provides an appropriate pointer to section 909.4.7 and considers all design scenarios. (Vote: 13-0)

FS116-21

#### FS117-21

Committee Action: Disapproved

Committee Reason: The committee disapproval is based on the proponent's request. (Vote: 13-0)

FS117-21

# FS118-21

Committee Action: As Submitted

**Committee Reason:** The committee determined that the elevator lobby smoke detector alone can activate the elevator pressurization system. The deletion is consistent with ANSI/ASME A17.1. (Vote: 12-1)

FS118-21

## FS119-21

This proposal includes published errata

 $\underline{https://cdn-web.iccsafe.org/wp-content/uploads/2021-GROUP-A-CONSOLIDATED-MONOGRAPH-UPDATES-Updated-4-02-2021-complete.pdf}$ 

Committee Action: As Submitted

Committee Reason: The committee approval is based on that the proposal clarifies the section requirements. The addition to the section provides the criteria for how the undivided area is to be determined. (Vote: 13-1)

FS119-21

#### FS120-21

Committee Action: As Submitted

**Committee Reason:** The committee concluded the proposal is a good change by replacing "envelope" with "assembly" to be consistent with IECC. BUILDING THERMAL ENVELOPE is defined in the IECC as The basement walls, exterior walls, floors, ceilings, roofs, and any other building element assemblies enclose conditioned space or provide a boundary between conditioned space and exempt or unconditioned space. The proposal includes the unification of the terms and simplifies the language. (Vote: 13-0)

FS120-21

#### FS121-21

Committee Action: Disapproved

Committee Reason: The committee agreed with the reason statement on the need to be careful not to repeat building cladding fires, such as the Grenfell Tower fire in London, UK. The committee's disapproval is based on the charging statement of section 1402.5 to meet section 703.3 or to have an exception based on having one combustible component based on the previous testing. The fire-retardant-treated wood is not predictable based on testing since NFPA 285 is a test for the entire exterior wall assembly. The proponent could rewrite the whole exception by addressing the condition of only having a combustible weather barrier and a fire-retardant-treated wood. The proponent needs to have backup data. (Vote: 11-1)

FS121-21

### FS122-21

Committee Action: As Modified

#### **Committee Modification:**

1402.5Vertical and lateral flame propagation. .

Exterior walls on buildings of Type I, II, III and IV construction that are greater than 40 feet (12,192 mm) in height above grade plane and contain a combustible exterior wall covering, combustible insulation, or a combustible water-resistive barrier shall comply with Sections 1402.5.1 through 1402.5.5, as applicable. Where compliance with NFPA 285 and associated acceptance criteria is required in Sections 1402.5.1 through 1402.5.5, the exterior wall assembly shall be tested in accordance with and comply with the acceptance criteria of NFPA 285. 1402.5.1 Combustible Water resistive barrier.

Exterior walls containing a combustible water-resistive barrier shall comply with Section 1402.6.

1402.5.2 Metal Composite Materials (MCM)..

Exterior walls containing MCM systems shall comply with Section 1406.

1402.5.3 Exterior insulation and finish system (EIFS)..

Exterior walls of any height above grade plane containing EIFS shall comply with Section 1407.

1402.5.4 High-pressure decorative exterior-grade compact laminate (HPL) system..

Exterior walls containing an HPL system shall comply with Section 1408.

1402.5.5 Foam Plastic Insulation.

Exterior walls of any height above grade plane containing foam plastic insulation shall comply with Section 2603.5-2603.

**Committee Reason:** The committee concluded the modification appropriately deletes "are greater than 40 feet (12,192 mm) in height above grade plane", consistent with the intent of the code. This proposal assists users of the Code by providing reference to all the relevant sections of Chapter 14 and Chapter 26 containing specific requirements for exterior wall assemblies needing testing to NFPA 285. (Vote: 11-2)

FS122-21

# FS123-21

Committee Action: Disapproved

Committee Reason: The committee disapproval is based on the proponent's request and based on committee action on FS122-21. (Vote: 12-0)

FS123-21

#### FS124-21

Committee Action: Disapproved

**Committee Reason:** The committee concluded there are serious issues with the proposal and a lot of controversy with it. Section 104.11, Alternative materials, design, and methods of construction and equipment, could be used. The proposed definition of engineering analysis is not broad enough to apply to the use of the term currently in the code. The proposal could have been submitted as two different proposals for each item. (Vote: 13-0)

FS124-21

### FS125-21

Committee Action: Disapproved

Committee Reason: The committee disapproval is based on the committee action on FS121-21. (Vote: 11-1)

FS125-21

### FS126-21

Committee Action: As Modified

#### **Committee Modification:**

1403.2Water-resistive barrier.

Not fewer than one layer of water-resistive barrier material shall be attached to the studs or sheathing, with flashing as described in Section 1404.4, in such a manner as to provide a continuous water-resistive barrier behind the exterior wall veneer. The intersection between the water-resistive barrier materials and fenestration openings shall be flashed and assembled in accordance with the fenestration manufacturer's installation instructions, or other approved methods for applications not addressed by the fenestration manufacturer's instructions. The water-resistive barrier material shall be continuous to the top of walls and terminated at penetrations and building appendages in a manner to meet the requirements of the exterior wall envelope as described in Section 1402.2. Water-resistive barriers shall comply with one of the following:

- 1. No. 15 felt complying with ASTM D226, Type 1.
- 2. ASTM E2556, Type I or II.
- 3. ASTM E331 in accordance with Section 1402.2.
- 4. Other approved materials installed in accordance with the manufacturer's installation instructions.

No.15 asphalt felt and water-resistive barriers complying with ASTM E2556 shall be applied horizontally, with the upper layer lapped over the lower layer not less than 2 inches (51 mm), and where joints occur, shall be lapped not less than 6 inches (152 mm).

Committee Reason: The committee concluded that the modification corrects complex language. The proposal coordinates IBC Section 1403.2 with IRC Section R703.2. The proposal appropriately includes prescriptive instructions for No.15 asphalt felt. (Vote: 13-0)

FS126-21

#### FS127-21

Committee Action: Disapproved

Committee Reason: The committee disapproval is based on the proponent's request and based on committee action on FS126-21. (Vote: 12-0)

FS127-21

#### FS128-21

Committee Action: As Submitted

Committee Reason: The committee based their approval on the proponent's reason statement. (12-0)

FS128-21

#### FS129-21

Committee Action: Disapproved

**Committee Reason:** The committee concluded that the language in the proposal could be misleading to contain all the plastics within a wall. The reference to chapter 14 is not appropriate, while the section is in chapter 14. The proposed text is not clear and not concise. The proponent could incorporate the approved FS120-21 code change text of "exterior wall assembly" to clarify the proposal's intent. (Vote: 13-0)

FS129-21

# FS130-21

Committee Action: As Submitted

Committee Reason: The committee determined the proposal is a good deletion of section 1403.8, Plastics. The pointers to chapter 26 and chapter 16 are not needed. (Vote: 13-0)

FS130-21

# FS131-21

Committee Action: Disapproved

Committee Reason: The committee determined that based on the FS131-21 Dobson report included in the supporting documentation, it looks like Polypropylene (siding) melts and falls, which is concerning. (Vote: 11-1)

FS131-21

# FS132-21

Committee Action: Disapproved

**Committee Reason:** The committee did not agree with the charging statement where ignition-resistant materials are used. If the intention is to allow manufacturers to label it, then that should be the charging statement. (Vote: 12-0)

FS132-21

### FS133-21

Committee Action: As Submitted

Committee Reason: The committee determined the proposal adds needed language for Fiber-mat reinforced cementitious backer units. (Vote: 12-0)

FS133-21

### FS134-21

Committee Action: As Submitted

Committee Reason: Although the committee had minor concerns with some of the testing requirements, they agreed that ASTM D7793 was appropriate. The material would need to be tested based on the foam plastic requirements in chapter 26 based on current code text. (Vote: 8-3)

FS134-21

## FS135-21

Committee Action: As Modified

#### **Committee Modification:**

1404.3.3 Vapor Retarder Installation.

Vapor retarders shall be installed in accordance with the manufacturer's instructions or an approved design. Where a vapor retarder also functions as an a component of a continuous air barrier, the vapor retarder shall be installed as a continuous an air barrier in accordance with the International Energy Conservation Code.

Committee Reason: The committee determined that the modification solves the issue of misinterpreting the section. The proposal coordinates the installation of vapor retarders between the IBC and IECC. (Vote: 13-0)

FS135-21

# FS136-21

Committee Action: As Submitted

Committee Reason: The committee concluded that the addition of class I is appropriate. (Vote: 13-0)

FS136-21

# FS137-21

Committee Action: As Modified

#### **Committee Modification:**

1404.3Vapor retarders.

Vapor retarder materials shall be classified in accordance with Table 1404.3(1). A vapor retarder shall be provided on the interior side of frame walls in accordance with Tables 1404.3(2) and 1404.3(3), or an approved design using accepted engineering practice for hygrothermal analysis. The appropriate climate zone shall be selected in accordance with Chapter 3 of the *International Energy Conservation Code*.

Where a Class II vapor retarder is used in combination with foam plastic insulating sheathing installed as continuous insulation on the exterior side of frame walls, the continuous insulation shall comply with Table 1404.3(4) and the Class II vapor retarder shall be a *responsive vapor retarder*. Use of a Class I interior vapor retarder, that is not a *responsive vapor retarder*, in frame walls with a Class I vapor retarder, that is not a *responsive vapor retarder*, on the exterior side shall require an *approved* design.

#### **Exceptions:**

- 1. Basement walls.
- 2. Below-grade portion of any wall.
- 3. Construction where accumulation, condensation or freezing of moisture will not damage the materials.
- 4. A responsive vapor retarder shall be allowed on the interior side of any frame wall in all climate zones.

Committee Reason: The committee concluded the modification clarifies the text by deleting" that is not a responsive vapor retarder". The proposal encapsulates performance and the definition that is already being recognized. (Vote:13 -0)

FS137-21

## FS138-21

Committee Action: As Modified

#### **Committee Modification:**

**1404.3 Vapor retarders.** Vapor retarder materials shall be classified in accordance with Table 1404.3(1). A vapor retarder shall be provided on the interior side of frame walls in accordance with Table 1404.3(2) and Tables 1404.3(3) or 1404.3(4) as applicable, or an *approved* design using accepted engineering practice for hygrothermal analysis.

Vapor retarders shall be installed in accordance with 1404.3.3.

The appropriate climate zone shall be selected in accordance with Chapter 3 of the International Energy Conservation Code.

#### **Exceptions:**

- 1. Basement walls.
- 2. Below-grade portion of any wall.
- 3. Construction where accumulation, condensation or freezing of moisture will not damage the materials.
- 4. A vapor retarder shall not be required in Climate Zones 1, 2, and 3.
- 5. In Climate Zones 4 through 8, a vapor retarder on the interior side of frame walls shall not be required where the assembly complies with Table 1404.3(5)

#### **TABLE 1404.3(2) VAPOR RETARDER OPTIONS**

CLIMATE ZONE	VAPOR RETARDER CLASS						
CLIMATEZONE	l <sup>a</sup>	ll <sup>a</sup>	III				
1, 2	Not permitted	Not Permitted	Permitted				
3	Not permitted	Permitted <sup>c</sup>	Permitted				
4 (except Marine)	Not permitted	Permitted <sup>c</sup>	See Table 1404.3(3)				
Marine 4, 5, 6, 7, 8	Permitted <sup>b,c</sup>	Permitted <sup>c</sup>	See Table 1404.3(3)				

- a. . A responsive vapor retarder shall be allowed on the interior side of any frame wall in all climate zones.
- b. Use of a Class I interior vapor retarder, that is not a responsive vapor retarder, in frame walls with a Class I vapor retarder, that is not a responsive vapor retarder, on the exterior side shall require an approved design.
- c. Where a Class I or II vapor retarder is used in combination with foam plastic insulating sheathing installed as *continuous insulation* on the exterior side of frame walls, the *continuous insulation* shall comply with Table 1404.3(4) and the Class I or II vapor retarder shall be a *responsive vapor retarder*.

TABLE 1404.3(3) CLASS III VAPOR RETARDERS

ZONE	CLASS III VAPOR RETARDERS PERMITTED FOR: a, b					
4	Vented cladding over wood structural panels  Vented cladding over fiberboard  Vented cladding over gypsum  Continuous insulation with R-value ≥ R2.5 over 2 × 4 wall  Continuous insulation with R-value ≥ R3.75 over 2 × 6 wall					
5	Vented cladding over wood structural panels  Vented cladding over fiberboard  Vented cladding over gypsum  Continuous insulation with R-value ≥ R5 over 2 × 4 wall  Continuous insulation with R-value ≥ R7.5 over 2 × 6 wall					
6	Vented cladding over fiberboard  Vented cladding over gypsum  Continuous insulation with R-value ≥ R7.5 over 2 × 4 wall  Continuous insulation with R-value ≥ R11.25 over 2 × 6 wall					
7	Continuous insulation with $R$ -value $\geq$ R10 over 2 $\times$ 4 wall  Continuous insulation with $R$ -value $\geq$ R15 over 2 $\times$ 6 wall					
8	Continuous insulation with $R$ -value $\geq$ R12.5 over 2 × 4 wall Continuous insulation with $R$ -value $\geq$ R20 over 2 × 6 wall					

a. Vented cladding shall include vinyl lap siding, polypropylene, or horizontal aluminum siding, brick veneer with airspace as specified in this code.

#### rainscreen systems,

and other approved vented claddings.

b. The requirements in this table apply only to insulation used to control moisture in order to permit the use of Class III vapor retarders. The insulation materials used to satisfy this option also contribute to but do not supersede the thermal envelope requirements of the *International Energy Conservation Code*.

1404.3.3 Vapor Retarder Installation. Vapor retarders shall be installed in accordance with the manufacturer's instructions or an approved design.

Where a vapor retarder also functions as a component of a continuous air barrier, the vapor retarder shall be installed as an air barrier in accordance with the International Energy Conservation Code.

**Committee Reason:** The committee determined this proposal, with all the modifications, is a correlation of , FS135-21, FS136-21, FS137-21, FS139-21, FS140-21, FS141-21, FS142-21, FS143-21 and FS144-21, which have already been approved by the committee on section 1404.3. The definition from FS 144-21 for rainscreen system still needs to be incorporated in the final 2024 IBC. (Vote: 13-0)

FS138-21

## FS139-21

Committee Action: As Modified

#### **Committee Modification:**

1404.3Vapor retarders.

Vapor retarder materials shall be classified in accordance with Table 1404.3(1). A vapor retarder shall be provided on the interior side of frame walls in accordance with Table

s-1404.3(2) and <u>Tables</u> 1404.3(3) <u>or 1404.3(4) as applicable</u>, or an approved design using accepted engineering practice for hygrothermal analysis. The appropriate climate zone shall be selected in accordance with Chapter 3 of the

International Energy Conservation Code.

#### **Exceptions:**

- 1. Basement walls.
- 2. Below-grade portion of any wall.
- 3. Construction where accumulation, condensation or freezing of moisture will not damage the materials.

**Committee Reason:** The committee agreed with the modification adding Table 1404.3(4). The committee based their approval on the fact that the proposal appropriately moves text and an exception added last code cycle into footnotes for Table 1404.3(2). The proposal addresses correlation without changing technical contents. (Vote: 13 to 0)

FS139-21

## FS140-21

Committee Action: As Submitted

Committee Reason: The committee determined that the proposal solves the issue of inward movement of moisture in Climate Zones 1, 2, and 3 by providing an exception. (Vote: 13-0)

FS140-21

## FS141-21

Committee Action: As Submitted

Committee Reason: The committee concluded that the proposal provides another wall insulation option for the code users. (Vote: 13-0)

FS141-21

## FS142-21

Committee Action: As Submitted

Committee Reason: The committee based their approval on the proponent's reason statement and concluded the proposal aligns provisions for spray foam in the IBC with those in the IRC and, in doing so, applies the maximum 1.5 perm limit to both applications of spray foam. (Vote: 13-0)

FS142-21

# FS143-21

Committee Action: As Submitted

Committee Reason: The committee based their approval on the proponent's reason statement and concluded that the existing footnote is not relevant to the table. (Vote: 13-0)

FS143-21

#### FS144-21

Committee Action: As Modified

#### **Committee Modification:**

RAINSCREEN <u>SYSTEM</u>. An assembly applied to <u>the exterior side of</u> an exterior wall which consists of, at minimum, an outer layer, an inner layer, and a cavity between them sufficient for the passive removal of liquid water and water vapor.

TABLE 1404.3(3) CLASS III VAPOR RETARDERS

#### Portions of table not shown remain unchanged.

- a. Vented cladding shall include vinyl lap siding, polypropylene, or horizontal aluminum siding, brick veneer with airspace as specified in this code, *rainscreens rainscreen systems*, and other approved vented claddings.
- b. The requirements in this table apply only to insulation used to control moisture in order to permit the use of Class III vapor retarders. The insulation materials used to satisfy this option also contribute to but do not supersede the thermal envelope requirements of the International Energy Conservation Code.

**Committee Reason:** The committee concluded that the modification is an essential addition to clarify the exterior side of the exterior wall. Adding the word "system" is critical to guide to the appropriate system. The proposal defines an already used concept. (Vote: 13-0)

FS144-21

### FS145-21

Committee Action: As Submitted

**Committee Reason:** The committee determined that the proposal is an essential topic to the wood industry and provides flexibility for the use of Fenestration flashing. The proponent is encouraged to look into the coordination of the proposed text since Section 1404.4 states "perimeters of exterior door and window assemblies in accordance with Section 1404.4.1"; however, fenestration flashing is only used with a glazed opening like windows. (Vote: 13-0)

FS145-21

## FS146-21

Committee Action: Disapproved

Committee Reason: The committee indicated this is an unnecessary and unclear pointer. The fire testing criteria is already addressed in ASTM E2568. (Vote: 9-4)

FS146-21

# FS147-21

Committee Action: Disapproved

Committee Reason: The committee concluded this code change is not needed since ASTM E2568 already addresses this issue. (Vote: 10-3)

FS147-21

#### FS148-21

Committee Action: Disapproved

**Committee Reason:** The committee is concerned about the deletion of sections, and relocating some sections is difficult to follow for the code users. (Vote: 13-0)

FS148-21

## FS149-21 Part I

This proposal includes unpublished errata

Errata: The proponent missed a couple of words and misspelled a word. See below:

- 1) Add "roof assembly" at the end of INSULATED METAL PANEL (IMP) definition to be " or roof assembly of a building."
- 2) Change "INSULTATED METAL PANEL (IMP)" to "INSULATED METAL PANEL (IMP)" in the title of SECTION 1409.

Committee Action: As Submitted

Committee Reason: The committee concluded the proposal provides important criteria for new technology (Insulated Metal Panels (IMP)). (Vote: 13-0)

FS149-21 Part I

## FS149-21 Part II

This proposal includes unpublished errata

Errata: The last sentence in section 2603.4.1 is a new text and needs to be underlined. See below:

2603.4.1.4Exterior walls, one-story buildings.

For one-story buildings, foam plastic having a *flame spread index* of 25 or less, and a *smoke-developed index* of not more than 450, shall be permitted without thermal barriers in or on *exterior walls* in a thickness not more than 4 inches (102 mm) where the foam plastic is covered by a thickness of not less than 0.032-inch-thick (0.81 mm) aluminum or corrosion-resistant steel having a base metal thickness of 0.0160 inch (0.41 mm) and the building is equipped throughout with an *automatic sprinkler system* in accordance with Section 903.3.1.1.

For exterior walls of one-story buildings constructed of insulated metal panels (IMP) with foam plastic insulation cores, the thermal barrier is not required when all of the following apply:

Committee Action: As Submitted

Committee Reason: The committee determined the proposal clarifies the criteria for insulated metal panels (IMP). (Vote: 13-0)

FS149-21 Part II

# FS150-21

Committee Action: As Submitted

**Committee Reason:** The proposal provides needed installation guidelines for BIPV systems used as exterior wall coverings or fenestration to be listed and labeled. The committee also mentioned that the safety glazing issue and adding duality to those products need to be addressed. The

FS150-21

### FS151-21

Committee Action: Disapproved

**Committee Reason:** The committee concluded the proposal is overreaching for what a rainscreen is and could be misinterpreted. The proposal tries to solve a problem that does not exist. The code currently does not prohibit the use of rainscreen systems. (Vote: 13-0)

FS151-21

## FS152-21

Committee Action: As Submitted

Committee Reason: The committee concluded the proposal appropriately adds material standards for foam plastic insulating sheathing through the addition of Section 2603.1.2 and Table 2603.1. (Vote: 13-0)

FS152-21

## FS153-21

Committee Action: As Modified

#### **Committee Modification:**

2603.4.1.4. Separately controlled climate structures.

In nonsprinklered buildings of Group U, foam plastic having a thickness that does not exceed 4 inches (102 mm) and a maximum flame spread index of 75 is permitted in separately controlled climate structures where the aggregate floor area does not exceed 400 square feet (37 m2) and the foam plastic is covered by a metal facing not less than 0.032-inch-thick (0.81 mm) aluminum or corrosion-resistant steel having a minimum base metal thickness of 0.016 inch (0.41mm). A thickness of up to 10 inches (254 mm) is permitted where protected by a thermal barrier.

**Committee Reason:** The committee concluded that the modification appropriately limits the use of the new section by adding "Group U". The proposed new section sets design requirements (i.e. similar to those in Section 2603.4.1.3) for separately controlled climate structures. (Vote: 13-0)

FS153-21

# FS154-21

Committee Action: As Submitted

Committee Reason: The committee concluded the proposal provides consistency and recognizes that there are other components of the shafts that are horizontal. (Vote: 13-0)

FS154-21

### FS155-21

Committee Action: As Modified

#### **Committee Modification:**

803.13Interior finish requirements based on occupancy.

Interior wall and ceiling finish shall have a classification such that the flame spread index and smoke developed index values are not higher than those corresponding to the classification not less than that specified in Table 803.13 for the group and location designated. Interior wall and ceiling finish materials tested in accordance with NFPA 286 and meeting the acceptance criteria of Section 803.1.1.1, shall be permitted to be used where a Class A classification in accordance with ASTM E84 or UL 723 is required.

Committee Reason: The committee concluded the modification clarifies the intent of the proposal and incorporates the proper terminology. The proposal clarifies the intent of the code. (Vote: 12-0)

FS155-21

## FS156-21

Committee Action: As Modified

#### **Committee Modification:**

1403.10Fiber-cement siding.

Fiber-cement siding

shall conform to the requirements of ASTM C1186, Type A (or ISO 8336, Category A), and shall be so identified on labeling listing an approved quality control agency.

Committee Reason: The committee concluded the modification corrects the other missing section 1403.10, Fiber-cement siding. The proposal clarifies the current code text since the term "approved quality control agency" is not defined. "approved agency" is a defined term. (Vote: 12-0)

FS156-21

## FS157-21

Committee Action: As Modified

#### **Committee Modification:**

1405.1.1Types I, II, III and IV construction.

On buildings of Types I, II, III and IV construction, *exterior wall coverings* shall be permitted to be constructed of combustible materials, complying with the following limitations:

- 1. Combustible exterior wall coverings shall not exceed 10 percent of an exterior wall surface area where the fire separation distance is 5 feet (1524 mm) or less.
- 2. Combustible exterior wall coverings shall be limited to 40 feet (12 192 mm) in height above grade plane.

#### **Exceptions:**

- 1. Metal composite material (MCM) systems complying with Section 1406.
- 2. Exterior insulation and finish systems (EIFS) complying with Section 1407.
- 3. High-pressure decorative exterior-grade compact laminate (HPL) systems complying with Section 1408.
- 4. Exterior wall coverings containing foam plastic insulation complying with Section 2603.5

- 3. Combustible exterior wall coverings constructed of fire-retardant-treated wood complying with Section 2303.2 for exterior installation shall not be limited in wall surface area where the fire separation distance is 5 feet (1524 mm) or less and shall be permitted up to 60 feet (18 288 mm) in height above grade plane regardless of the fire separation distance.
- 4. Wood veneers shall comply with Section 1404.5.

**Committee Reason:** The committee concluded that the modification is necessary to refer to all the requirements in section 2603. The proposal fixes many conflicts by providing the appropriate exceptions to Limitation 2 and references to those sections of the Code providing the applicable information regarding use on Types I-IV construction greater than 40-ft in height. (Vote: 13-0)

FS157-21

## FS158-21

Committee Action: As Submitted

Committee Reason: The committee indicated this is a legacy requirement based on legacy understanding; the addition of HT is an appropriate update of the code text. (Vote: 12-0)

FS158-21

## FS159-21

Committee Action: As Submitted

**Committee Reason:** The committee determined the proposal clarifies the appropriate place for inspection testing and maintenance of existing systems. The IFC, which is the maintenance code, is more relevant than the IBC construction code. (Vote: 14-0)

FS159-21

# FS160-21

Committee Action: As Submitted

**Committee Reason:** The committee agreed that the foam plastic trim should be a subsection of interior trim and Section 603 should refer specifically to Section 806.6. The proposal clarifies the requirements without technical changes. (Vote: 14-0)

FS160-21

# **International Building Code - General**

2021 Group A - Report of the Committee Action Hearing Results

## G1-21 Part I

Committee Action: Disapproved

Committee Reason: This proposal was disapproved due to the following concerns:

Section 703.5 - the term 'access to' only includes mechanical equipment, so if a ceiling space did not include mechanical equipment could a contractor argue that stenciling for fire rated walls was not required?

Section 1607.14.4.4 - "easily accessed" is not a defined term

Section 3008.9 - It was not clear what was meant by "allow access" for the fire department to the emergency/voice alarm communication systems. (Vote: 13-1)

G1-21 Part I

## G1-21 Part II

Committee Action: As Submitted

Committee Reason: The committee stated that the reason for approval was that the proposal replaces an improper term with the proper term for the conditions listed. (Vote: 12-0)

G1-21 Part II

# G1-21 Part III

Committee Action: As Submitted

Committee Reason: The Committee agreed with the published reason statement. (11-0)

G1-21 Part III

# G1-21 Part IV

This proposal includes the following errata In Section 1210.2.2 Item 2, "for use by the general" should be underlined.

Committee Action: Disapproved

**Committee Reason:** Although the intent of the proposal is understood, including the word "easy" continues a poor code text practice. Either something has access (see defined term) or it doesn't. (14-0)

G1-21 Part IV

#### G1-21 Part V

Committee Action: As Submitted

**Committee Reason:** The proposal was approved as submitted because it provides coordination with the action taken with -P84-15, M2-15, RB2-16, F12-16, CE137-16 Part 1, CE29-19 Part 1 and 2. Because the term 'accessible' is most commonly understood as requiring access for persons with disabilities, the proposal deletes the word accessible from the code and replaces it with other words, defined terms or phrases that are not attributed to requiring access for the physically disabled. This proposal provides clarity and consistency in the remaining codes where those coordination modifications missed or came in as part of new code changes. (Vote: 11-0)

G1-21 Part V

## G1-21 Part VI

Committee Action: As Submitted

Committee Reason: The Committee agreed with the published reason statement. (11-0)

G1-21 Part VI

## **G2-21**

Committee Action: Disapproved

Committee Reason: The proposal was disapproved because the committee did not like the laundry list. A definition should be what the item is. A definition for accessible route should specify that this is within the boundaries of the site so the public way does not get included. (Vote: 8-5)

G2-21

# G3-21 Part I

Committee Action: As Submitted

**Committee Reason:** The proposal was approved as a good clarification. "Group B" in front of ambulatory care could be read to have two different types of ambulatory care facilities. It is clear that ambulatory care is included in Group B in Chapter 3. This provides consistency throughout the code. (Vote: 14-0)

G3-21 Part I

# G3-21 Part II

Committee Action: As Submitted

Committee Reason: The committee stated that the reason for approval was that the proposal is an editorial clarification for consistent terminology and to be consistent with the actions taken on Parts I, III and IV. (Vote: 13-1)

G3-21 Part II

### G3-21 Part III

Committee Action: As Submitted

Committee Reason: The proposal provides for consistency with the building code. (13-1)

G3-21 Part III

### G3-21 Part IV

Committee Action: As Submitted

Committee Reason: This proposal passed as submitted because it correlates with other i-codes. The term "ambulatory care facility" is currently defined in the IBC and IFC. It should be defined in the other codes where the term is used. When this item was first introduced to the codes, it was believed that it was needed to add 'Group B' in front of the term. This proposal removes it as no longer necessary, and will make this consistent with the numerous other locations throughout the codes where 'Group B' in not included. The intent is to not appear to have two different types of 'ambulatory care facilities'. (Vote: 11-0)

G3-21 Part IV

## G4-21

Committee Action: Disapproved

**Committee Reason:** The committee concluded that the definition is in conflict with section 718.2.2 and other provisions, and there is not enough substantiation for this definition. This definition is not needed since there are already requirements in section 718 and chapter 6. The committee also mentioned, if the intent was to address the enforcement of the storage issue, not to add a definition, the proponent is encouraged to continue in that direction. (Vote: 13-0)

G4-21

## **G5-21**

Committee Action: As Modified

#### **Committee Modification:**

**[BG] CUSTODIAL CARE.** Describes persons who receive assistance Assistance with day-to-day living tasks; such as assistance with cooking, taking medication, bathing, using toilet facilities and other tasks of daily living. *Custodial care* includes persons receiving care who have the ability to respond to emergency situations and may receive *limited verbal or physical assistance*. These care recipients may evacuate at a slower rate and/or who have mental and psychiatric complications.

[BG] INCAPABLE OF SELF-PRESERVATION. <u>Describes persons Persons</u> who, because of age, physical limitations, mental limitations, chemical dependency or medical treatment, cannot respond as an individual to an emergency situation.

**LIMITED VERBAL OR PHYSICAL ASSISTANCE.** <u>Describes persons Persons</u> who, because of age, physical limitations, cognitive limitations, treatment or chemical dependency, and may not independently recognize, respond or evacuate without limited verbal or physical assistance during an emergency situation. <u>Limited verbal Verbal assistance</u> includes prompting, giving and repeating instructions. <u>Limited physical Physical</u> assistance with transfers to walking aids or mobility devices and assistance with egress.

Committee Reason: The modification was approved as the three terms are describing a person's abilities. In the last two sentences of 'limited verbal or physical assistance', adding 'limited' uses specific terms throughout the definition. The proposal was approved as this definition is important to appropriately separate Condition 1 and 2 for Group I-1 in Section 308. (Vote: 11-3)

## G6-21 Part I

Committee Action: Disapproved

**Committee Reason:** This proposal was disapproved as it does not really define anything. The confusion with the current text is not demonstrated. This is redundant with current definitions. (Vote: 8-6)

G6-21 Part I

## G6-21 Part II

Committee Action: Disapproved

Committee Reason: The proposal was disapproved for consistency with the committee action on G6-21 Part 1. (Vote: 10-4)

G6-21 Part II

## G7-21 Part I

Committee Action: Disapproved

Committee Reason: The committee indicated that the definition is not needed, and the reason statement references chapter 8, which does not address fire resistance. The committee mentioned that fire performance is a broad concept, and the definition does not address it. (Vote: 11-2)

G7-21 Part I

# G7-21 Part II

Committee Action: Disapproved

Committee Reason: The committee stated that the reasons for disapproval were based on the disapproval of Part I by the IBC FS committee and the lack of demonstrated need in the IFC. (Vote: 13-0)

G7-21 Part II

# G8-21

Committee Action: As Submitted

**Committee Reason:** The committee determined the proposal is specific and improves the current definition. The proposal clarifies how the fire protection rating will be measured. The proposal makes the definition consistent with the testing standard terminology used in opening protective without changing the acceptance criteria. (Vote: 8-5)

G8-21

#### G9-21

Committee Action: Disapproved

Committee Reason: The committee determined having the definition is not advised since it will not cover all the various applications of flashing in the code. The current code text in chapter 15 does not prohibit the use of flashing made from any materials. (Vote: 12-1)

G9-21

## G10-21

Committee Action: As Submitted

Committee Reason: The proposal was approved because an elevator lobby is typically part of the corridor and should not be part of a net floor area calculation. This will help with determination of the occupant load for a floor. (Vote: 8-6)

G10-21

## G11-21

Committee Action: Disapproved

**Committee Reason:** The proposal was disapproved because while a guard is primarily a vertical element, this could be read to not allow any angled or curved elements for the infill of the garage. Angled or curved guards are still effective if the meets the height measured vertically. (Vote: 14-0)

G11-21

## G12-21

Committee Action: Disapproved

Committee Reason: This proposal was disapproved because some committee members felt that not including the occupied roof in the definition of high rise ignored the issue of the potential occupant load on the occupied roof. Some of the committee members felt that the safety for persons on the roof was addressed through other sections in the codes. See also the committee reason for G14, G15 and G16. (Vote: 10-4)

**Staff Analysis:** G12-21, G14-21, G15-21, G16-21 addresses requirements in a different or contradicting manner. G14-21, G15-21 and G16-21 addresses similar requirements in a different manner to those found in current IBC Section 503.1.4. The committee is urged to make their intentions clear with their actions on these proposals.

G12-21

# G13-21

Committee Action: Disapproved

**Committee Reason:** This proposal was disapproved as too broad of a requirement. By asking for occupant notification throughout the roof, this would include unoccupied portions and areas accessed only by maintenance and service personnel that would only be on the roof for very limited times. This is not feasible for all roof areas. A problem with people wandering off or portions of occupied roofs has not been demonstrated - this could be addressed by barriers. (Vote: 14-0).

## G14-21

Committee Action: Disapproved

**Committee Reason:** This proposal was disapproved because the modification would require the measurement for determining if a building was a high rise by measuring to all roofs - occupied or not. See also the Committee Action to G12, G15 and G16. (Vote: 14-0)

**Staff Analysis:** G12-21, G14-21, G15-21, G16-21 addresses requirements in a different or contradicting manner. G14-21, G15-21 and G16-21 addresses similar requirements in a different manner to those found in current IBC Section 503.1.4. The committee is urged to make their intentions clear with their actions on these proposals.

G14-21

## G15-21

Committee Action: As Submitted

Committee Reason: The proposal to add 'occupied roofs' to the definition of 'highrise' was approved due to the concern that occupants on the occupied roof need to be protected with elements other than just being open to the outside air. Fire department access to the roof is important for life safety. Concerns were raised that protection for occupied roofs were already addressed in other portions of the code, so having an occupied roof above the 75 foot height should not add the entire 'highrise' package of requirements - especially if the occupied roof was only a small portion of the overall roof. The proposal did not address the issue if a 'floor' is the floor of the story below the roof, a mezzanine in the top story, or what would be required for an occupied roof with elevated platforms on portions of the occupied roof. There was also a concern about the impact on existing building that wanted to add amenities on the roof. See also the Committee Action to G12, G14 and G16. (Vote: 10-4)

**Staff Analysis:** G12-21, G14-21, G15-21, G16-21 addresses requirements in a different or contradicting manner. G14-21, G15-21 and G16-21 addresses similar requirements in a different manner to those found in current IBC Section 503.1.4. The committee is urged to make their intentions clear with their actions on these proposals.

G15-21

# G16-21

Committee Action: Disapproved

Committee Reason: This proposal was disapproved as it could be read to apply to occupied roofs on any height building. There was also the question if someone could post an occupant load to limit the occupant load on the roof or if this needed to be the calculated occupant load. Concerns were raised that protection for occupied roofs were already addressed in other portions of the code, so having an occupied roof above the 75 foot height should not add the entire 'highrise' package of requirements - especially if the occupied roof was only a small portion of the overall roof. The proposal did not address the issue if a 'floor' is the floor of the story below the roof, a mezzanine in the top story, or what would be required for an occupied roof with elevated platforms on portions of the occupied roof. There was also a concern about the impact on existing building that wanted to add amenities on the roof. See also the Committee Action to G12, G14 and G15. (Vote: 9-4)

**Staff Analysis:** G12-21, G14-21, G15-21, G16-21 addresses requirements in a different or contradicting manner. G14-21, G15-21 and G16-21 addresses similar requirements in a different manner to those found in current IBC Section 503.1.4. The committee is urged to make their intentions clear with their actions on these proposals.

G16-21

## G17-21

Committee Action: As Modified

#### **Committee Modification:**

**[BF] INTUMESCENT FIRE-RESISTIVE MATERIALS.** Liquid mixture applied to substrates by brush, roller, spray or trowel which expands into a protective <u>insulating feamed</u> layer to provide fire-resistive protection of the substrates when exposed to flame or intense heat.

**722.5.1.3 Sprayed** <u>fire-resistive fire-resistant</u> **materials.** The *fire resistance* of wide-flange structural steel columns protected with sprayed <u>fire-resistant</u> resistive <u>fire-resistant</u> materials, as illustrated in Figure 722.5.1(5), shall be permitted to be determined from the following expression:

 $R = [C_1(W/D) + C_2] h$  (Equation **7-13**) where:

 $R = Fire\ resistance\ (minutes).$ 

 $h = \text{Thickness of sprayed } \underline{\text{fire-resistive}} \text{ } \underline{\text{fire-resistant-material (inches)}}.$ 

D = Heated perimeter of the structural steel column (inches).

 $C_1$  and  $C_2$  = Material-dependent constants.

W = Weight of structural steel columns (pounds per linear foot).

The *fire resistance* of structural steel columns protected with intumescent fire-resistive materials shall be determined on the basis of *fire-resistance* tests in accordance with Section 703.2.

**722.5.2.2 Sprayed** <u>fire-resistive</u> <u>fire-resistant</u> **materials.** The provisions in this section apply to structural steel beams and girders protected with sprayed <u>fire-resistive</u> <u>fire-resistant</u> materials. Larger or smaller beam and girder shapes shall be permitted to be substituted for beams specified in *approved* unrestrained or restrained fire-resistance-rated assemblies, provided that the thickness of the <u>fire-resistive</u> <u>fire-resistant</u> material is adjusted in accordance with the following expression:

 $h_2 = h_1[(W_1/D_1) + 0.60] / [(W_2/D_2) + 0.60]$  (Equation **7-17**) where:

 $h = \text{Thickness of sprayed } \underline{\text{fire-resistive }}$  material in inches.

W = Weight of the structural steel beam or girder in pounds per linear foot.

D = Heated perimeter of the structural steel beam in inches.

Subscript 1 refers to the beam and fire-resistive fire-resistant material thickness in the approved assembly.

Subscript 2 refers to the substitute beam or girder and the required thickness of fire-resistive fire-resistant material.

The *fire resistance* of structural steel beams and girders protected with intumescent fire-resistive materials shall be determined on the basis of fire-resistance tests in accordance with Section 703.2.

**Committee Reason:** The committee determined the modification uses "insulating" instead of "foamed", which is the proper word. The modification also clarifies the code and consistent with the latest code change using "fire-resistive" instead of "fire-resistant". The proposal is a good clarification and updates the code language with the proper industry terms. (Vote: 12-1)

G17-21

G18-21

Committee Action: Withdrawn

G18-21

### G19-21

Committee Action: Disapproved

Committee Reason: This proposal was disapproved as the committee felt that this was a common dictionary term that did not need to be redefined in the codes. (Vote: 14-0)

G19-21

## **G20-21 Part I**

Committee Action: As Modified

#### **Committee Modification:**

OCCUPIABLE ROOF. An exterior space on a roof that is designed for human occupancy, other than maintenance or repair, and which is equipped with a means of egress system meeting the requirements of this code.

**Committee Reason:** The modification added 'repair' to the definition, which is consistent with other sections in the codes related to roof requirements. The definition was approved because it clarifies a 'occupiable roof' is for roofs for human occupancy on a regular basis. The term was also coordinated throughout the code. (Vote: 12-2)

**Staff Analysis:** G20-21, G21-21 and G22-21 addresses requirements in a different or contradicting manner. The committee is urged to make their intentions clear with their actions on these proposals.

G20-21 Part I

## G20-21 Part II

Committee Action: As Modified

#### **Committee Modification:**

**OCCUPIABLE ROOF.** An exterior space on a roof that is designed for human occupancy, other than maintenance <u>or repair</u>, and which is equipped with a means of egress system meeting the requirements of this code.

**Committee Reason:** The committee stated that the reason for the approval of the modification was that the inclusion of the term repairs is important to the language of the definition. The reason for the approval of the proposal is that it provides a definition for a needed clarification of an occupiable roof. (Vote: 11-0)

**Staff Analysis:** G20-21, G21-21 and G22-21 addresses requirements in a different or contradicting manner. The committee is urged to make their intentions clear with their actions on these proposals.

G20-21 Part II

# G21-21

Committee Action: Disapproved

Committee Reason: The proposal was disapproved for consistency with the committee action on G20. In addition, this definition could be read to include equipment maintenance and repair that occurred on the roof. (Vote: 14-0)

Staff Analysis: G20-21, G21-21 and G22-21 addresses requirements in a different or contradicting manner. The committee is urged to make

G21-21

### G22-21

Committee Action: Disapproved

Committee Reason: This proposal was disapproved because the change to 'occupiable space' could loose the differences in the code with 'habitable space'. (Vote: 12-2)

**Staff Analysis:** G20-21, G21-21 and G22-21 addresses requirements in a different or contradicting manner. The committee is urged to make their intentions clear with their actions on these proposals.

G22-21

## G23-21

Committee Action: As Modified

#### **Committee Modification:**

OVERHEAD DOOR STOP. Door hardware mounted at the top of the door and  $\frac{1}{2}$  to the door frame which limits the <u>swing of the door in the opening of the door.</u>

Committee Reason: The modification was approved as this clarified an overhead door stop limits the swing instead of holding the door shut like a closer. This coordinates E41-18 and Section 1010.1.1.1. This fixes a conflict between clear opening and door opening. (Vote: 14-0)

G23-21

# G24-21

Committee Action: Disapproved

**Committee Reason:** The committee concluded that the proposed definition does not solve or clarify any issue. The definition is broad and raising more questions. The committee also mentioned that the veneer definition included in the code already covers all types of materials. For plastic veneer material in specific, chapter 26 could be used. (Vote: 12-1)

G24-21

# G25-21

Committee Action: Disapproved

Committee Reason: This proposal was disapproved as there was a concern for how a theater in the round could be separated from the seating areas if it was considered a stage instead of a platform. The committee felt that the change to 'audio visual equipment' was addressing new technology. (Vote: 9-4)

G25-21

#### G26-21

Committee Action: Disapproved

Committee Reason: The proposal was being disapproved because the committee felt that adding 'portions' to a structural frame and the other descriptors would be hard to define and analyze. (Vote: 14-0)

G26-21

## G27-21

Committee Action: Disapproved

**Committee Reason:** The committee agreed that projection is a confusing topic in general; however, the definition is broad. The definition is not clear on what is allowed. (Vote: 13-0)

G27-21

### G28-21

Committee Action: Disapproved

**Committee Reason:** The proposal was disapproved because the proponent said the term modified should have been 'public entrance' instead of 'public-use areas.' The added words would be confusing for entrances with multiple doors. (Vote: 14-0)

G28-21

## G29-21

Committee Action: As Modified

#### **Committee Modification:**

**603.1 Allowable materials.** Combustible materials shall be permitted in buildings of Type I or II construction in the following applications and in accordance with Sections 603.1.1 through 603.1.3:

- 1. Fire-retardant-treated wood shall be permitted in:
  - 1.1. Nonbearing partitions where the required *fire-resistance rating* is 2 hours or less except in *shaft enclosures* within Group I-2 occupancies and *ambulatory care facilities*.
  - 1.2. Nonbearing exterior walls where fire-resistance-rated construction is not required.
  - 1.3. Roof construction, including girders, trusses, framing and decking.

#### **Exceptions:**

- 1. In buildings of Type IA construction exceeding two *stories above grade plane*, *fire-retardant-treated wood* is not permitted in roof construction where the vertical distance from the upper floor to the roof is less than 20 feet (6096 mm).
- 2. Group I-2, roof construction containing *fire-retardant-treated wood* shall be covered by not less than a Class Aroof covering or roof assembly, and the roof assembly shall have a *fire-resistance rating* where required by the construction type.
- 1.4. Balconies, porches, decks and exterior stairways not used as required exits on buildings three stories or less above grade plane.

2. Thermal and acoustical insulation, other than foam plastics, having a flame spread index of not more than 25.

#### **Exceptions:**

- 1. Insulation placed between two layers of noncombustible materials without an intervening airspace shall be allowed to have a *flame spread index* of not more than 100.
- 2. Insulation installed between a finished floor and solid decking without intervening airspace shall be allowed to have a *flame* spread index of not more than 200.
- 3. Foam plastics in accordance with Chapter 26.
- 4. Roof coverings that have an A, B or C classification.
- 5. Interior floor finish and floor covering materials installed in accordance with Section 804.
- 6. Millwork such as doors, door frames, window sashes and frames.
- 7. Interior wall and ceiling finishes installed in accordance with Section 803.
- 8. Trim installed in accordance with Section 806.
- 9. Where not installed greater than 15 feet (4572 mm) above grade, show windows, nailing or furring strips and wooden bulkheads below show windows, including their frames, aprons and show cases.
- 10. Finish flooring installed in accordance with Section 805.
- 11. Partitions dividing portions of stores, offices or similar places occupied by one tenant only and that do not establish a *corridor* serving an *occupant load* of 30 or more shall be permitted to be constructed of *fire-retardant-treated* wood, 1-hour fire-resistance-rated construction or of wood panels or similar light construction up to 6 feet (1829 mm) in height.
- 12. Stages and platforms constructed in accordance with Sections 410.2 and 410.3, respectively.
- 13. Combustible exterior wall coverings, balconies and similar projections and bay or oriel windows in accordance with Chapter 14 and Section 705.2.3.1.
- 14. Blocking such as for handrails, millwork, cabinets and window and door frames.
- 15. Light-transmitting plastics as permitted by Chapter 26.
- 16. Mastics and caulking materials applied to provide flexible seals between components of exterior wall construction.
- 17. Exterior plastic veneer installed in accordance with Section 2605.2.
- 18. Nailing or furring strips as permitted by Section 803.15.
- 19. Heavy timber as permitted by Note c to Table 601 and Sections 602.4.4.4 and 705.2.3.1.
- 20. Aggregates, component materials and admixtures as permitted by Section 703.2.1.2.
- 21. Sprayed fire-resistive materials and intumescent and mastic <u>fire-resistive fire-resistant</u> coatings, determined on the basis of *fire resistance* tests in accordance with Section 703.2 and installed in accordance with Sections 1705.15 and 1705.16, respectively.
- 22. Materials used to protect penetrations in fire-resistance-rated assemblies in accordance with Section 714.
- 23. Materials used to protect joints in fire-resistance-rated assemblies in accordance with Section 715.
- 24. Materials allowed in the concealed spaces of buildings of Types I and II construction in accordance with Section 718.5.
- 25. Materials exposed within plenums complying with Section 602 of the International Mechanical Code.
- 26. Wall construction of freezers and coolers of less than 1,000 square feet (92.9 m²), in size, lined on both sides with noncombustible materials and the building is protected throughout with an *automatic sprinkler system* in accordance with Section 903.3.1.1.
- 27. Wood nailers for parapet flashing and roof cants.

**722.5.1.3 Sprayed fire-resistive materials.(SFRM).** The *fire resistance* of wide-flange structural steel columns protected with SFRM, as illustrated in Figure 722.5.1(5), shall be permitted to be determined from the following expression:

 $R = [C_1(W/D) + C_2] h$  (Equation 7-13) where:

 $R = Fire\ resistance\ (minutes).$ 

h = Thickness ofSFRM (inches).

D = Heated perimeter of the structural steel column (inches).

 $C_1$  and  $C_2$  = Material-dependent constants.

W = Weight of structural steel columns (pounds per linear foot).

The *fire resistance* of structural steel columns protected with intumescent or mastic <u>fire-resistive</u> fire-resistant coatings shall be determined on the basis of *fire-resistance* tests in accordance with Section 703.2.

**722.5.2.2 Sprayed fire-resistive materials (SFRM).** The provisions in this section apply to structural steel beams and girders protected with (SFRM). Larger or smaller beam and girder shapes shall be permitted to be substituted for beams specified in *approved* unrestrained or restrained fire-resistance-rated assemblies, provided that the thickness of the SFRM material is adjusted in accordance with the following expression:

 $h_2 = h_1 [W_1 / D_1) + 0.60] / [(W_2 / D_2) + 0.60]$ (Equation 7-17) where:

h = Thickness of SFRM in inches.

W = Weight of the structural steel beam or girder in pounds per linear foot.

D = Heated perimeter of the structural steel beam in inches.
 Subscript 1 refers to the beam and SFRM thickness in the approved assembly.

Subscript 2 refers to the substitute beam or girder and the required thickness of SFRMI.

The *fire resistance* of structural steel beams and girders protected with intumescent or mastic <u>fire-resistive</u> fire-resistant coatings shall be determined on the basis of fire-resistance tests in accordance with Section 703.2.

Committee Reason: The committee concluded the modification fixes the main proposal text regarding using "fire-resistive" instead of "fire-resistant". Committee approval is in line with committee action on code change G 17-21. (Vote: 13-0)

G29-21

## G30-21

Committee Action: Disapproved

**Committee Reason:** The proposal was disapproved because the committee felt that this added an additional level of complexity that would not help clarify the code. This issue is already addressed in the definition of 'grade plane'. This option was removed from the code in the 04/05 cycle. This would have very detrimental effects on buildings in flood zones. (Vote: 14-0)

G30-21

# G31-21

Committee Action: Disapproved

**Committee Reason:** The proposal was disapproved because the committee felt that the proposed text could be read to expand the Group E occupancy to all assembly spaces on the educational campus, which is contrary to what the proponent expressed in the reason as their intent. (Vote: 13-1)

## G32-21

Committee Action: As Submitted

Committee Reason: This proposal was approved as this clarifies where to classify what Group energy storage systems shall be classified. This is consistent with similar systems with new technologies. (Vote: 8-6)

G32-21

### G33-21

Committee Action: As Submitted

**Committee Reason:** This proposal was approved because it adds clarification to the requirements between data processing and data entry use. (Vote: 12-1)

G33-21

## G34-21

Committee Action: Disapproved

**Committee Reason:** This proposal was disapproved by the committee, however, they felt that the general intent for coordination with the IRC scoping was good, but some testifiers were confused on the limits. There was a concern that this could be read to allow for multiple care facilities in an apartment building, or dwelling units in a school. (Vote: 14-0)

G34-21

# G35-21

Committee Action: Withdrawn

G35-21

# G36-21

Committee Action: As Modified

**Committee Modification:** 

2021 International Building Code

[F] TABLE 307.1(1) MAXIMUM ALLOWABLE QUANTITY PER CONTROL AREA OF HAZARDOUS MATERIALS POSING A PHYSICAL HAZARDa, c j, m, n

Portions of table not shown remain unchanged.

MATERIAL	CLASS	GROUP WHEN THE MAXIMUM ALLOWABLE QUANTITY IS EXCEEDED	Solid pounds(cubic feet)	Liquid gallons (pounds)	Gas (cubic feet at NTP)	Solid pounds(cubic feet)	Liquid gallons (pounds)	teet at	pounds(cubic	Liquid gallons (pounds)
	II	H-2 or H-3		120 <sup>d, e</sup>			120 <sup>d</sup>			30 <sup>d</sup>
Combustible liquid o	IIIA	H-2 or H-3	NA	330 <sup>d, e</sup>	NA	NA	330 <sup>d</sup>	NA	NA	80 <sup>d</sup>
	IIIB	NA		13,200 <sup>e, f</sup>			13,200 <sup>f</sup>			3,300 <sup>f</sup>

TABLE 307.1.1 HAZARDOUS MATERIAL EXEMPTIONS<sup>a</sup>

Portions of table not shown remain unchanged.

Material Classification	Occupancy or Application	Exemption
	Groups B, F, M and S	Storage of special industrial explosive devices is are not limited
Explosives	Groups M and R-3	Storage of black powder, smokeless propellant, and small arms primers is are not limited
Flammable and combustible liquids and gases	Fuel oil	The quantity of fuel oil storage complying with Section 605.4.2 603.3.2 of the International Fire Code is not limited
I Berneralion I i i i i i i i i i i i i i i i i i i		The quantity of refrigerants in refrigeration systems is not limited. To qualify for this allowance, such systems shall comply with Section 608 of the International Fire Gode and Chapter 11 of the International Mechanical Gode

#### 2021 International Fire Code

**5001.1 Scope.** Prevention, control and mitigation of dangerous conditions related to storage, dispensing, use and handling of hazardous materials shall be in accordance with this chapter. This chapter shall apply to all hazardous materials, other than those materials and conditions listed in Table 5001.1, including those materials regulated elsewhere in this code, except that where specific requirements are provided in other chapters, those specific requirements shall apply in accordance with the applicable chapter. Where a material has multiple hazards, all hazards shall be addressed. (balance unchanged)

#### TABLE 5003.1.1(1)

MAXIMUM ALLOWABLE QUANTITY PER CONTROL AREA OF HAZARDOUS MATERIALS POSING A PHYSICAL HAZARD a, c, j, m, n, p. Portions of table not shown remain unchanged.

MATERIAL	CLASS	GROUP WHEN THE MAXIMUM ALLOWABLE QUANTITY IS EXCEEDED	Solid pounds (cubic feet)	Liquid gallons (pounds)	Gas (cubic feet at NTP)	Solid pounds (cubic feet)	Liquid gallons (pounds)	Gas (cubic feet at NTP)	Solid pounds (cubic feet)	Liquid gallons (pounds)
Combustible	Loose	H-3	(100)	NA	NA	(100)	NA	NA	(20)	NA
fibers <sup>q</sup> Bale	Baled <sup>e</sup>	п-3	(1,000)			(1,000)			(200)	
	II	H-2 or H-3		120 <sup>d, e</sup>			120 <sup>d</sup>			30 <sup>d</sup>
Combustible liquid <sup>e</sup> _9	IIIA	H-2 or H-3	NA	330 <sup>d, e</sup>	NA	NA	330 <sup>d</sup>	NA	NA	80 <sup>d</sup>
	IIIB	NA		13,200 <sup>e, f</sup>			13,200 <sup>f</sup>			3,300 <sup>f</sup>

p. Quantities in this table shall be modified in accordance with Table 5003.1.1(5).

#### TABLE 5003.1.1(2)

MAXIMUM ALLOWABLE QUANTITY PER CONTROL AREA OF HAZARDOUS MATERIALS POSING A HEALTH HAZARD<sup>a, g, h, i, j</sup> Portions of table not shown remain unchanged.

- c. For hazardous materials in Group B higher education laboratory occupancies, See Section 428 of the International Building Code and Chapter 38.
- i. Quantities in this table shall be modified in accordance with Table 5003.1.1(5).

#### TABLE 5001.1 5003.1.1(5) HAZARDOUS MATERIAL EXEMPTIONS<sup>a</sup>

Portions of table not shown remain unchanged.

Material Classification	Occupancy or Application	Exemption				
Explosives	Groups B, F, M and S	Storage of special industrial explosive devices is are not limited				
	Groups M and R-3	Storage of black powder, smokeless propellant, and small arms primers is are not limited				
	Cleaning establishments with combustible	The quantity of combustible liquid solvents used in closed systems and having a flash point at or above 140°F (60°C) is not limited. To qualify for this allowance, equipment shall be listed by an approved testing agency and the occupancy shall be separated from all other areas of the building by 1-hour fire barriers constructed in accordance with Section 707 or 1-hour horizontal assemblies, or both, constructed in accordance with-Section 711, or both the International Building Code				
	liquid solvents	The quantity of combustible liquid solvents having a flash point at or above 200°F (93°C) is not limited				
Flammable	Fuel oil	The quantity of fuel oil storage complying with Section 605.4.2 603.3.2 of the International Fire Code is not limited				
and combustible liquids and gases	Flammable finishing operations using flammable and combustible liquids	Buildings and structures occupied for the application of flammable finishes. Such buildings and areas shall comply with Chapter 24Section 416				
	Hand sanitizer	The quantity of alcohol-based hand rubs classified as Class I or II liquids in dispensers installed in accordance with Sections 5705.5 and 5705.5.1 of the International Fire Code is not limited. The location of the alcohol-based hand rub (ABHR) dispensers shall be provided in the construction documents				
Any	Refrigeration systems	The quantity of refrigerants in refrigeration systems is not limited. To qualify for this allowance, such systems shall comply with Section 608 of the International Fire Code and Chapter 11 of the International Mechanical Code				

a. Exempted materials and conditions listed in this table are required to comply with applicable provisions of the International Fire Code this code that are not based on exceeding maximum allowable quantities in Section 5003.

Committee Reason: This proposal clarifies and cleans up the group H occupancy exemptions and applicability of the hazardous materials provisions of the IFC. The new IBC Table 307.1.1 is a better and more comprehensive approach than the current list found in IBC Section 307.1.1. This proposal along with the F197-21 revising roof top storage are necessary fixes to better clarify the application of the hazardous materials requirements. The modifications further coordinate footnotes amongst the tables, clarifies references and fixes redundant text. Additionally, the proposed table explaining the exceptions to requirements for IFC Chapter 50 has been more appropriately placed within Section 5003 as Table 5003.1.1(5). Section 5003 is the more appropriate location as that is where the maximum allowable quantity (MAQ) information is found. Appropriate references were made in Tables 5003.1.1(1) and 5003.1.1(2) through footnotes. (Vote: 13-0)

G36-21

# G37-21

Committee Action: Disapproved

Committee Reason: This proposal was disapproved based upon the action taken on F199-21 as the testing supporting this proposal is not yet complete. (Vote: 14-0)

G37-21

# G38-21

Committee Action: Disapproved

Committee Reason: This proposal was disapproved based upon the specific decision in 2018 to permit these exceptions to Group H Occupancy classifications within the IBC for the 2021 code. The IFC would still apply from an operational standpoint. (Vote: 10-4)

G39-21

Committee Action: Withdrawn

G39-21

G40-21

Committee Action: As Submitted

**Committee Reason:** The proposal was approved as it appropriately correlates with the occupancy classifications for explosives. The language is consistent with the definition for 1.4 explosives but could be simplified to remove the duplicative language. (Vote: 14-0)

G40-21

G41-21

Committee Action: As Submitted

Committee Reason: This proposal was approved based upon the actions taken on F3-21 and F192-21. (Vote: 14-0)

G41-21

G42-21

Committee Action: Disapproved

**Committee Reason:** This proposal was disapproved by the committee, however, they felt that the general intent for coordination with the IRC scoping was good, but some testifiers were confused on the limits. There was a concern that this could be read to allow for a large assisted living or nursing home to be constructed as individual dwelling units under the IRC. (Vote: 14-0)

G42-21

G43-21

Committee Action: As Modified

**Committee Modification:** 

**310.3 Residential Group R-2.** Residential Group R-2 occupancies containing *sleeping units* or more than two *dwelling units* where the occupants are primarily permanent in nature, including:

- Apartment houses
- Congregate living facilities (nontransient) with more than 16 occupants
  - o Boarding houses (nontransient)
  - Convents
  - Dormitories

- Fraternities and sororities
- Monasteries
- Hotels (nontransient) with more than 10 occupants five guest rooms
- Live/work units
- Motels (nontransient) with more than 10 occupants five guest rooms
- Vacation timeshare properties

**310.4 Residential Group R-3** Residential Group R-3 occupancies where the occupants are primarily permanent in nature and not classified as Group R-1, R-2, R-4 or I, including:

- Buildings that do not contain more than two dwelling units
- Care facilities that provide accommodations for five or fewer persons receiving care
- Congregate living facilities (nontransient) with 16 or fewer occupants
  - o Boarding houses (nontransient)
  - Convents
  - Dormitories
  - o Fraternities and sororities
  - Monasteries
- Congregate living facilities (transient) with 10 or fewer occupants
  - o Boarding houses (transient)
- Lodging houses with five or fewer guest rooms
- Hotels (nontransient) with 10 or fewer occupants five or fewer guest rooms
- Motels (nontransient) with 10 or fewer occupants five or fewer guest rooms

**Committee Reason:** The modification was approved because it proposed the 5 guestroom limitation for lodging houses with small hotels and motels - thus using consistent terminology. The proposal was approved because it coordinated the limits for lodging houses with small hotels and motels. (Vote: 13-1).

G43-21

# G44-21 Part I

Committee Action: As Submitted

**Committee Reason:** This proposal was approved because it would address in the code requirements the extended stay hotels that include dwelling units, not just sleeping units. (Vote: 14-0)

G44-21 Part I

## G44-21 Part II

Committee Action: As Submitted

**Committee Reason:** The committee stated that the reason for the approval was that it closes a gap in the requirements by including the proposed terms in various sections throughout the code. (Vote: 13-0)

G44-21 Part II

# G44-21 Part III

Committee Action: As Submitted

Committee Reason: The Committee agreed with the published reason statement. (14-0)

G44-21 Part III

## **G44-21 Part IV**

Committee Action: As Submitted

Committee Reason: The committee agreed that adding "dwelling unit" to the definition of hotel (R-1) and related table in the IZC, which like R-2 occupancies can also include both dwelling and sleeping units, appropriately correlated the requirements between I-codes. (Vote: 11-0)

G44-21 Part IV

### G45-21

Committee Action: As Modified

#### **Committee Modification:**

**310.3 Residential Group R-2.** Residential Group R-2 occupancies containing *sleeping units* or more than two *dwelling units* where the occupants are primarily permanent in nature, including:

- Apartment houses
- Congregate living facilities (nontransient) with more than 16 occupants
  - Boarding houses (nontransient)
  - Convents
  - o Dormitories
  - o Fire station Emergency services living quarters
  - Fraternities and sororities
  - Monasteries
- Hotels (nontransient)
- Live/work units
- Motels (nontransient)
- Vacation timeshare properties

**310.4 Residential Group R-3.** Residential Group R-3 occupancies where the occupants are primarily permanent in nature and not classified as Group R-1, R-2, R-4 or I, including:

- Buildings that do not contain more than two dwelling units
- · Care facilities that provide accommodations for five or fewer persons receiving care
- Congregate living facilities (nontransient) with 16 or fewer occupants
  - Boarding houses (nontransient)
  - Convents
  - o Dormitories
  - o Fire station Emergency services living quarters
  - o Fraternities and sororities
  - Monasteries
- Congregate living facilities (transient) with 10 or fewer occupants
  - o Boarding houses (transient)

• Lodging houses (transient) with five or fewer guest rooms and 10 or fewer occupants

**Committee Reason:** The proposal was approved because it helps classify the living quarters for fire stations as Group R-2. Fire fighters are non-transient and familiar with the living arrangements. The modification was approved because it expanded this idea to include other emergency operation centers where staff may be sleeping. (Vote: 13-1)

G45-21

### G46-21

Committee Action: As Modified

#### **Committee Modification:**

**310.4.2 Lodging houses.** Owner-occupied *lodging houses* with five or fewer *guest rooms* shall be permitted to be constructed in accordance with this code or the *International Residential Code*. , <u>provided that facilities</u> Facilities constructed using the *International Residential Code* shall be protected by that an *automatic sprinkler system* installed in accordance with Section 903.3.1.3 or Section P2904 of the *International Residential Code*.

**Committee Reason:** The modification was approved to make the lodging house sprinkler requirements consistent with the IRC requirements when a lodging house is permitted to be constructed under the IRC. The proposal was approved since it coordinates the 5 guest room threshold with IRC and provides and appropriate pointer that matches the IRC scoping. (Vote: 14-0)

G46-21

### G47-21

Committee Action: Disapproved

**Committee Reason:** The proposal was disapproved for the following reasons. The proposed standard is not extensive enough to ensure proper testing for awing materials. The proponent should compare this option to the other three to see if this is truly another option. It was not clear how the applicators would be approved. (Vote: 12-2)

G47-21

## G48-21

Committee Action: As Submitted

Committee Reason: This proposal was approved as it correctly classifies these types of aerosal products. The package size and flamability is regulated. (Vote: 8-6)

G48-21

# G49-21

Committee Action: Disapproved

**Committee Reason:** This proposal was disapproved because the proposed text did not accomplish the stated objectives. Most airports have their own fire department, so there should not be a fire department access issue. Some airports have extensive shopping and dining options, so this section would be appropriate. It was suggested that if this is an issue that the proponent could develop criteria specific to airport terminals. (Vote:

G49-21

### G50-21

Committee Action: As Submitted

Committee Reason: The committee stated that the reason for the approval was based on the improvement of the code language and intent with the replacement of the word "same" with "mall" in the proposal. (Vote: 14-0)

G50-21

## G51-21

Committee Action: Disapproved

**Committee Reason:** This proposal was disapproved because this is only a partial solution - the proponent also needs to look at the equation in Section 402.8.2.1. Malls are different than mercantile occupancies because for the central/common areas. (Vote: 14-0)

G51-21

## G52-21

Committee Action: As Submitted

Committee Reason: The proposal was approved as this is a clarification of the requirements for malls. (Vote: 14-0)

G52-21

# G53-21

Committee Action: Disapproved

Committee Reason: The proposal was disapproved. There are concerns about moving the F-1 and S-1 buildings in Table 504.3 and grouping these with H-4 facilities and the application of the footnote for sprinklered buildings. What is the justification for equivalency for concrete and steel to wood construction with 2 hour protection and wood construction with 3 hour protection? Concrete and steel buildings should justify the height increases on their own merit. (Vote: 14-0)

G53-21

# G54-21

Committee Action: Disapproved

Committee Reason: The proposal was disapproved because the proposal could be read to allow for different ratings in parts of the building, including a reduction of supporting construction. The result could be a random mix of construction types in a building. (Vote: 14-0)

## G55-21

Committee Action: Withdrawn

G55-21

### G56-21

Committee Action: Disapproved

Committee Reason: The disapproval was based on the committee preference for G57-21. (Vote: 14-0)

G56-21

## G57-21

Committee Action: As Submitted

Committee Reason: The committee stated that adding the definitions along with the new requirements adds clarity to the code. (Vote: 13-1)

G57-21

## G58-21

Committee Action: As Submitted

Committee Reason: The committee stated that the reason for the approval was based on the clarification of code language that hose stream was only intended to be based upon NFPA 13 versus NFPA 14. (Vote: 14-0)

G58-21

# G59-21

Committee Action: As Modified

#### **Committee Modification:**

**403.5.3.1 Stairway communication system.** A telephone or other two-way communications system connected to an *approved constantly attended station* shall be provided at not less than every fifth floor in each *stairway* where the doors to the *stairway* are locked. Systems shall be listed to in accordance with UL 2525 and installed per in accordance with NFPA 72, or an equivalent standard acceptable to the authority having jurisdiction.

**1009.8.1 System requirements.** Two-way communication systems shall provide communication between each required location and the *fire command center* or a central control point location *approved* by the fire department. Where the central control point is not a *constantly attended location*, the two-way communication system shall have timed, automatic telephone dial-out capability that provides two-way communication with an approved supervising station or emergency services. The two-way communication system shall include both audible and visible signals. Systems shall be listed to in accordance with UL 2525 and installed per in accordance with NFPA 72., or an equivalent standard acceptable to the authority

#### having jurisdiction.

**Committee Reason:** The modification was approved because the language removed was already addressed under alternative means. The proposal was approved as UL 2525 and NFPA 72 will provide protection for two-way communication systems in highrise stairways, areas of refuge and in elevator lobbies. (Vote: 14-0)

**Staff Analysis:** E35-21, E36-21 and G59-21 addresses requirements in a different manner. The committee is urged to make their intentions clear with their actions on these proposals.

G59-21

## G60-21

Committee Action: Disapproved

**Committee Reason:** This proposal was disapproved based on the proponents request. This is coordinated with the committee action on E47 and G61. (Vote: 12-0)

**Staff Analysis:** Proposals E47-21, G60-21 and G61-21 addresses requirements in a different or contradicting manner. The committee is urged to make their intentions clear with their actions on these proposals.

G60-21

### G61-21

Committee Action: As Modified

#### **Committee Modification:**

**403.5.3 Stairway door operation.** *Stairway* doors other than the exit discharge doors shall be permitted to be locked from the *stairway* side. *Stairway* doors that are locked from the *stairway* side shall be capable of being unlocked simultaneously without unlatching when upon one \_any of the following \_conditions occur:

- 1. Shall unlock individually or simultaneously upon a Asignal from the fire command center.
- 2. Shall unlock simultaneously upon activation Activation of a fire alarm signal in an area served by the stairway.
- 3. Shall unlock upon failure Failure of the power supply to the lock or the locking system.

Committee Reason: The modification was approved as it added criteria to make the locks fail safe. The proposal was approved as this adds options for unlocking of stairway door operations. The options allows for automatic opening in addition to manual opening options. (Vote: 9-3)

**Staff Analysis:** Proposals E47-21, G60-21 and G61-21 addresses requirements in a different or contradicting manner. The committee is urged to make their intentions clear with their actions on these proposals.

G61-21

# G62-21

Committee Action: As Submitted

**Committee Reason:** This proposal was approved as it clarifies the requirements for atriums in hospitals. This is needed to match the federal certification requirements for healthcare. (Vote: 13-1)

G62-21

#### G63-21

Committee Action: As Submitted

Committee Reason: This proposal was approved as it clarifies an exit stairway can egress through the ground floor lobby. (Vote: 14-0)

G63-21

## G64-21

Committee Action: Disapproved

**Committee Reason:** The proposal was disapproved because of the deletion of the last sentence. This sentence provides guidance for smoke control systems in underground buildings. (Vote: 14-0)

G64-21

## G65-21

Committee Action: As Modified

#### **Committee Modification:**

**406.2.1 Automatic door operators and vehicular gates.** Where provided, automatic garage door operators, and automatic rolling door operators or systems, shall be *listed* and *labeled* in accordance with UL 325. Where provided, *automatic vehicular gates* shall comply with Section 3110.

**Committee Reason:** The modification was recommended by the automatic door industry to minimize confusion caused by using multiple terms. The proposal was approved as this makes it clear the automatic door openers are a choice. (Vote: 13-0)

G65-21

# G66-21

Committee Action: Disapproved

Committee Reason: This proposal was disapproved for several reasons. There are requirements in the definitions - these need to be removed. The requirement is disproportionate for EV equipment in Group R-2 facilities. There are government incentives to provide these systems - the proponent said there were not. Adding these systems is a business decision, and should not be a requirement. These requirements are better located in land use ordinances, Zoning or the IgCc. The proposal was not coordinated with the EV requirements in the IBC Section 1108. (Vote: 11-3)

G66-21

# G67-21

Committee Action: Disapproved

**Committee Reason:** The committee felt this was a good idea to allow for private garages in small business occupancies, however the proposal was disapproved because there was a concern that someone would put multiple private garages in a mixed use building as a way to exceed the area limitations permitted for Group U or S-2. (Vote: 14-0)

## G68-21

Committee Action: Disapproved

Committee Reason: The proposal was disapproved because the committee found the language confusing. The exception for ventilation is unclear - is it for when the single private garage is area up to 3,000 sq.ft. for where multiple private garages are an aggregate for up to 3,000 sq.ft.?

Otherwise this seems to be a total exception for the entire requirement. The phrase "atmospherically separated" is confusing - does this require smoke tight walls or something less - specific criteria is needed. There was no technical criteria showing that these size garages do not need ventilation. (Vote: 14-0)

G68-21

## G69-21

Committee Action: Disapproved

Committee Reason: The proposal was disapproved as unnecessary and confusing language and is too restrictive for conditions such as hotel lobbies and open parking garages. (Vote: 14-0)

G69-21

## G70-21

Committee Action: Disapproved

**Committee Reason:** The proposal as disapproved since Section 406.5.5 already allows for an area increase based on openness and should not have an additional increase applied on top of that increase in area. There was not technical justification for this increase in area. There needs to be more specific criteria for Type IV construction. (Vote: 14-0)

G70-21

# G71-21

Committee Action: As Modified

#### **Committee Modification:**

**407.4.4.4** <u>Circulation paths</u> <u>Circulating space</u> within a care suite. The <u>circulation paths</u> <u>circulating space</u> within a care suite providing the access to <u>the door</u> <u>doors</u> required in Section 407.4.4.3 shall have a minimum width of 36 inches (914 mm) and shall not be required to meet the requirements for a corridor or an aisle.

**Committee Reason:** The modification changed circulating space to circulation path which is easier to understand. The proposal was approved as it separates 36" wide circulation paths within suites from the 72" wide corridors needed for movement of beds in corridors. (Vote: 13-1)

G71-21

## G72-21

Committee Action: Disapproved

Committee Reason: The proposal was disapproved as this just provides redundant text that is not needed. It is already addressed in Secition 709 and 711. (Vote: 14-0)

G72-21

## G73-21

Committee Action: Disapproved

**Committee Reason:** This proposal was disapproved because removing platforms seems to the skip over platform requirement in Section 410.3. If platforms should not be included in the stage requirements, there needs to be specific criteria for exactly how platforms should be addressed and when a platform is not a stage. (14-0)

G73-21

### G74-21

Committee Action: Disapproved

Committee Reason: The proposal was disapproved because the text could be read to allow for a much larger area rather than just the stage itself. This would allow for stages of fire retardant treated wood in Type 1 construction. A direct correlation for stage and platform fire hazards is not correct, so the construction requirements should not be the same. (Vote: 12-2)

G74-21

# G75-21

Committee Action: Disapproved

**Committee Reason:** The proposal was disapproved because the forestage is not protected by the proscenium curtain and the roof vents, therefore the forestage should not be included in the stage area. (Vote: 12-2)

G75-21

# G76-21

Committee Action: As Submitted

Committee Reason: The proposal was approved because it clarifies how stage height should be measured. (Vote: 13-1)

G76-21

# G77-21

Committee Action: Disapproved

**Committee Reason:** This proposal was disapproved because there was no justification provided for the 300 occupant limitation for the proposed exception. The assumption of a short exit time in the reason statement is too broad for all venues. (Vote: 14-0)

G77-21

### G78-21

Committee Action: Disapproved

**Committee Reason:** This proposal was disapproved because while lighting is the most common source of ignition in theaters, it is not the only ignition source. The protection is required to protect the audience from all ignition sources. (Vote: 14-0)

G78-21

### G79-21

Committee Action: As Submitted

**Committee Reason:** The proposal was approved because the exception did maintain the fire protection continuity for the stage. This has already been proven to be effective in many existing stage constructions. (Vote: 14-0)

G79-21

## G80-21

Committee Action: Disapproved

**Committee Reason:** This proposal was disapproved because there was no justification provided for the 300 occupant limitation for the proposed exception. The assumption of a short exit time in the reason statement is too broad for all venues. Exceptions should be based on fire load on the stage rather than occupant load of the audience. (Vote: 13-1)

G80-21

# G81-21

Committee Action: Disapproved

**Committee Reason:** The proposal was disapproved because this could be read to require the dressing rooms, etc. to be separated from other parts of the buildings as well as the stage. (Vote: 14-0)

G81-21

# G82-21

Committee Action: As Submitted

Committee Reason: The proposal was approved as this change makes the requirements easier to understand and enforce. (Vote: 13-1)

### G83-21

Committee Action: Disapproved

**Committee Reason:** The committee stated that the reason for the disapproval was that the way it is written it is a far too reaching a requirement that would be for any occupancy that has any stage, it would then require the entire building regardless of size or occupancy to be provided with an automatic sprinkler system. (Vote: 14-0)

G83-21

### G84-21

Committee Action: As Submitted

**Committee Reason:** The committee stated that the reason for the approval was based on the addition of the language of the new exception. The exception helps clarify the code by placing a pointer directly to NFPA 13 for the allowance. (Vote: 13-1)

G84-21

#### G85-21

Committee Action: As Submitted

Committee Reason: The committee stated that the approval was based on the proponent's reason statement. (Vote: 14-0)

G85-21

# G86-21 Part I

Committee Action: As Submitted

Committee Reason: This proposal was an editorial clean up of the requirements for special amusement buildings and puzzle rooms. (Vote: 14-0)

G86-21 Part I

# G86-21 Part II

Committee Action: As Modified

#### Committee Modification:

**907.2.12 Special amusement areas.** Fire detection and alarm systems shall be provided in *special amusement areas* in accordance with Section 914.7 914.7.2.

Committee Reason: The committee stated that the approval of the modification was based on the revision to the section reference that allows the reader to see the exceptions for the scoping. The reason for the approval of the proposal was stated that it correlates the intent by correcting the inadvertent errors by reorganizing the section so that it's coherent and it's easier for use and it is also in coordination with the action by the IBC

#### G87-21

Committee Action: Disapproved

Committee Reason: The proposal was disapprove because the committee felt clarification was needed on several points. Either base the size limit on the amount of fuel in the planes or clarify how the aviation classification for the planes in the hangars will limit the amount of fuel in the hangar. Is any fuel storage permitted in the hangars? If the small plane hangars are no longer adjacent to residential structures, perhaps a new name for these types of hangars would clarify the issue. The committee felt that 'commercial' hangars would not be appropriate because that was tied to ownership, not plane size/classifications and fuel loads. The committee asked if residential units or storage would be permitted over the hangars? The committee recognized that this section had not been revised in many years and technology for planes has changed dramatically. In addition, the number of airports that are for these size of planes has increased dramatically in the last 20 years. (Vote: 12-2)

G87-21

#### G88-21

Committee Action: Disapproved

**Committee Reason:** The proposal was disapproved for consistency with the committee action on G87. The concern regarding the difference between the amount of fuel versus the size of plane was reiterated. The committee was concerned that this proposal had an area limitation that was not tied to a construction type and this could be read as allowing any height of building. It was suggested that it would be more appropriate to refer back to the height and area tables based on the type of construction in Chapter 5. It was suggested again that this type of hanger be defined as a new type or with a definition. The committee acknowledged that the type of planes described had a lower fuel load than RV storage garages. (Vote: 14-0).

G88-21

# G89-21

Committee Action: Disapproved

**Committee Reason:** The proposal was disapproved based on the committee action on G87 and G88. A complete package for these types of hangars is needed. (Vote: 14-0)

G89-21

# G90-21

Committee Action: Disapproved

Committee Reason: This proposal was disapproved as it was preferred that the issue of sprinkler protection should be pursued within NFPA 409 versus specifying the density within the exception. (Vote: 14-0)

G90-21

#### G91-21

Committee Action: As Submitted

**Committee Reason:** This proposal corrects an error dating back many editions of the codes. The fire code does not have limits based upon MAQs for fabrication areas but is instead addressed by Section 2705.2.2. There was some concern that this would allow excessive HPM in a fabrication area if IBC Section 415.11.1.1.2 is deleted. (Vote: 13-1)

G91-21

## G92-21

Committee Action: Disapproved

Committee Reason: This new proposed section is basically adjusting the quantity limits which is better addressed in IBC Table 415.11.1.1. The language in 415.11.1.5 currently states "single conditioned environment" which does not appear to make the connection to the concept of a multi-level fabrication area. (Vote: 13-1)

G92-21

### G93-21

Committee Action: As Submitted

Committee Reason: The proposal was approved as it was considered a clean up. The revisions clarify the difference in requirements between other explosives and 1.4G fireworks. (Vote: 14-0)

G93-21

### G94-21

Committee Action: As Submitted

Committee Reason: This proposal was approved as it coordinates with the revised language in the 2020 ICC 500 Storm Shelter Standard. (Vote: 13-0)

G94-21

# G95-21

Committee Action: As Modified

#### **Committee Modification:**

**423.4.1 Location.** Storm shelters shall be located within the building they serve or shall be located where the maximum distance of travel from not fewer than one exterior door of each building to a door of the shelter serving that building does not exceed 1,000 feet (305 m), unless otherwise approved.

Committee Reason: The modification provided a middle ground between the 1,000 feet and a blanket exception that allows for a common sense decision from the code official. Since most facilities will not have a multi-building complex, they should be able to meet the 1,000 ft. travel distance most of the time. The proposal was approved as it provides the same travel distance as currently required for Group E buildings and is consistent

#### G96-21

Committee Action: As Modified

#### **Committee Modification:**

**423.4.1 Required Occupant Capacity.** The required occupant capacity of the storm shelter shall include all of the <u>critical emergency operations buildings</u> on the site and shall be the greater of the following:

- 1. The total occupant load of offices and number of beds.
- 2. The occupant load of the largest indoor assembly space.

#### **Exceptions:**

- 1. Where approved by the building official, the actual number of occupants for whom each occupied space, floor or building is designed, although less than those determined by occupant load calculation, shall be permitted to be used in the determination of the required design occupant capacity for the storm shelter.
- 4-2. Where a new building is being added on an existing site, and where the new building is not of sufficient size to accommodate the required occupant capacity of the storm shelter for all of the buildings on the site, the storm shelter shall at a minimum accommodate the required occupant capacity of the new building.
- 2.3. Where approved by the building official, the required occupant capacity of the shelter shall be permitted to be reduced by the occupant capacity of any existing storm shelters on the site.

**Committee Reason:** The modification to the main paragraph of Section 423.4.1 better described the number of occupants anticipated in these types of facilities that the shelter is intended to serve. The modification to add the new Exception 1 is logical and is consistent with a similar allowance for consideration of actual occupant load in Section 1004.5. The proposal was approved as this provides needed guidance for the size of storm shelters required in critical emergency operation facilities. (Vote: 14-0)

G96-21

## G97-21

Committee Action: As Modified

#### **Committee Modification:**

**423.5.1Required occupant capacity.** The required occupant capacity of the *storm shelter* shall include all of the buildings on the site and shall be the total occupant load of the classrooms, vocational rooms and offices in the Group E occupancy.

#### **Exceptions:**

- 1. Where approved by the building official, the actual number of occupants for whom each occupied space, floor or building is designed, although less than those determined by occupant load calculation, shall be permitted to be used in the determination of the required design occupant capacity for the storm shelter.
- +2. Where a new building is being added on an existing Group E site, and where the new building is not of sufficient size to accommodate the required occupant capacity of the *storm shelter* for all of the buildings on the site, the storm shelter shall at a minimum accommodate the required occupant capacity for the new building.
- 23. Where approved by the *building official*, the required occupant capacity of the shelter shall be permitted to be reduced by the occupant capacity of any existing *storm shelters* on the site.

Committee Reason: The modification to add the new Exception 1 is logical and is consistent with a similar allowance for consideration of actual occupant load in Section 1004.5, This would be consistent with the committee action in G96. The proposal was approved as this provides needed guidance for the size of storm shelters required for the students and staff in the school. The associated assembly spaces will not be occupied at the same time. The amount of time the public will be in assembly space in a school building is limited, is not typically fully occupied when school is in operation, or may have a much higher occupant load than the students and staff, therefore the elimination of the assembly space for sizing criteria is appropriate. (Vote: 14-0)

G97-21

### G98-21

Committee Action: Disapproved

**Committee Reason:** The proposal was disapproved. The committee felt that an increase in travel distance to the shelter for Group E should not be allowed to be greater than 1,000 ft. without specific guidance on what should be considered being delineated. In addition there were questions about who should approve this - the code official, the school administration or the county/state emergency planning administration? (Vote: 13-1)

G98-21

#### G99-21 Part I

Committee Action: As Submitted

**Committee Reason:** The proposal was approved because these definitions are an important part of the package for these types of facilities. There was concerned raised about the differences between the four definitions and that there were requirements in the definitions - this could be simplified. (Vote: 8-5)

G99-21 Part I

# **G99-21 Part II**

Committee Action: Disapproved

**Committee Reason:** This proposal was disapproved. There were 7 proposed modifications to this proposal and the testifiers did not agree on a resolution, so the interested parties should go back and work together on a clean set of requirements. The correct occupancy for these facilities needs to be defined. The requirements should work within the current parameters for fire suppression protection. How NFPA 75 is incorporated needs to be clarified. (Vote: 13-0)

G99-21 Part II

# G99-21 Part III

Committee Action: Disapproved

**Committee Reason:** This proposal was disapproved because the committee felt that this was was the wrong classification for informational technology equipment facilities - these are not manufacturing. In addition, this type of facility does not fit with the other items in the description of Group F-2. (Vote: 13-0)

G99-21 Part III

### **G99-21 Part IV**

Committee Action: Disapproved

**Committee Reason:** This proposal was disapproved as the committee felt that informational technology equipment facilities are not low hazard since that have many combustible elements. These items are too flamable to be considered a Group S-2. (Vote: 13-0)

G99-21 Part IV

## **G99-21 Part V**

Committee Action: Disapproved

**Committee Reason:** This proposal was disapproved because there was no size limit for the information technology equipment facilities in the incidental use tables. There was also a conflict with Section 509.4.2 in the terminology for sprinklers versus suppression. (Vote: 13-0)

G99-21 Part V

### **G99-21 Part VI**

Committee Action: As Modified

**Committee Modification:** 

TABLE 1004.5 MAXIMUM FLOOR AREA ALLOWANCES PER OCCUPANT

FUNCTION OF SPACE	OCCUPANT LOAD FACTOR <sup>a</sup>	
Business areas	150 gross	
-Information Technology Equipment Facilities	<del>300 gross</del>	
Concentrated business use areas	See Section 1004.8	
Information Technology Equipment Facilities	300 gross	

For SI: 1 foot = 304.8 mm, 1 square foot =  $0.0929 \text{ m}^2$ .

a. Floor area in square feet per occupant.

**Committee Reason:** The modification moved Information Technology Equipment Facilities out from under business, which is a more appropriate location. The proposal was approved as it separated data entry from equipment facilities. The coordinates with the action on G99-21 Part 1. (Vote: 14-0)

G99-21 Part VI

### G99-21 Part VII

Committee Action: Disapproved

**Committee Reason:** This proposal was disapproved as the committee felt that the special exit criteria for information technology equipment facilities should not be grouped with refrigeration machinery rooms. While these facilities always have to be cooled, the equipment could be in a separate room. There should also be an equipment size limit. (Vote: 13-1)

G99-21 Part VII

# G99-21 Part VIII

Committee Action: As Submitted

Committee Reason: This proposal was approved to be consistent with Part I. Additionally if the other portions are placed within the code these definitions will be critical. It was noted that NFPA 75 does not appear to be consistent with these definitions. (Vote: 10-4)

G99-21 Part VIII

# **G99-21 Part IX**

Committee Action: Disapproved

Committee Reason: This proposal was disapproved based upon the actions taken on other parts of this proposal. In addition, there was concern that this proposal will be reducing necessary safety factors with removal of automatic shutoffs through the proposed exception. (Vote: 14-0)

G99-21 Part IX

# **G99-21 Part X**

Committee Action: Disapproved

Committee Reason: This proposal has been disapproved because definitions should not be included in code language that does not currently

#### **G99-21 Part XI**

Committee Action: Disapproved

**Committee Reason:** This proposal has been disapproved because industrial is not an occupancy classification. The committee also had concerns regarding merging spaces with correct requirements. (Vote: 11-0)

G99-21 Part XI

### G99-21 Part XII

Committee Action: Disapproved

#### **Committee Modification:**

Committee Reason: This proposal has been disapproved by the committee because the solution already exists for circuits in ASHRAE Section 7.6 and conflicts with Group A2L. (Vote: 11-0)

G99-21 Part XII

### G100-21 Part I

Committee Action: Disapproved

Committee Reason: This proposal was disapproved as the committee felt several items needed to be considered. What is the separation requirements for other uses/buildings, including classrooms in the same facilities? NFPA 1402 seems to regulate prop, but that was not included in the proposal - what props should be included. There is additional correlation needed for how these facilities should be constructed since NFPA 1402 seems to be minimal, maybe they should be added to the code instead of a reference. (Vote: 13-1)

G100-21 Part I

# G100-21 Part II

Committee Action: Disapproved

**Committee Reason:** The committee stated that the reasons for disapproval were based on the conflicts in the proposal with the existing IBC and IFC sections and that there are no design load requirements in the proposed referenced standard. (Vote: 10-2)

G100-21 Part II

# **G100-21 Part III**

**Committee Reason:** The committee felt that these types of inspections were performed by the Fire Code Official. Further, the committee agreed that the determination of requirements for fire training buildings was by jurisdiction and should therefore not be in a model code. (Vote 9-2)

G100-21 Part III

### G101-21

This proposal includes the following errata Chapter 35:

<u>UL 962 -2014 Includes all amendments and changes through Revision Page(s)</u>, <u>January 12, 2021 - UL Standard for Safety Household and Commercial Furnishings</u>

Review of the standard is as follows:

Appears to be written in enforceable language. Does not appear to require proprietary materials or agencies. Promulgation by a consensus process stated in preface

Committee Action: Disapproved

Committee Reason: This proposal was disapproved. The referenced standard, UL962, was not provided to the committee. What is required for risk assessment? It is not clear if modular rooms and sleep pods were considered rooms or furniture. The 5 inch step up permitted is an issue for accessibility requirements. If the sleep pods are stacked, there is an egress issue that is not currently addressed. There was concern that these would be permitted in all occupancies. Criteria is needed for what would be an approved location. The installation limits in Section 429.5.2 is unclear and does not address modular rooms, only sleep pods. There is a concern about seismic anchorage if the sleep pods are stacked. There is a concern about fire alarm notification in the enclosed sleep pods and modular rooms. Do these need to be sprinklered? (Vote: 13-0)

G101-21

### G102-21

Committee Action: Disapproved

Committee Reason: This proposal was disapproved. The definition for off-site construction included modular buildings and components. Modular units are typically regulated by state specific requirements. The definition for off-site construction includes tiny houses. Tiny houses are not address by the code, but are in Appendix Q. This blanket exception for tiny houses is too broad. Would this cause a conflict with the tiny house emergency escape and rescue openings? The definition of off-site construction is too broad - it could be read to include items such as prefabricated trusses, the modular units and sleep pods in G101-21 or precast panels. (Vote: 13-1)

G102-21

# G103-21

Committee Action: Disapproved

**Committee Reason:** The proposal was disapproved. The current code language is clear on the requirements. (Vote: 10-4)

G103-21

# G104-21

Committee Reason: The proposal was disapproved. The code change proposal is different than the requirements in California. The language needs to be cleaned up. (Vote: 14-0)

**Staff Analysis:** This proposal addresses similar requirements in a different manner to those found in current code section IBC Section 1511.2.1 and 311.3.4 and IFC Section 1205. The committee is urged to make their intentions clear with their actions on these proposals.

G104-21

### G105-21

Committee Action: As Submitted

**Committee Reason:** The proposal was approved as submitted. The proposal will allow for what is currently done. The committee recommend the section title be reviewed to read "enclosures around and over roof areas" to better match the provision. (Vote: 9-5)

G105-21

### G106-21 Part I

Committee Action: Disapproved

**Committee Reason:** The proposal was disapproved. The proposal does not allow for other options such as planters. Generally guards are unnecessary unless there is a drop. (Vote: 8-5)

G106-21 Part I

## G106-21 Part II

Committee Action: Disapproved

**Committee Reason:** The proposal was disapproved for several reasons. There are issues with structural attachment if the guard is not on the edge of the roof. There are a lot of barriers that would work to stop people from moving out of the areas intended to be occupied. There are no fall issues, so a guard is not needed. This is an issue to prevent access, not a fall issue. This requirement is an over reach. (Vote: 11-3)

G106-21 Part II

# G107-21

Committee Action: Disapproved

**Committee Reason:** The proposal was disapproved. The proposal provided insufficient substantiation for the change. (Vote: 14-0)

G107-21

# G108-21

Committee Reason: The proposal was disapproved. Needs to identify the specific high-rise provisions to document an additional story. (Vote: 13-1)

G108-21

### G109-21

Committee Action: Disapproved

Committee Reason: The proposal was disapproved. The proposal provided insufficient justification for the proposed change. (Vote: 9-5)

G109-21

### G110-21

Committee Action: Disapproved

**Committee Reason:** The proposal was disapproved. Current code wording provides good direction. Proposal's wording is unclear and needs to clarify intent of 'segment'. (Vote: 8-5)

G110-21

### G111-21

Committee Action: Disapproved

Committee Reason: The proposal was disapproved. Current code adequately covers the requirements for the topic. (Vote: 13-0)

G111-21

### G112-21 Part I

This proposal includes the following errata Section 506.2. - replace "floor area of not less than 35" with "floor area greater than or equal to 35" Section 506.3.1.7 - replace "Section 1115" with "Section "1015"

Committee Action: Disapproved

**Committee Reason:** The proposal was disapproved. The committee had several concerns, including appropriate location in the code. Confusion between mezzanine and/or sleeping loft. There is no defined height. The proposal had no scoping. The committee expressed concerns about guards. (Vote: 12-1)

G112-21 Part I

# G112-21 Part II

Committee Action: Disapproved

**Committee Reason:** This proposal was disapproved because the committee felt this was a very niche market that would be more appropriate in an appendix, similar to the IRC. It could be read to prohibit something as simple as a built in bunk bed. The requirements for guards have safety

G112-21 Part II

## **G112-21 Part III**

Committee Action: Disapproved

Committee Reason: The committee stated that the reasons for disapproval were that sleeping lofts may not be considered just for sleeping, a separate definition is needed, and the proponent requested it based on the other committees actions taken on Parts I and II. (Vote: 14-0)

G112-21 Part III

### G113-21

Committee Action: Disapproved

Committee Reason: The proposal was disapproved. The proposal is not needed as it is editorial on the table formatting. (Vote: 14-0)

G113-21

# G114-21

Committee Action: Disapproved

**Committee Reason:** The proponent requested disapproval. (Vote: 14-0)

G114-21

# G115-21

Committee Action: Disapproved

Committee Reason: The proposal was disapproved as the proposed change is not needed and covered elsewhere in the code. (Vote: 14-0)

G115-21

# G116-21

Committee Action: Disapproved

**Committee Reason:** The proposal was disapproved as it is not needed as it is understood that one does not have to use the frontage increase. Additionally, when calculating the frontage increase, one does not need to consider all the open spaces around the building. (Vote: 8-7)

G116-21

#### G117-21

Committee Action: As Submitted

**Committee Reason:** This proposal was approved as submitted. The proposal has no technical changes. The proposal modifies the language of Section 507.3 to be consistent with Section 507.4. (Vote: 12-2)

G117-21

### G118-21

Committee Action: Disapproved

Committee Reason: The proposal was disapproved as not appropriate due to the differences in Type IIIB and IIIA construction. (Vote: 14-0)

G118-21

### G119-21

Committee Action: Disapproved

Committee Reason: The proposal was disapproved based on the proposal to add Type III construction to Section 507.12 is not appropriate for motion picture theaters. (Vote: 14-0)

G119-21

# G120-21

Committee Action: Disapproved

**Committee Reason:** This proposal was disapproved a reduction in the fire separation distance to 5 feet is to tight. The committee expressed concerns about the application to unlimited area. (Vote: 14-0)

G120-21

### G121-21

This proposal includes published errata

This proposal was part of the listed errata at https://cdn-web.iccsafe.org/wp-content/uploads/2021-GROUP-A-CONSOLIDATED-MONOGRAPH-UPDATES-Updated-4-02-2021-complete.pdf. Section 406.2.8 was missing from the posted proposal and some sections were out of order.

Committee Action: Disapproved

**Committee Reason:** The proposal was disapproved as not necessary. The committee was concerned about the effect on mixed use buildings. (Vote 14-0)

G121-21

### G122-21 Part I

Committee Action: Disapproved

**Committee Reason:** This proposal was disapproved based on the proposal would be a large reduction. The current wording is appropriate. (Vote: 9-5)

G122-21 Part I

### G122-21 Part II

Committee Action: As Submitted

**Committee Reason:** The committee thought including mass timber in section 2603.4, Thermal barrier, is a proper action. The proposal updates section 2603.4 to be consistent with the definition of mass timber now found in Section 202 and clarifies the reference to heavy timber in 602.4 is now found in Section 2304.11. (Vote: 13-0)

G122-21 Part II

### G123-21

Committee Action: As Submitted

Committee Reason: The proposal was approved as submitted as a thermal barrier is not required on the top of a horizontal assembly as along as the stated criteria are satisfied. (Vote: 14-0)

G123-21

#### G124-21

This proposal includes the following errata The information note at the beginning of the code change is deleted.

Committee Action: Disapproved

**Committee Reason:** The proposal was disapproved as the current wording needs to say 'as is'. The committee suggested this topic be reviewed by BCAC. (Vote: 8-6)

G124-21

# G125-21

Committee Action: Disapproved

Committee Reason: The proposal was disapproved as it still needs work since the wording is unclear. (Vote: 14-0)

**Staff Analysis:** G125-21 and G126-21addresses requirements in a different or contradicting manner. The committee is urged to make their intentions clear with their actions on these proposals.

G125-21

#### G126-21 Part I

Committee Action: Withdrawn

**Staff Analysis:** G125-21 and G126-21addresses requirements in a different or contradicting manner. The committee is urged to make their intentions clear with their actions on these proposals.

G126-21 Part I

### G126-21 Part II

Committee Action: As Modified

#### **Committee Modification:**

[F] 508.5.7 Fire protection. Live/work units in buildings constructed in accordance with this code shall be provided with all of the following:

- 1. An automatic sprinkler system in accordance with Section 903.3.1.1 or 903.3.1.2.
- 2. Smoke alarms in accordance with Section 907.2.11.
- 3. Where required by Section 907.2.9.1, a manual fire alarm system.

Live/work units in buildings constructed in accordance with the International Residential Code shall be provided with an automatic sprinkler system and smoke alarms. The automatic sprinkler system shall comply with International Residential Code Section P2904, and smoke alarms shall comply with International Residential Code Section 314.

**Committee Reason:** The committee stated that the reason for the approval of the modification was that it clarifies the requirement by specifying that the live work units are in buildings. The reason for the approval of the proposal is that it improves the intent of the requirements and gives the correct code citations for the various items in the list. (Vote: 14-0)

**Staff Analysis:** G125-21 and G126-21addresses requirements in a different or contradicting manner. The committee is urged to make their intentions clear with their actions on these proposals.

G126-21 Part II

# G127-21

Committee Action: As Submitted

Committee Reason: The proposal was approved as submitted. The deleted item #4 was not enforceable. (Vote: 11-2)

G127-21

#### G128-21

Committee Action: As Submitted

Committee Reason: The proposal was approved as submitted as the proposal coordinates Table 509.1 with the federal requirements. (Vote: 12-2)

G128-21

#### G129-21

Committee Action: Disapproved

Committee Reason: The proposal was disapproved as the current location of the provisions is logical for architects. (Vote: 13-1)

G129-21

### G130-21

Committee Action: As Submitted

Committee Reason: The proposal was approved as submitted as the proposal clarifies the intent and provides continuity. (Vote: 14-0)

G130-21

### G131-21

Committee Action: Disapproved

Committee Reason: The proposal was disapproved as no technical data was provided to substantiate the change. (Vote: 13-1)

G131-21

### G132-21

Committee Action: As Modified

#### **Committee Modification:**

**510.2 Horizontal building separation allowance.** A building shall be considered as separate and distinct buildings for the purpose of determining area limitations, continuity of *fire walls*, limitation of number of *stories* and type of construction where the following conditions are met:

- 1. The buildings are separated with a *horizontal assembly* having a *fire-resistance rating* of not less than 3 hours. Where vertical offsets are provided as part of a *horizontal assembly*, the vertical offset and the structure supporting the vertical offset shall have a *fire-resistance rating* of not less than 3 hours.
- 2. The building below, including the horizontal assembly, is of Type IA construction.
- 3. Shaft, stairway, ramp and escalator enclosures through the horizontal assembly shall have not less than a 2-hour fire-resistance rating with opening protectives in accordance with Section 716.

**Exception:** Where the enclosure walls below the *horizontal assembly* have not less than a 3-hour *fire-resistance rating* with opening protectives in accordance with Section 716, the enclosure walls extending above the *horizontal assembly* shall be permitted to have a 1-hour *fire-resistance rating*, provided that the following conditions are met:

- 1. The building above the *horizontal assembly* is not required to be of Type I construction.
- 2. The enclosure connects fewer than four stories.
- 3. The enclosure opening protectives above the horizontal assembly have a fire protection rating of not less than 1 hour.
- 4. Interior exit stairways located within the Type IA building are permitted to be of combustible materials where the following requirements are met:

- 4.1. The building above the Type IA building is of Type III, IV, or V construction.
- 4.2. The *stairway* located in the Type IA building is enclosed by 3-hour fire-resistance-rated construction with opening protectives in accordance with Section 716.
- 5. The building or buildings above the horizontal assembly shall be permitted to have Group A, B, M, R or and S occupancies.
- 6. The building below the *horizontal assembly* shall be protected throughout by an *approved automatic sprinkler system* in accordance with Section 903.3.1.1, and shall be permitted to be any occupancy allowed by this code except Group H.
- 7, The maximum *building height* in feet (mm) shall not exceed the limits set forth in Section 504.3 for the building having the smaller allowable height as measured from the *grade plane*.

**Committee Reason:** The proposal was approved as modified by Eckhoff-1. The proposal with the modification removes the restrictions on Group A occupancies. The modification clarifies the intent. (Vote: 14-0)

G132-21

### G133-21

Committee Action: Disapproved

**Committee Reason:** The proposal was disapproved as it would create confusion with the term "transition". Note: the proposal does not completely match the Seattle ordinance. (Vote: 14-0)

G133-21

### G134-21

Committee Action: Disapproved

Committee Reason: The proposal was disapproved as it appeared incomplete as it deleted 'secondary members' and was confusing relative to the intended extent for occupiable roofs that do not cover the entire roof. (Vote: 14-0)

G134-21

# G135-21

Committee Action: Disapproved

**Committee Reason:** The proposal was disapproved as the proposed new footnote was confusing and the committee recommended the proponent work with all involved to improve the proposal. (Vote: 14-0)

G135-21

# G136-21

Committee Action: As Submitted

Committee Reason: The proposal was approved as submitted as the proposal provides good clarification of the code's intent. (Vote: 14-0)

### G137-21

Committee Action: Disapproved

Committee Reason: The proposal was disapproved as the topic is already covered elsewhere in the code (Chapter 7); hence, the change is not required. (Vote: 14-0)

G137-21

# G138-21

Committee Action: Disapproved

**Committee Reason:** The proposal was disapproved to be consistent with the committee action on G137. The topic is already covered in Chapter 7. (Vote: 14-0)

G138-21

### G139-21

Committee Action: Disapproved

**Committee Reason:** The proposal was disapproved as the editorial change is unnecessary even though it attempts to assist in clarifying the intent. (Vote: 8-7)

G139-21

# G140-21

Committee Action: Disapproved

Committee Reason: The proposal was disapproved as being unnecessary as the code has only five (5) main types of construction. Expanding the sentence to include sub-classifications is unwarranted. (Vote: 14-0)

G140-21

# G141-21

Committee Action: Disapproved

Committee Reason: The proposal was disapproved as the proposed additional language for "horizontal assemblies" is unnecessary. (Vote: 14-0)

G141-21

#### G142-21

Committee Action: Disapproved

Committee Reason: The proposal was disapproved due to concerns for special inspection requirements. (Vote: 14-0)

G142-21

### G143-21

Committee Action: Disapproved

Committee Reason: The proposal was disapproved as this not part of the TWB ad hoc committee recommendations. (Vote: 13-1)

G143-21

### G144-21

Committee Action: As Submitted

Committee Reason: The proposal was approved as submitted as it is editorial and clarifies the intent consistent with the code provisions elsewhere in the IBC. (Vote: 14-0)

G144-21

# G145-21

Committee Action: Disapproved

Committee Reason: The proposal was disapproved as 'voids' are covered elsewhere. (Vote: 14-0)

G145-21

# G146-21

Committee Action: Disapproved

**Committee Reason:** The proposal was disapproved as the proposed section 602.4.1.2 adds confusion between Type IVA and IVB. The proposal needs additional study as the test did not directly address the 40% allowance and the test reports are not finalized. (Vote: 9-5)

G146-21

# G147-21

Committee Action: As Submitted

Committee Reason: The proposal was approved as submitted since the provided preliminary RISE test report indicated that the test met or

## G148-21

Committee Action: As Submitted

Committee Reason: The proposal was approved as submitted consistent with the provided reason statement. (Vote: 12-2)

G148-21

## G149-21

Committee Action: As Submitted

**Committee Reason:** The proposal was approved as submitted. The proposal cleans up the existing language and eliminates a possible conflict. (Vote: 13-0)

G149-21

### G150-21

Committee Action: As Submitted

Committee Reason: The proposal was approved as submitted as the committee agreed with the reason statement that non-combustible surface need not be covered. (Vote: 14-0)

G150-21

# G151-21

Committee Action: As Submitted

Committee Reason: The proposal was approved as submitted as it clarifies the intent of the code. (Vote: 14-0)

G151-21

# G152-21

Committee Action: Disapproved

Committee Reason: The proposal was disapproved since as written the proposal does not add clarity and may even add confusion. (Vote:14-0)

G152-21

### G153-21

Committee Action: As Submitted

Committee Reason: The proposal was approved as submitted as it creates consistent code language by adding a necessary pointer to Section 2303.2. (Vote: 11-3)

G153-21

### G154-21

Committee Action: Disapproved

Committee Reason: The proposal was disapproved as the proposal adds confusion on what is considered Type IIB construction. (Vote: 14-0)

G154-21

### G155-21

Committee Action: Disapproved

Committee Reason: The proposal was disapproved consistent with the committee action on G154 on the same code section. (Vote: 14-0)

G155-21

## G156-21

Committee Action: As Submitted

Committee Reason: The proposal was approved as submitted as adding a pointer to Section 1404.3 for vapor retarders is appropriate. (Vote:12-2)

G156-21

# G157-21

Committee Action: As Submitted

**Committee Reason:** The proposal was approved as submitted as the proposal is consistent with current standards for plumbing fixtures. The proposal is a clarification of the provision. The committee did question if a 'prefabricated shower compartment' qualifies as a plumbing fixture. (Vote: 9-5)

G157-21

# G158-21

Committee Action: As Submitted

Committee Reason: This proposal was approved as it coordinates with the International Mechanical Code Section 401.2. (Vote: 14-0)

G158-21

#### G159-21

Committee Action: As Submitted

Committee Reason: This proposal was approved as it coordinates with the International Energy Code. (Vote: 11-2)

G159-21

#### G160-21

Committee Action: As Submitted

Committee Reason: The proposal was approved as it addresses an error that occurred in G119-18. The 1/150 ratio is for vapor diffuser ports and follows recommended industry practices. (Vote: 14-0)

G160-21

### G161-21

Committee Action: Disapproved

Committee Reason: The proposal was disapproved based on committee action on G159-21 and proponents request. (Vote: 14-0)

G161-21

# G162-21

Committee Action: Disapproved

**Committee Reason:** The proposal was disapproved. The AARST standard has suggestive language, not enforceable language. There is no specific directions for testing and it is not clear for how to comply. As written this would be required a radon system in all schools while maps show high risk only on specific areas and in these areas the testifiers said that radon was found in only 15% of the schools tested. (Vote 14-0)

G162-21

# G163-21

Committee Action: Disapproved

**Committee Reason:** The proposal was disapproved for consistency with the committee action on G162-21. The AARST standard has suggestive language, not enforceable language. There is no specific directions for testing and is not clear for how to comply. As written this would be required in all Group R-2 to have a radon system while maps show high risk only on specific areas. This is in the International Green Code. If jurisdictions want to require testing, this would be better in an appendix for how to comply. (Vote 14-0)

### G164-21

Committee Action: Disapproved

**Committee Reason:** The proposal was disapproved based on the committee action on G162 and G163. The AARST standard has suggestive language, not enforceable language. There is no specific directions for testing and is not clear for how to comply. (Vote 14-0)

G164-21

#### G165-21

Committee Action: Disapproved

Committee Reason: The proposal was disapproved. Use of windows for light versus artificial light is a designers choice and not a minimum requirement that deals with health, safety or welfare. Natural light also varies based on time of the day, day of the year and weather. The improvements in test scores indicated in the reasons is suspect - if this is true why were there no school representative testifying? Requiring windows could conflict with the energy code requirements. G128-18 asked for 100% of classrooms - this is not better. The language could be read to also include all day care classrooms or school classrooms such as music rooms (acoustics concerns), shops and gyms. There is also the question if this would be applied to a change of occupancy, even in current school buildings being reconfigured. (Vote: 14-0)

**Staff Analysis:** G165-21 and G166-21 addresses requirements in a different or contradicting manner. The committee is urged to make their intentions clear with their actions on these proposals.

G165-21

### G166-21

Committee Action: Disapproved

Committee Reason: This proposal was disapproved for the same reasons as G165-21. In addition, the current percentage is 8%. What is the justification for such a large increase in the percentage of windows? The cost impact says there is no change in cost, but this could be a significant cost increase. How was the study done that is referenced in the reason statement? Were there schools evaluated with no windows? Are the new schools being built with an insufficient number of windows? Is there a difference in buildings where students move between classrooms with and without windows? (Vote: 14-0)

**Staff Analysis:** G165-21 and G166-21 addresses requirements in a different or contradicting manner. The committee is urged to make their intentions clear with their actions on these proposals.

G166-21

# G167-21

Committee Action: Disapproved

**Committee Reason:** The proposal was disapproved for several reasons. How would you ever determine the possible level of sound 10 years in the future? There are some sound transmission requirements in the International Green Code, but this is for high performance buildings only. Who would test for this? How would this be enforced at initial construction given different levels of sound during the day - much less as a maintenance requirement? Worst case sound levels are debatable. (Vote: 14-0)

G167-21

### G168-21

Committee Action: Disapproved

**Committee Reason:** The proposal was disapproved because no state currently offer licenses for acoustical engineers. There was the question if any of the acoustical standards require testing? This requirement is an over reach as there are many registered design professions and can demonstrate expertise in acoustics and incorporate them into their designs. (Vote: 14-0)

G168-21

#### G169-21

Committee Action: As Submitted

**Committee Reason:** The proposal was approved as this is the correct generic reference for requiring expertise for design (see the committee action on G168-21). This will allow for either compliance with the standard or engineering analysis. (Vote 13-1)

G169-21

### G170-21

Committee Action: Disapproved

**Committee Reason:** This proposal was disapproved because the exception as written would be difficult to uniformly enforce and is too broad and ambiguous. Who would determine the allowance? How would the code official determine this if there is no planned tenant at the time of construction, or the tenant changes over time? (Vote: 12-1)

G170-21

### G171-21

This proposal includes the following errata **1208.5 Efficiency dwelling units.** Efficiency dwelling units shall conform to the requirements of the code except as modified herein:

- 1. The unit unit's habitable space shall comply with Sections 1207.1 1208.1 through 1207.4 1208.4.
- 2. The unit shall be provided with a separate closet.
- 3. For other than Accessible, Type A and Type B dwelling units, the unit shall be provided with a kitchen sink, cooking appliance and refrigerator, each having a clear working space of not less than 30 inches (762 mm) in front. Light and ventilation conforming to this code shall be provided.
- 4. The unit shall be provided with a separate bathroom containing a water closet, lavatory and bathtub or shower.

Committee Action: As Submitted

Committee Reason: The proposal was approved as it coordinated the requirements for area in dwelling units and efficiency dwelling units. (Vote: 13-0)

G171-21

### G172-21

This proposal includes the following errata **1210.3.4.4 Structural characteristics.** Grab bars and stanchions shall be designed and constructed for the structural loading conditions set forth in Section <del>1607.8.2</del> 1607.9.2.

Committee Action: Disapproved

Committee Reason: This proposal was disapproved because the committee had several concerns. Have there been any dwelling or sleeping units constructed with the proposed grab bar configurations so that the increase in safety can be verified? Have their been any studies or empirical evidence that indicate that this will significantly improve safety? Requiring the installation in all bathrooms in all Group R units is going too far - perhaps blocking so that residents can add grab bars based on need. The choices for grab bar installation should be based on individual residents needs and choices, which may not be this configuration. The locations specified can be an issue with the different types of tubs and showers on the market for design and structural strength. There is a concern about the grab bar location conflicting with the shower curtains so that water would end up on the room floor, thus creating a slip and fall hazard. (Vote: 14-0)

G172-21

### G173-21

Committee Action: As Submitted

Committee Reason: The proposal was approved because it provides guidance for UV germicidal irradiation systems where they are provided. There was a concern that UL 8802 is a outline, not a standard. (Vote: 12-1)

**Staff Analysis:** G173-21 and G174-21 addresses requirements in a different or contradicting manner. The committee is urged to make their intentions clear with their actions on these proposals.

G173-21

## G174-21

Committee Action: Disapproved

**Committee Reason:** This proposal was disapproved. Germicidal irradiation is one method to address the health issues raised, and should not be mandated. Designers need to be able to use multiple options to address issues. Many of these systems are portable equipment and are not a building element. This needs a standards reference for compliance - NFPA 70 does not seem to have any specific information for these systems. Some studies say that UV light can be hazardous to people' eyes - this type of system needs to be studied further. (Vote 12-1)

**Staff Analysis:** G173-21 and G174-21 addresses requirements in a different or contradicting manner. The committee is urged to make their intentions clear with their actions on these proposals.

G174-21

# G175-21 Part I

Committee Action: Disapproved

**Committee Reason:** The proposal was disapproved because the committee felt that this system should be applied by choice, and not as a building requirement. This is an unreasonable cost where applied to all buildings - there should be some kind of risk assessment. The exception in Section 2703.3 is in the wrong section - the section is about surge protection and the exception is for lightning protection. This requirement should not apply to additions. This would be better in an appendix so it can be adopted by communities specific to their needs. (Vote: 13-0)

**Staff Analysis:** G175-21 and G176-21 addresses requirements in a different or contradicting manner. The committee is urged to make their intentions clear with their actions on these proposals.

### **G175-21 Part II**

Committee Action: Disapproved

Committee Reason: Disapproval was based upon past actions on G175-21 Part I and G176-21. (Vote: 14-0)

**Staff Analysis:** G175-21 and G176-21 addresses requirements in a different or contradicting manner. The committee is urged to make their intentions clear with their actions on these proposals.

G175-21 Part II

### G176-21

Committee Action: As Submitted

**Committee Reason:** This proposal was approved as the committee felt that this provided direction and criteria if you wanted to add a lightning protection systems. The committee preferred this to the mandatory requirements in G175-21. (Vote: 13-0)

**Staff Analysis:** G175-21 and G176-21 addresses requirements in a different or contradicting manner. The committee is urged to make their intentions clear with their actions on these proposals.

G176-21

## G177-21

Committee Action: Disapproved

Committee Reason: This proposal was disapproved because the committee felt that the revised text could be read to just apply to emergency elevators rather than all elevators. The language in the proposal should emphasize that the two-way communication in the elevator car is for everyone, including persons who have speaking or hearing disabilities. All of the testifiers seem to have the same intent - they need to work together to resolve the conflicts in the current language. ASME A17.1 has included criteria for these systems. The proposal needs to provide more specific direction. (Vote: 14-0)

G177-21

# G178-21

Committee Action: As Submitted

**Committee Reason:** This proposal was approved because two-way communication is already required by ASME A17.1 in each elevator car. This change just re-emphasizes that requirement. (Vote: 14-0)

G178-21

# G179-21

Committee Reason: This proposal was disapproved because the requirements for exterior elevator design needs to apply to all elevators, not just passenger elevators. (Vote: 10-4)

G179-21

### G180-21

This proposal includes the following errata **3002.1 Hoistway protection.** A hoistway for elevators, dumbwaiters and other vertical access devices shall be comply with Sections 712 and 713. Where the hoistway is required to be enclosed it shall be constructed as a shaft enclosure in accordance with Section 713.

Committee Action: As Submitted

**Committee Reason:** This proposal was approved as it is applies consistent terminology for elevators and their protections. The cleanups is helpful and should simplify compliances. There was a question about the area of refuge reference in Section 3006.1 Item 3, but Section 1009.6.4 this is the correct reference for area of refuge separation, which is what Section 3006.1 is about. (Vote: 14-0)

G180-21

### G181-21 Part I

Committee Action: Disapproved

**Committee Reason:** This proposal was disapproved because the committee was concerned that natural ventilation would allow for smoke to enter the cab. Removing the requirement to be an independent system will allow the use of the building's ventilation and mixing the air. (Vote: 14-0)

G181-21 Part I

# G181-21 Part II

Committee Action: Disapproved

**Committee Reason:** The proposal was disapproved with concern with the need to specifically match the language with ASME A17.1/CSA B44 and the affect it will have on enforcement. Also it was noted that Part I of this proposal was disapproved. (Vote: 10-4)

G181-21 Part II

# G182-21

Committee Action: As Modified

#### **Committee Modification:**

<u>3006.2.1 Rated corridors.</u> Where *corridors* are required to be fire-resistance rated in accordance with Section 1020.2, elevator hoistway openings shall be protected in accordance with Section 3006.3.

**Committee Reason:** The modification retained the current language in Section 3006.2.1. This modification was presented as needed because the provisions in the FS proposals related to elevator hoistway doors have not been decided yet. Elevator hoistway doors may be needed in 2 and 3 story Group R-2 occupancies. The proposal was approved as this cleans us the language for elevator hoistway doors and should make the code easier to understand. (Vote: 14-0)

### G183-21 Part I

Committee Action: As Modified

#### **Committee Modification:**

**3007.6.2 Elevator lobby** enclosure separation. The fire service access elevator lobby shall be separated from each floor with a smoke barrier in accordance with Section 709, except that lobby doorways shall comply with Section 3007.6.3.

Exception: Enclosed fire Fire service access elevator lobbies are not required to be separated at the levels of exit discharge.

**3008.6.2 Elevator lobby enclosure separation.** The occupant evacuation elevator lobby shall be separated from each floor with a smoke barrier in accordance with Section 709, except that lobby doorways shall comply with Section 3008.6.3. **Exception:** Enclosed occupant Occupant evacuation elevator lobbies are not required to be separated at the levels of exit discharge.

**Committee Reason:** The modification provides better language for consistency by using 'separated' instead of 'enclosed' for lobbies. The proposal is a good clean up of the language for which walls make up the elevator lobby and provides consistency between the general lobbies, fire service access elevators lobbies and occupant evacuation elevator lobbies. (Vote: 14-0)

G183-21 Part I

### G183-21 Part II

Committee Action: As Modified

#### **Committee Modification:**

**708.4.1 Fire partition walls enclosing elevator lobbies.** Fire partition walls used to enclose elevator lobbies in accordance with Section 3006.3 (elevator hoistway protection), shall form an effective enclosure that terminates at a fire barrier or fire partition having a level of fire-resistance-rating not less than 1 hour, or an outside wall.

**710.4.1Smoke partition walls enclosing elevator lobbies.** Smoke partition walls used to enclose elevator lobbies in accordance with Section 3006.3 (elevator hoistway protection), shall form an effective enclosure that terminates at a fire barrier having a level of fire-resistance-rating not less than 1 hour, another smoke partition or an outside wall.

**Committee Reason:** The committee concluded the modification is a good clean-up of the text and making the proposed text comply with the rest of the code by deleting "elevator hoistway protection" and "effective" in sections 708.4.1 and 710.4.1. The proposal provides clarification for the protection of elevator lobbies and outlines the types of fire resistance where it is required. (Vote: 13-0)

G183-21 Part II

# G184-21

Committee Action: Disapproved

**Committee Reason:** The proposal was disapproved because this is not totally correlated with the California code as indicated in the reason - the California code allows options. The hospital representatives that testified indicated that there has not been infections in hospitals or nursing homes that were related to elevator pressurization, therefore, they should be allowed to use this option in the code. (Vote: 14-0)

G184-21

# G185-21

Committee Action: As Submitted

**Committee Reason:** The proposal was approved as this modification allows for smoke protective curtain assemblies to be used at elevator doors to meet the smoke protection requirements for rated corridors. The UL 864 listing for the controller is appropriate. Some committee members felt this option was already permitted as an alternative to Section 3006.3 Item 3. (Vote: 8-7)

G185-21

### G186-21

Committee Action: Disapproved

**Committee Reason:** This proposal was disapproved because the committee felt this was already addressed in Section 1009, so it did not need to be repeated in the elevator lobby requirements. (Vote: 13-1)

G186-21

#### G187-21

Committee Action: As Submitted

#### **Committee Modification:**

**3007.6 Fire service access elevator lobby.** The fire service access elevator shall open into an enclosed fire service access elevator lobby in accordance with Sections 3007.6.1 through 3007.6.5. Egress is permitted through the enclosed elevator lobby in accordance with Item 1 of Section 1016.2.

#### **Exceptions:**

- 1. Where a fire service access elevator has two entrances onto a floor, the second entrance shall be permitted to be protected in accordance with Section 3006 3.2
- 2. A fire service access elevator lobby is not required to be provided at an <del>occupied occupiable roof.</del>

**Committee Reason:** This proposal was approved because the committee agreed that a lobby for fire department staging or assisted rescue was not needed at the roof level. The additional expense is not justified and there was a concern that this lobby would be considered an additional floor for building height. As editorial, the committee requested that the new exception coordinate "occupied roof" with the "occupiable roof" approved in G21-21 Part 1. (Vote: 14-0)

G187-21

### G188-21

Committee Action: As Modified

#### **Committee Modification:**

**3009.1 General.** The design, construction, <u>and</u> installation, <u>alteration</u>, <u>repair and maintenance</u> of elevators installed within a residential dwelling unit or installed to provide access to one individual residential dwelling unit shall conform to ASME A17.1/CSA B44, Section 5.3.

**Committee Reason:** The modification was because the alteration, maintenance and repair of a private residence elevators is regulated by the property maintenance code. The proposal was approved as the text will address a safety issue for private residence elevator installations. This provides direction for inspectors. (Vote: 10-4)

G188-21

#### G189-21

Committee Action: As Submitted

#### **Committee Modification:**

**3103.5 Bleachers**, grandstands and folding and telescopic seating. Temporary bleachers, grandstands and folding and telescopic seating, that are not building elements, shall comply with ICC 300.

**Committee Reason:** This proposal was approved as the committee felt that the ICC 300 was the correct reference for the temporary bleachers, grandstands and folding and telescopic seating. As editorial, the Committee requested that the title of the section be revised to include all three elements. (Vote: 14-0)

G189-21

#### G190-21

Committee Action: Disapproved

**Committee Reason:** The proposal was disapproved as the term "replacement building" was unclear. The proposal was unclear on when the 180 days would start in Section 3104.2 item #3. This proposal may be more appropriate in the IEBC. (Vote: 14-0)

G190-21

### G191-21

Committee Action: As Submitted

**Committee Reason:** The proposal was approved as submitted based on the provided reason statement. The committee did express concerns that additional justification would be beneficial. (Vote: 8-7)

G191-21

### G192-21

Committee Action: Disapproved

Committee Reason: The proposal was disapproved based on the proponents request. (Vote: 14-0)

**Staff Analysis:** G192-21 and G193-21 addresses requirements in a different or contradicting manner. The committee is urged to make their intentions clear with their actions on these proposals.

G192-21

# G193-21

Committee Action: As Submitted

**Committee Reason:** The proposal was approved as submitted per the provided reason statement. The proposal represents an extension coordinate effort of those involved. (Vote: 13-1)

Staff Analysis: G192-21 and G193-21 addresses requirements in a different or contradicting manner. The committee is urged to make their intentions clear with their actions on these proposals.

G193-21

### G194-21

Committee Action: As Submitted

**Committee Reason:** The proposal submitted by FEMA was approved as submitted as per the reason statement. The proposal resolves an existing discontinuity. (Vote: 14-0)

G194-21

### G195-21

Committee Action: Disapproved

**Committee Reason:** The proposal was disapproved based on concerns and/or conflict with precast construction. The committee expressed concerns with the wording in proposed section 3114.7 for installation only 'in accordance with the manufacturer's instructions'. (Vote: 13-0)

G195-21

## G196-21

Committee Action: Disapproved

**Committee Reason:** The proposal was disapproved as the proposal has inconsistencies. The committee encouraged the proponent to review with and propose future updates. (Vote: 14-0)

G196-21

100

# G197-21

Committee Action: As Modified

#### **Committee Modification:**

3115.8.4.2 Seismic design parameters. The seismic force-resisting system shall be designed and detailed in accordance with one of the following:

- 1. Where all or portions of the intermodal shipping container profiled steel panel elements are considered to be the seismic force-resisting system, design and detailing shall be in accordance with the ASCE 7, Table 12.2-1 requirements for light-frame bearing-wall systems with shear panels of all other materials.
- 2. Where portions of the <u>intermodal shipping container profiled steel panel</u> elements are retained, but are not considered to be the seismic force-resisting system, an independent seismic force-resisting system shall be selected, designed and detailed in accordance with ASCE 7, Table 12.2-1.
- 3. Where portions of the intermodal shipping—container profiled steel panel elements—are retained and integrated into a seismic force-resisting system other than as permitted by Section 3115.8.4.2 Item 1, seismic design parameters shall be developed from testing and analysis in accordance with Section 104.11 and ASCE 7, Section 12.2.1.1 or 12.2.1.2.

3115.8.4.3 Allowable shear value The allowable shear values for the intermodal shipping container profiled steel panel side walls and end walls

shall be demonstrated by testing and analysis accordance with Section 104.11. Where penetrations are made in the side walls or end walls designated as part of the lateral force-resisting system, the penetrations shall be substantiated by rational analysis.

**3115.8.5.2 Structural design assumptions** Where permitted by Section 3115.8.5.1, single-unit, stand-alone intermodal shipping containers shall be designed using the following assumptions for the <u>profiled steel panel</u> side walls and end walls <u>lateral-force resisting system</u>:

- 1. The appropriate detailing requirements contained in Chapters 16 through 23.
- 2. Response modification coefficient, R = 2.
- 3. Overstrength factor,  $\Omega_0 = 2.5$ .
- 4. Deflection amplification factor,  $C_d = 2$ .
- 5. Limits on structural height,  $h_n = 9.5$  feet (2900 mm).

**3115.8.5.3 Allowable shear** The allowable shear for the intermodal shipping container profiled steel panel side walls (longitudinal) and end walls (transverse) for wind design and seismic design using the coefficients of Section 3115.8.5.2 shall be in accordance with Table 3115.8.5.3, provided that all of the following conditions are met:

- 1. The total linear length of all openings in any individual side wall or end wall shall be limited to not more than 50 percent of the length of that side wall or end wall, as shown in Figure 3115.8.5.3(1).
- 2. Any full-height wall length, or portion thereof, less than 4 feet (305 mm) shall not be considered as a portion of the lateral force-resisting system, as shown in Figure 3115.8.5.3(2).
- 3. All side walls or end walls used as part of the lateral force-resisting system shall have an existing or new boundary element on all sides to form a continuous load path, or paths, with adequate strength and stiffness to transfer all forces from the point of application to the final point of resistance, as shown in Figure 3115.8.5.3(3).
- 4. Where openings are made in the intermodal shipping container walls, floors or roofs, for doors, windows and other openings:
  - 4.1 The openings shall be framed with steel elements that are designed in accordance with Chapters 16 and 22.
  - 4.2 The cross section and material grade of any new steel element shall be equal to or greater than the steel element removed.
- 5. A maximum of one penetration not greater than 6 inches (152 mm) in diameter for conduits, pipes, tubes or vents, or not greater than 16 square inches (10 323 mm²) for electrical boxes, is permitted for each individual 8-foot (2438 mm) length of lateral force-resisting wall. Penetrations located in walls that are not part of the lateral force-resisting system shall not be limited in size or quantity. Existing intermodal shipping container vents shall not be considered a penetration, as shown in Figure 3115.8.5.3(4).
- 6. End wall doors designated as part of the lateral force-resisting system shall be welded closed.

#### **TABLE 3115.8.5.3**

ALLOWABLE SHEAR VALUES FOR INTERMODAL SHIPPING CONTAINER PROFILED STEEL PANEL SIDE WALLS AND END WALLS
FOR WIND OR SEISMIC LOADING

CONTAINER DESIGNATION <sup>b</sup>	CONTAINER DIMENSION (nominal length)	CONTAINER DIMENSION (nominal height)	ALLOWABLE SHEAR VALUES (PLF) <sup>a, c</sup>	
			Side Wall	End Wall
1EEE	- 45 feet	9.5 feet	- 75	
1EE		8.5 feet		843
1AAA	- 40 feet	9.5 feet	84	
1AA		8.5 feet		
1A		8.0 feet		
1AX		< 8.0 feet		
1BBB	- 30 feet	9.5 feet	112	
1BB		8.5 feet		
1B		8.0 feet		
1BX		< 8.0 feet		
1CC	20 feet	8.5 feet	168	
1C		8.0 feet		
1CX		< 8.0 feet		
1D	10 feet	8.0 feet	337	
1DX		< 8.0 feet		

For SI: 1 foot = 304.8 mm.

- a. The allowable strength shear values for the side walls and end walls of the intermodal shipping containers are derived from ISO 1496-1 and reduced by a factor of safety of 5.
- b. Container designation type is derived from ISO 668.
- c. Limitations of Sections 3115.8.5.1 and 3115.8.5.3 shall apply.

**Committee Reason:** The proposal was approved as modified by Proczka-1 and Proczka-2. With the modifications, the proposal is a coordinated good addition to the code and it clarifies the terminology related to intermodal shipping containers. The modifications provide needed editorial updates. (Vote: 11-3)

G197-21

# G198-21

Committee Action: As Modified

#### **Committee Modification:**

**3115.8.5.3 Allowable shear.** The allowable shear for the corrugated steel side walls (longitudinal) and end walls (transverse) for wind design and seismic design using the coefficients of Section 3115.8.5.2 shall be in accordance with Table 3115.8.5.3, provided that all of the following conditions are met:

- 1. The total linear length of all openings in any individual side wall or end wall shall be limited to not more than 50 percent of the length of that side wall or end wall, as shown in Figure 3115.8.5.3(1).
- 2. Any full-height wall length, or portion thereof, less than 4 feet (305 mm) shall not be considered as a portion of the lateral force-resisting system, as shown in Figure 3115.8.5.3(2).
- 3. All side walls or end walls used as part of the lateral force-resisting system shall have an existing or new boundary element on all sides to form a continuous load path, or paths, with adequate strength and stiffness to transfer all forces from the point of application to the final point of resistance, as shown in Figure 3115.8.5.3(3). The existing door interlocking mechanism shall not be considered as a component of the required load path.
- 4. Where openings are made in container walls, floors or roofs, for doors, windows and other openings:

- 4.1 The openings shall be framed with steel elements that are designed in accordance with Chapters 16 and 22.
- 4.2 The cross section and material grade of any new steel element shall be equal to or greater than the steel element removed.
- 5. A maximum of one penetration not greater than 6 inches (152 mm) in diameter for conduits, pipes, tubes or vents, or not greater than 16 square inches (10 323 mm²) for electrical boxes, is permitted for each individual 8-foot (2438 mm) length of lateral force-resisting wall. Penetrations located in walls that are not part of the lateral force-resisting system shall not be limited in size or quantity. Existing intermodal shipping container vents shall not be considered a penetration, as shown in Figure 3115.8.5.3(4).
- 6. End wall doors designated as part of the lateral force-resisting system shall be intermittently welded closed around the full perimeter of the door panels.

**Committee Reason:** The proposal was approved as modified by Furr-2 based on the committee actions on G197. The proposal, and modification, coordinate and clarify the welding, shear and seismic provisions. The proposal adds a pointer to ASCE 7 seismic provisions. The modification Furr-2 clarifies intermediate welding for Section 3115.8.5.3 item #6. (Vote: 14-0)

G198-21

### G199-21 Part I

Committee Action: As Submitted

**Committee Reason:** The proposal was approved as submitted as the proposal is a good coordinated change and providing a link to the Chapter 33 of the International Fire Code in the scoping statement of Section 3301.1. (Vote: 12-2)

G199-21 Part I

### G199-21 Part II

Committee Action: As Submitted

Committee Reason: This proposal was approved based upon the reason statement. It was suggested that perhaps the phrase "up-to-date" could be revised in Section 3303.3. (Vote: 13-0)

G199-21 Part II

# G200-21

Committee Action: Disapproved

Committee Reason: The proposal was disapproved for several reasons. The phrase 'approved per plan' is not good code language - perhaps 'approved construction documents.' Are these temporary or permanent stairways. This will be difficult to sequence with having the stairway installers return at each floor. This will increase inspections for coming back for each stair flight. There is no justification for the same number of stairs for fire department and construction access as there is for a fully occupied building. Is this just to steps, or does this also include handrails and guards? What about damage during construction of finish materials? (Vote: 13-0)

G200-21

# G201-21

**Committee Reason:** The proposal was disapproved as the proposal has a lack of enforceable language. The proposal does not provide full guidance in an emergency. With extensive work, the topic has potential. (Vote: 9-5)

G201-21

## G202-21

Committee Action: Disapproved

Committee Reason: The proposal was disapproved as the proposed Appendix, on 3D printed building construction, is incomplete and lacking clarity on materials. (Vote: 13-0)

G202-21

## G203-21

Committee Action: Disapproved

**Committee Reason:** The proposal was disapproved. The AARST standard has suggestive language, not enforceable language. There is no specific directions for testing and is not clear for how to comply. The language in the proposed appendix appears to conflict with the International Residential Code. (Vote 14-0)

G203-21

### G204-21

Committee Action: Disapproved

**Committee Reason:** The committee stated that the reason for the disapproval was that there was some confusion and disagreement about the relationship between the current and the proposed requirement to provide protection in these rooms. (Vote: 14-0)

G204-21

# **International Building Code - Egress**

2021 Group A - Report of the Committee Action Hearing Results

### E1-21

Committee Action: Disapproved

Committee Reason: This proposal was disapproved because the proposed additional language is not clear and could be read to conflict with the general provisions in Sections 1003 through 1015 which apply to all three parts of the means of egress. (Vote: 14-0)

E1-21

### E2-21

Committee Action: Disapproved

**Committee Reason:** The proposal was disapproved because the committee felt that the handrail provisions should remain in Section 1014. Moving this would add confusion. It is important for the 36" clear width between handrails on ramps to remain. (Vote: 14-0)

**Staff Analysis:** Proposals to E2-21 and E12-21 addresses requirements in a different or contradicting manner. The committee is urged to make their intentions clear with their actions on these proposals.

E2-21

## E3-21

Committee Action: Disapproved

Committee Reason: The proposal was disapproved. Several concerns were raised by the committee. What parts of a floor were the circulation paths for the means of egress would be too open for interpretation. This description would include the exit discharge from a building. Would there be other products that were considered hard flooring that were not listed, such as vinyl or wood floors? This proposal could be read to only allow the types of floor coverings listed. What would happen on floor areas that could get wet, such as in weather vestibules or near pools or showers? How would floor cleaning or polishing applications affect compliance? Compliance with this proposed standard should be the responsibility of the manufacturer, not the job of the code official to check. If the standard is already utilized by the industry as indicated in the testimony, why does this need to be added to the code? (Vote 10-4)

E3-21

# E4-21

Committee Action: Disapproved

**Committee Reason:** The proposal was disapproved because it could be a conflict with the accessible route requirements for entry or means of egress. With no no handrails, no warning stripes, and no lower limit on the rise between landings this could be a tripping hazard. This could be a series problem for means of egress for large assembly facilities. (Vote: 13-0)

E4-21

#### E5-21

Committee Action: Disapproved

Committee Reason: This proposal was disapproved. This is cumulative occupant load requirements, so this does not affect the total occupant load for a space. "Ordinarily" is too vague of a term. This could be read to include building lobbies or conference rooms. (Vote: 13-0)

E5-21

### E6-21

Committee Action: Disapproved

**Committee Reason:** This proposal was disapproved because actual occupant load is already permitted in the current exception. The access-control systems only keep track of who enters or leaves a space, not the number of occupants in the space. (Vote: 14-0)

E6-21

### E7-21

Committee Action: Disapproved

**Committee Reason:** This proposal was disapproved because the committee felt that the threshold of 450 sq.ft for a collaboration area was too large and should be considered a conference room. This threshold does not match the proposed definition. (Vote: 9-5)

E7-21

## E8-21

Committee Action: Disapproved

**Committee Reason:** This proposal was disapproved because the committee felt that there should be a maximum size threshold for these conference rooms for when the 15 sq.ft. per person should be applied versus the 30 sq.ft. per person proposed. The collaboration areas in E7-21 and the conference rooms in E8-21 should be addressed together. (Vote: 14-0)

E8-21

# E9-21

Committee Action: Disapproved

**Committee Reason:** This proposal was disapproved because the committee felt that this increase allowance for the occupant load would allow for so many people to be in the space that there would not be enough room to move for smooth evacuation. This is too tight for all assembly spaces. It was suggested that a public comment could limit this to transportation terminals. (Vote: 11-3)

E9-21

#### F10-21

Committee Action: Withdrawn

E10-21

### E11-21

Committee Action: Disapproved

Committee Reason: This proposal was disapproved because the committee felt the proposals was too broad - this could be interpreted to require an occupant load sing in every conference room or employee break rooms. (Vote: 14-0)

E11-21

### E12-21

Committee Action: Disapproved

**Committee Reason:** This proposal was disapproved for consistency with the committee action on E2-21. This proposal appears to subtract handrail width and would conflict with Section 1014.9. The proposal should include a qualifier that this is applicable to where a required stairway width of greater than 60 inches. (Vote: 14-0)

**Staff Analysis:** Proposals to E2-21 and E12-21 addresses requirements in a different or contradicting manner. The committee is urged to make their intentions clear with their actions on these proposals.

E12-21

# E13-21

Committee Action: Disapproved

**Committee Reason:** This proposal was disapproved. The committee agreed that the occupant load is based the function of the space, however, Section 1004.9 should remain occupancy. The proposal to Section 1006.2.2 is a complex ratio calculation that is not needed for most spaces. If this is needed is should be in the main paragraph, not in an exception. (Vote: 14-0)

E13-21

# E14-21

Committee Action: Disapproved

**Committee Reason:** This proposal was disapproved because this issue need to be addressed in both Table 1006.2.1 note c and Section 1030.8. If 'fixed seating' was removed here was concern the common path of travel in Section 1030.8 would over ride the 75 foot common path of travel allowance in this table for assembly spaces. (Vote: 14-0)

**Staff Analysis:** This proposal's revision to Table 1006.2.1 footnote c addresses requirements in a different or contradicting manner to those found in Code Change E108-21 to Section 1030.8. The committee is urged to make their intentions clear with their actions on these proposals.

E14-21

#### E15-21

Committee Action: Disapproved

**Committee Reason:** The proposal was disapproved based on proponent's request. There is a problem with the wording in Section 1006.2.2.3. (Vote: 14-0)

E15-21

### E16-21

Committee Action: Disapproved

**Committee Reason:** The proposal was disapproved because added travel distance should not be permitted for a fire-extinguishing system. This type of system does not offer the same level of protection as an automatic sprinkler system. (Vote: 14-0)

E16-21

### E17-21

Committee Action: As Submitted

Committee Reason: This proposal was approved as this will clarify that all spaces on a story or an occupied roof have to have access to the required number of exits. (Vote: 12-1)

E17-21

### E18-21

Committee Action: As Submitted

**Committee Reason:** This proposal was approved as a clarification. Smoke-protected assembly seating and open-air assembly seating have the same requirements for means of egress. (Voter: 12-1)

E18-21

# E19-21

Committee Action: Disapproved

**Committee Reason:** This proposal was disapproved as this conflicts with the main description of exit access stairways as open stairways. The code works now; this is not needed to change back to exit stairways. The proposal missed Section 1023.1. (Vote: 14-0)

E19-21

# E20-21

Committee Action: Disapproved

**Committee Reason:** This proposal was disapproved. Section 1017.3 - the modification would be read to apply to any steps, not just exit stairways. Section 1023.1 - the new exception allows for the stairway to not lead to an exit and there was no justification provided. The modifications could be read to allow for a mixture of stairways and the drive ramps to meet the exit requirements for parking garages. If revisions are needed for clarification the concentration should be on the exit access requirements and not try and change this back to exit stairways. (Vote: 10-4)

E20-21

### E21-21

Committee Action: As Submitted

**Committee Reason:** This proposal was approved as an occupied roof is not a story, so the number of exits from the occupied roof needs to be clarified. The location of the occupied roof allowance in Table 1006.3.4(2) is appropriate as the occupied roof over the 1st floor is the same vertical travel as from the basement level. This is a good correlation with the occupied roof requirements in the code. (Vote: 10-4)

E21-21

### E22-21

Committee Action: Disapproved

Committee Reason: This proposal was disapproved because the proposed language could be read to apply to all lobbies of any size - including general lobbies on the first floor. Some members felt the current language was requiring access to all the exits on the floor from all elevator lobbies, so this is not a clarification. The exception requires a rated corridor even in a sprinklered building - this is an unnecessary expenses (Vote: 13-1)

F22-21

### E23-21

Committee Action: Disapproved

Committee Reason: The proposals was disapproved because the current tables are clear. Adding "per story" in the third column would limit this to each story in stead of allowing groups of 20 occupants in a row. (Vote: 13-1)

E23-21

### E24-21

This proposal includes unpublished errata

1008.2.3 1008.2.4 Power for illumination. The power supply for *means of egress* illumination shall normally be provided by the premises' electrical supply.

Committee Action: As Submitted

Committee Reason: The proposal was approved as an editorial grouping of means of egress and emergency lighting equipment. (Vote: 9-4)

E24-21

### E25-21

Committee Action: Disapproved

Committee Reason: The proposal was disapproved because the proposal did not limit the size of the self-storage facility that could use this exception. The proposal would be better if it also added "of the building" after "exterior." (Vote: 14-0)

E25-21

### E26-21 Part I

Committee Action: Disapproved

**Committee Reason:** The proposal was disapproved because the new definition for energy storage system did not match the IFC or IECC definitions. This is addressed in the IFC, so it does not need to be added into IBC. The standard for these systems, NFPA855-20 should be referenced in the IBC if this is to be added. (Vote 14-0)

E26-21 Part I

## **E26-21 Part II**

Committee Action: Disapproved

**Committee Reason:** This proposal was disapproved based upon the action on F123-21. Section 1207 is a more appropriate compliance path. (Vote: 14-0)

E26-21 Part II

# E27-21

Committee Action: Disapproved

Committee Reason: The proposal was disapproved because exit access stairways can serve as part of an accessible means of egress, so raised bleachers already meet Section 1009 with two sets of stairways. The proposal is adding requirements - if you only need one accessible route to get onto the bleachers, why would you need two accessible routes off the bleachers? The proposal should add "egress" in the phrase "common path of travel" so they are using a defined term. This should be in the ICC 300, not the IBC. There were concerns raised that steps from a raised bleacher were not between stories or mezzanines, therefore they would not comply with Section 1009.3. (Vote: 9-5)

E27-21

# E28-21

Committee Action: Disapproved

**Committee Reason:** The proposal was disapproved because an occupied roof is not a story so this revision does not clarify the requirements. (Vote: 8-6)

### E29-21

Committee Action: Disapproved

Committee Reason: This proposal was disapproved because this sets a totally different threshold for requirements. The level of exit discharge is used to address sloped sites, not grade plane. This would be a huge increase in cost with no justification. (Vote: 14-0)

E29-21

### E30-21

Committee Action: As Submitted

Committee Reason: The proposal was approved since this adds ramps as way off the roof the same as the floors below. (Vote: 14-0)

**Staff Analysis:** Proposals E30-21 and E31-21 combined and Proposal E32-21 addresses requirements in a different or contradicting manner. The committee is urged to make their intentions clear with their actions on these proposals.

E30-21

## E31-21

Committee Action: Disapproved

**Committee Reason:** This proposal was disapproved. Roof levels that are not rated are a hazard for people on the roof. There is no protection for occupants on the roof. Exit stairways from the roof should be required to come down on opposite sides of the horizontal exit. (Vote: 14-0)

**Staff Analysis:** Proposals E30-21 and E31-21 combined and Proposal E32-21 addresses requirements in a different or contradicting manner. The committee is urged to make their intentions clear with their actions on these proposals.

F31-21

# E32-21

Committee Action: Disapproved

**Committee Reason:** The proposal was disapproved. The exception did not require the exit stairways to come down on opposite sides of the horizontal exit. The need for an areas of refuge at the roof are not justified since the roof is open to the outside air. The roof could have exit access stairways to the floor below instead of exit stairways. (Vote: 11-3)

**Staff Analysis:** Proposals E30-21 and E31-21 combined and Proposal E32-21 addresses requirements in a different or contradicting manner. The committee is urged to make their intentions clear with their actions on these proposals.

E32-21

# E33-21

Committee Action: Disapproved

**Committee Reason:** This proposal was disapproved because the language could be read to only require an accessible means of egress from the 6th floor and above. People with mobility impairments could be on the upper floors. (Vote: 14-0)

E33-21

### E34-21

Committee Action: As Modified

#### **Committee Modification:**

1009.2.2 Doors.

Where doors are part of an accessible route to provide access to an exit, area of refuge or exterior area of assisted rescue, the doors shall provide maneuvering clearances shall be provided at such doors as required by ICC A117.1 in the direction of egress.

Where doors lead to an area of refuge or exterior area for assisted rescue and re-entry to the floor is possible, maneuvering shall be provided on both sides of the door.

#### **Exception:**

Maneuvering clearances are not required at the doors to exit stairways for levels above and below the level of exit discharge where the exit enclosure does not include an area of refuge.

**Committee Reason:** The modifications to the first sentence and the exception provide better grammar specific to the elements and is technically more accurate. The modification that added the 2nd sentence provides best practice for areas of refuge or exterior areas for assisted rescue, however, there was concern that "where possible" was vague and would lead to wide interpretations. The proposal adds needed clarification for exit stairway doors and indicates where independent access is required. (Vote: 14-0)

F34-21

### E35-21

Committee Action: Disapproved

Committee Reason: The proposal was disapproved based on proponents request and the committee preferred G59-21. (Vote: 14-0)

**Staff Analysis:** E35-21, E36-21 and G59-21 addresses requirements in a different manner. The committee is urged to make their intentions clear with their actions on these proposals.

E35-21

# E36-21

Committee Action: Disapproved

Committee Reason: The proposal was disapproved based on proponents request and the committee preferred G59-21. (Vote: 14-0)

**Staff Analysis:** E35-21, E36-21 and G59-21 addresses requirements in a different manner. The committee is urged to make their intentions clear with their actions on these proposals.

E36-21

### E37-21 Part I

This proposal includes the following errata IFC Section 604.4 has an errata for the elevator signage so that is matches current IBC Section 3002.3.

Committee Action: As Submitted

**Committee Reason:** The proposal as approved because it provides for instructions at all two-way communication system. This also provides appropriate information at elevators as needed and is coordinated with ASME A17.1. (Vote: 12-2)

E37-21 Part I

### E37-21 Part II

Committee Action: As Submitted

Committee Reason: This proposal was a the preferred method of verbiage for elevator signage as compared with proposal F113-21. (Vote: 12-1)

E37-21 Part II

### E38-21

Committee Action: As Submitted

Committee Reason: This proposal was approved because this clarifies the intent of the height of the door opening and what can project into that opening. (Vote: 14-0)

E38-21

# E39-21

Committee Action: As Submitted

**Committee Reason:** The proposal was approved as it coordinates the exceptions with the removal of the requirements for maximum door width in E39-18. (Vote: 14-0)

E39-21

## E40-21

This proposal includes the following errata The underline was missing from Section 1010.1.1 Item 11 for the phrase "compartments that are not required to be accessible."

Committee Action: As Submitted

**Committee Reason:** The proposal was approved because the added exception 12 allowed for sliding doors on standard 36 inch wide showers. These showers cannot make the 20" minimum width in exception 11. There was concern that this needs to be coordinated with IPC Section 421.4.2. (Vote: 10-4)

E40-21

#### E41-21

Committee Action: Disapproved

**Committee Reason:** The proposal was disapproved because the proposed language would add confusion. This is a requirement for how much force, not the duration of the force. (Vote: 14-0)

E41-21

### E42-21

Committee Action: Disapproved

**Committee Reason:** The proposal was disapproved because detention and restraint are not allowed in all occupancies. This would conflict with Section 308.4.4. The proposal seems to be in conflict with the reason statement. (Vote: 14-0)

E42-21

### E43-21

Committee Action: Disapproved

Committee Reason: This proposal was disapproved, however the committee felt that cleanup of the language for bolts is needed. In Table 1010.2.4, it is recommended to take out "inactive leaf is not needed to meet egress capacity requirements." Would this be confused with Group I-2 constant latching? (Vote: 10-3)

E43-21

### E44-21

Committee Action: As Modified

#### **Committee Modification:**

**1010.2.3 Hardware height.** Door handles, pulls, latches, locks and other operating devices shall be installed 34 inches (864 mm) minimum and 48 inches (1219 mm) maximum above the finished floor.

#### **Exceptions:**

- 1. Locks used only for security purposes and not used for normal operation are permitted at any height.
- 2. Where the International Swimming Pool and Spa Code requires restricting access to a pool, spa, or hot tub, on the ingress side of the door or gate providing access to a pool, spa, or hot tub, the operable parts of the latch release on self-latching devices shall be permitted to be at and where door and gate latch release mechanisms are accessed from the outside of the barrier and are not of the self-locking type, such mechanism shall be located above the finished floor or ground surface, not less than 52 inches (1219 mm) and not greater than 54 inches (1370 mm) maximum above the finished floor or ground, provided that the self-latching device latch release mechanisms is not a self-locking devices type such as where the lock is operated by means of a key, electronic opener or the entry of a combination into an integral combination lock.

Committee Reason: The modification matches the 2021 ISPSC requirements. The proposal clarifies that this applies to the outside of the barrier instead of the exit side. The coordinates with the accessibility requirements in the ICC A117.1 and the 2010 ADA and allows for a height that keeps the latches outside the reach of children for safety. (Vote: 13-0)

### E45-21

Committee Action: Disapproved

**Committee Reason:** The proposal was disapproved. The proposed text as written appears to not be applicable to spaces with one means of egress. There was a question as to if there could be more than one door in the path of egress travel - from the tenant and then again from the building. (Vote: 9-4)

E45-21

### E46-21

Committee Action: As Submitted

Committee Reason: The proposal was approved because it coordinated with E17-15 and Table 1006.2. (Vote 13-0)

E46-21

### E47-21

Committee Action: As Modified

#### **Committee Modification:**

1010.2.7Stairway doors. Interior stairway means of egress doors shall be openable from both sides without the use of a key or special knowledge or effort.

#### **Exceptions:**

- 1. Stairway discharge doors shall be openable from the egress side and shall only be locked from the opposite side.
- 2. This section shall not apply to doors arranged in accordance with Section 403.5.3.
- 3. Stairway exit doors are permitted to be locked from the side opposite the egress side, provided that they are openable from the egress side and capable of being unlocked simultaneously without unlatching when upon any one of the following conditions occur:
  - 3.1. Shall be capable of being unlocked individually or simultaneously upon a A signal from the fire command center, if present, or a signal by emergency personnel from a single location inside the main entrance to the building.
  - 3.2. <u>Shall unlock simultaneously upon activation Activation</u> of a fire alarm signal when a fire alarm system is present in an area served by the stairway.
  - 3.3. Shal unlock upon failure Failure of the power supply to the electric lock or the locking system.
- 4. Stairway exit doors shall be openable from the egress side and shall only be locked from the opposite side in Group B, F, M and S occupancies where the only interior access to the tenant space is from a single exit stairway where permitted in Section 1006.3.4.
- 5. Stairway exit doors shall be openable from the egress side and shall only be locked from the opposite side in Group R-2 occupancies where the only interior access to the dwelling unit is from a single exit stairway where permitted in Section 1006.3.4.

**Committee Reason:** The modification was approved because it makes the locks failsafe. This proposal address non-high-rise buildings and adds 3 options for compliance. (Vote: 10-2)

**Staff Analysis:** Proposals E47-21, G60-21 and G61-21 addresses requirements in a different or contradicting manner. The committee is urged to make their intentions clear with their actions on these proposals.

### E48-21

Committee Action: As Submitted

Committee Reason: The proposal was approved because it simplifies operation and addresses hazards other than fire. (Vote: 9-3)

E48-21

## E49-21

Committee Action: Disapproved

**Committee Reason:** The proposal was disapproved because Chapter 10 is for means of egress and this proposal is about entering, not exiting. (Vote: 11-3)

E49-21

## E50-21

Committee Action: Disapproved

Committee Reason: This proposal was disapproved because the added words are not needed - this is a means of egress requirement. (Vote: 11-2)

E50-21

## E51-21

Committee Action: As Submitted

Committee Reason: This proposal adds a technical clarification and provides consistent locking mechanism terminology. (Vote: 14-0)

E51-21

# E52-21

Committee Action: As Submitted

Committee Reason: The proposal was approved because it provides better terminology. (Vote: 14-0)

E52-21

# E53-21

Committee Action: Disapproved

Committee Reason: The proposal was disapproved for consistency with the committee action on E48-21. (Vote: 12-0)

E53-21

### E54-21

Committee Action: Disapproved

**Committee Reason:** This proposal was disapproved. This proposal should be broader to address security areas in all occupancies. Smoke detection does not provide a higher level of protection than sprinklers. If this is just for airports, it should be located in Section 412. What about protection in other locations such as between terminals, the bag box, etc. because this is more than just outside. (Vote: 11-3)

E54-21

### E55-21

Committee Action: Disapproved

**Committee Reason:** This proposal was disapproved. The intent is good and is needed but there were still several questions. What is the maximum size of the vestibule? Is self closing needed on the doors for the exiting? What is the duration of the over ride? Would this be a hazard if used for areas with large occupant loads? (Vote: 13-1)

E55-21

## E56-21

Committee Action: As Modified

#### **Committee Modification:**

1010.2.15 Elevator lobby exit access doors. Electrically locked exit access doors providing egress from elevator lobbies shall be permitted where all the following conditions are met:

- 1. For all occupants of the floor, the path of exit access travel to not less than two exits is not required to pass through the elevator lobby.
- The building is equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1, and <u>a fire alarm system in accordance with Section 907</u>. <u>Elevator lobbies shall be provided with an approved-automatic smoke detection system in accordance with Section 907</u>.
- Activation of either the automatic sprinkler system or automatic smoke detection the building fire alarm system by other than a manual fire alarm box shall automatically unlock the electric locks providing exit access from the elevator lobby lobbies, and the electric locks shall remain unlocked until the fire alarm system is are reset.
- 4. The electric locks shall unlock on loss of power to the electric lock or electrical locking system.
- The electric locks shall have the capability of being unlocked by a switch located at the fire command center, security station, or other approved location.
- 6. A two-way communication system connected to an approved constantly attended station installed in accordance <u>complying</u> with Sections 1009.8.1 and 1009.8.2, shall be located in the elevator lobby adjacent to the electrically locked exit access door <u>and connected to an approved constantly attended station</u>. This constantly attended station shall have the capability of unlocking the electric locks of the elevator lobby exit access doors.
- 7. Emergency lighting shall be provided in the elevator lobby on both sides of the electrically locked door.
- 8. The door locking system units shall be listed in accordance with UL 294.

**Committee Reason:** The modification to Item 2 and 3 corrects the language to remove the activation of the sprinklers and just requires an alarm. The modification to Item 6 is rearranged for clarity. The proposal was approved as it is a good solution to a common design. The is a good solution for mixed occupancy, multi-tenant buildings. This proposal combines several state modifications that allow this option. This solution also addressed emergencies other than fire. (Vote: 12-2)

E56-21

### E57-21

Committee Action: Disapproved

**Committee Reason:** The proposal was disapproved because the language did not require a latch for the fire-rated door. This could be a conflict with accessible means of egress requirements. (Vote: 8-6)

E57-21

### E58-21

Committee Action: As Submitted

Committee Reason: This proposal was approved as it is consistent with the terminology for accessible means of egress (Vote: 13-1)

E58-21

## E59-21

Committee Action: As Modified

#### **Committee Modification:**

**1014.2 Height.** Handrail height, measured above from a line connecting the nosings of flights of stairs 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 ships ladders, measured above from a line connecting the nosings, shall be uniform, not less than 30 inches (762 mm) and not more than 34 inches (864 mm).

#### Exceptions:

- 1. Where handrail fittings or bendings are used to provide continuous transition between flights, the fittings or bendings shall be permitted to exceed the maximum height.
- 2. In Group R-3 occupancies; within *dwelling units* in Group R-2 occupancies; and in Group U occupancies that are associated with a Group R-3 occupancy or associated with individual *dwelling units* in Group R-2 occupancies; where *handrail* fittings or bendings are used to provide continuous transition between flights, transition at *winder* treads, transition from *handrail* to guard, or where used at the start of a *flight*, the *handrail* height at the fittings or bendings shall be permitted to exceed the maximum height.
- 3. Handrails on top of a guard where permitted along stepped aisles and ramped aisles in accordance with Section 1030.16.

**Committee Reason:** The modification is a clarification for the handrail height measurement. This would provide a consist line for measurement instead of stepping. The proposal was approved as it cleans up the language by being more specific and technically accurate. This should improve enforcement because this is easier to understand. (Vote: 14-0)

E59-21

#### F60-21

Committee Action: Disapproved

**Committee Reason:** The proposal was disapproved because stairways are never part of an accessible route, therefore, there should not be different requirements for stairways within Accessible or Type A units. (Vote: 14-0)

E60-21

### E61-21

Committee Action: Disapproved

**Committee Reason:** The proposal was disapproved because the proposed language would conflict with winder treads. The committee preferred the language in E64-21. (Vote: 13-1)

**Staff Analysis:** Proposals E61-21, E63-21 and E64-21 addresses requirements for nosing in a different or contradicting manner. The committee is urged to make their intentions clear with their actions on these proposals.

E61-21

### E62-21

Committee Action: As Submitted

Committee Reason: The proposal was approved because the committee felt that the marking stripe on the stairway had to have the same slip resistance as the rest of the stairway. The marking stripe can be on the edge of a landing as well as a tread. (Vote: 12-2)

E62-21

## E63-21

Committee Action: Disapproved

**Committee Reason:** The proposal was disapproved as the proposed language is only a pointer to text that is already required so it is not needed. It could also be misread that the two following subsections only apply to sloped risers. (Vote: 14-0)

**Staff Analysis:** Proposals E61-21, E63-21 and E64-21 addresses requirements for nosing in a different or contradicting manner. The committee is urged to make their intentions clear with their actions on these proposals.

E63-21

# E64-21

Committee Action: As Modified

#### **Committee Modification:**

**1011.5.5.1 Nosing projection size.** The leading edge (*nosings*) of treads shall project not more than 1<sup>1</sup>/<sub>4</sub> inches (32 mm) beyond <del>over the required depth of</del> the tread below.

Exception: When solid risers are not required, the nosing projection is permitted to exceed the maximum projection-limit over the tread below.

**Committee Reason:** The modification removed a conflict with tread depth. The proposal was approved as it clarified that the controlling dimension is the location of the riser. The full tread depth is from nosing to nosing and does not change where the horizontal piece if larger than the tread. (Vote: 8-6)

**Staff Analysis:** Proposals E61-21, E63-21 and E64-21 addresses requirements for nosing in a different or contradicting manner. The committee is urged to make their intentions clear with their actions on these proposals.

E64-21

### E65-21

Committee Action: Disapproved

**Committee Reason:** The proposal was disapproved because the added text is introducing fire-resistance ratings and this requirement is construction type. The added text would be confusing and is not needed. (Vote: 14-0)

E65-21

### E66-21

Committee Action: Disapproved

**Committee Reason:** This proposal was disapproved. Exit access stairways are open, so enclosure under a stairway would never be applicable. This protection for the exit stairways is needed. This would be in conflict with similar stairway requirements in the IRC. The exception is expanded too far. (Vote: 12-1)

F66-21

## E67-21

Committee Action: Disapproved

Committee Reason: This proposal was disapproved because the committee felt there should be a limit on the maximum number of risers for this exception for handrails on stairways to a stage. There was a concern that no handrails would be an issue for schools where students used the stairways to move from the audience seating areas to the stage. Some of the committee felt that the steps were an extension of the state and that the scope provided a reasonable limited, however, there was a question about if this exception should also apply to platforms. (Vote: 7-6)

E67-21

# E68-21

Committee Action: Disapproved

**Committee Reason:** The proposal was disapproved because the committee felt that the proposed exception could conflict with exit discharge requirements. The exception should be limited to ramps for vehicle use only. (Vote: 13-0)

E68-21

#### F69-21

Committee Action: As Modified

#### **Committee Modification:**

Replace the proposal with the following:

**1013.2 Low-level exit signs in Group R-1.** Where exit signs are required in Group R-1 occupancies by Section 1013.1, additional low-level exit signs shall be provided in all areas serving guest rooms in Group R-1 occupancies and shall comply with Section 1013.5. The bottom of the sign shall be not less than 10 inches (254 mm) nor more than 18 inches (455 mm) above the floor level. The sign shall be flush mounted to the door or wall. Where mounted on the wall, the edge of the sign shall be within 4 inches (102 mm) of the door frame on the latch side.

Exception: Low-level exit signs are not required in Group R-1 occupancies when the building is equipped throughout with an automatic sprinkler system installed in accordance with Sections 903.3.1.1 or 903.3.1.2

**Committee Reason:** The modification was approved because the exception would be valid for older hotels that were not fully sprinklered, however, the word 'additional' should be removed as not necessary. The committee stated that the research for the reason statement was exceptional. As technology has advances the codes should allow for removal of antiquated requirements. (Vote: 13-0)

E69-21

### E70-21

Committee Action: Disapproved

**Committee Reason:** The proposal was disapproved because the committee felt that the requirements for exit sign location should match NFPA 101. The proposed dimension of 4 feet is arbitrary. It is up to the fire code official to determine this on a case-by-case basis for unusual situations. The exception is not needed - this is the same as alternative means. The proposed text literally applies to all exit signs; it is suggested to add a limitation such as where associated with and exit opening. (Vote: 7-6)

E70-21

#### E71-21

Committee Action: Disapproved

**Committee Reason:** The proposal was disapproved. The additional language to Section 1030.5 is already addressed in exit sign requirements in Section 1030.1. UL924 already addressed requirements for charging photoluminescent exit signs. The suggested language in Section 1030.5.1 is vague – how could a code official determine 'adequate'? The reason statement talks about movie theaters but lights turn on and off in these venues, so the proposed language does not work for those locations. (Vote: 13-0)

E71-21

# E72-21

Committee Action: Disapproved

Committee Reason: The proposal was disapproved because some of the committee felt that moving the handrail outboard from the stair treads would allow a gap next to the stairway at the walking surface. There was concern that someone could get their foot trapped at the edge and this would be a tripping hazard. It might be better for the code to be silent and address this on a case-by-case basis. (Vote: 8-5)

**Staff Analysis:** E72-21, E73-21 and E79-21 addresses requirements in a different or contradicting manner. The committee is urged to make their intentions clear with their actions on these proposals.

### E73-21

Committee Action: Disapproved

Committee Reason: The committee disapproved this proposal based on their action on E72 and for the same reasons. (Vote 7-6)

**Staff Analysis:** E72-21, E73-21 and E79-21 addresses requirements in a different or contradicting manner. The committee is urged to make their intentions clear with their actions on these proposals.

E73-21

### E74-21

Committee Action: As Modified

#### **Committee Modification:**

1014.4 Continuity. Handrail gripping surfaces shall be continuous, without interruption by newel posts or other obstructions.

#### **Exceptions:**

- 1. Within a *dwelling unit*, that is not an Accessible unit or Type A unit, the continuity of handrail gripping surfaces is allowed to be interrupted by a newel post at a turn or landing.
- 2. Within a dwelling unit, the use of a volute, turnout, starting easing or starting newel is allowed over the lowest tread.
- 3. Handrail brackets or balusters attached to the bottom surface of the *handrail* that do not project horizontally beyond the sides of the *handrail* within 1<sup>1</sup>/<sub>2</sub> inches (38 mm) of the bottom of the *handrail* shall not be considered obstructions. For each <sup>1</sup>/<sub>2</sub> inch (12.7 mm) of additional *handrail* perimeter dimension above 4 inches (102 mm), the vertical clearance dimension of 1<sup>1</sup>/<sub>2</sub> inches (38 mm) shall be permitted to be reduced by <sup>1</sup>/<sub>8</sub> inch (3.2 mm).
- 4. Where handrails are provided along walking surfaces with slopes not steeper than 1:20, the bottoms of the handrail gripping surfaces shall be permitted to be obstructed along their entire length where they are integral to crash rails or bumper guards.
- 5. Handrails serving stepped aisles or ramped aisles are permitted to be discontinuous in accordance with Section 1030.16.1.

**Committee Reason:** The modification coordinates this proposal with the federal accessibility requirements in the ADA, ABA and Section 504. This is needed in units geared more towards persons with mobility impairments. The committee also suggested a public comment to add the same modification to Exception 2. The proposal was approve as it clarifies the exception for handrail continuity. (Vote: 10-4)

E74-21

# E75-21

Committee Action: Disapproved

**Committee Reason:** This proposal was disapproved as the committee preferred the language proposed in E76. There was a concern for inconsistent measurements in the proposed text. (Vote: 14-0)

Staff Analysis: E75-21 and E76-21 addresses requirements in a different or contradicting manner. The committee is urged to make their intentions clear with their actions on these proposals.

E75-21

#### E76-21

Committee Action: As Submitted

Committee Reason: This proposal was approved because the committee felt the handrail extension should be measured from the stairway nosing. The proposed text matches the interpretation issued by the U.S. Access Board. (Vote: 12-2)

**Staff Analysis:** E75-21 and E76-21 addresses requirements in a different or contradicting manner. The committee is urged to make their intentions clear with their actions on these proposals.

E76-21

#### E77-21

Committee Action: As Submitted

**Committee Reason:** The proposal was approved because the proposed text codifies reasonable and common use safety practices at handrails. The committee agreed with the reasoning in the proponents reason that this will provide safe handrails. (Vote: 11-2)

E77-21

### E78-21

Committee Action: Disapproved

**Committee Reason:** This proposal was disapproved as the 12" clearance proposed for above the handrail is based on a grab bar study, not a handrail study – grab bars and handrails function totally differently. This would prohibit handrails with continuous support. This is a conflict with Section 1014.4. (Vote: 14-0)

E78-21

# E79-21

Committee Action: Disapproved

Committee Reason: This proposal was disapproved based on the committee action on E72 and E73. This proposed change is in the wrong location in the code. (Vote: 14-0)

E79-21

# E80-21

Committee Action: Disapproved

**Committee Reason:** This proposal was disapproved. The committee felt that this gap in the handrails was already addressed in Section 1015.4. (Vote: 14-0)

E80-21

#### E81-21

Committee Action: Disapproved

Committee Reason: This proposal was disapproved because the committee felt that the height of the exterior guard should be based on the height above grade, not the grade plane. This could also be an issue for Group R-3 units taller than 3 stories. (Vote: 9-5)

E81-21

### E82-21

Committee Action: Disapproved

Committee Reason: The proposal was disapproved for consistency with the committee action on E81. (Vote: 13-1)

E82-21

### E83-21

This proposal includes the following errata **1015.8 Window openings.** Windows in Group R-2 and R-3 buildings including dwelling units, where the bottom of the clear opening of an operable window is located less than 36 inches (914 mm) above the finished floor and more than 72 inches (1829 mm) above the finished grade or other surface below on the exterior of the building, shall comply with one of the following:

- 1. Where the bottom of the clear opening of the window is located more than 72 inches (1829 mm) and less than 75 feet (22 860 mm) above the finished grade or other surface below on the exterior of the building, the window shall comply with one of the following:
  - 1.1. Operable windows where the openings will not allow a 4-inch-diameter (102 mm) sphere to pass through the opening when the window is in its largest opened position, provided the opening is not required for emergency escape or rescue.
  - 1.2. Operable windows where the openings are provided with window fall prevention devices that comply with ASTM F2090.
  - 1.3. Operable windows where the openings are provided with window opening control devices that comply with Section 1015.8.1-ASTM F2090. The window opening control device, after operation to release the control device allowing the window to fully open, shall not reduce the minimum net clear opening area of the window unit to less than the area required by Section1031.3.1 for emergency escape rescue openings.
- 2. Where the bottom of the clear opening of the window is located 75 feet (22 860 mm) or <u>more</u> above from the finished grade or other surface below on the exterior of the building, the window shall comply with one of the following:
  - 2.1. Operable windows where the openings are provided with window fall prevention devices that comply with ASTM F2090.
  - 2.2. Operable windows where the openings will not allow a 4-inch-diameter (102 mm) sphere to pass through the opening when the window is in its largest opened position.
  - 2.3. Window fall prevention devices that comply with ASTM F2006.

Committee Action: As Submitted

Committee Reason: The proposal was approved as this is a good cleanup for window opening control devices. (Vote: 14-0)

E83-21

### E84-21

Committee Action: Withdrawn

E84-21

### E85-21

Committee Action: As Submitted

Committee Reason: This proposal was approved as a good cleanup - it removes and exception from an exception. (Vote: 14-0)

E85-21

### E86-21

Committee Action: Disapproved

**Committee Reason:** The proposal was disapproved because the committee felt that they did not have the expertise to make the decision on hazards associated with H-5. This should have a third party review. (Vote: 13-0)

E86-21

## E87-21

Committee Action: Disapproved

**Committee Reason:** This proposal was disapproved based on proponents request. Section 1018.2 covers this for assembly, and this proposal only addresses a portion of assembly spaces. (Vote: 14-0)

E87-21

# E88-21

Committee Action: As Submitted

Committee Reason: The proposal was approved as it coordinates well with Section 712.1.0 Item 6 which addresses options for shafts. (Vote: 9-4)

E88-21

# E89-21

Committee Action: Disapproved

**Committee Reason:** The proposal was disapproved. Circulation spaces are not always aisles. Care suites should be addressed in Chapter 4. This could be misread as to what is a suite. (Vote: 13-0)

E89-21

#### E90-21

Committee Action: Disapproved

**Committee Reason:** This proposal was disapproved because this would allow for unrated corridors in tenant spaces of any size, including large one tenant buildings without sprinklers. This would conflict with Table 1020.2. (Vote: 8-6)

E90-21

### E91-21

Committee Action: Disapproved

Committee Reason: This proposal was disapproved based on the proponent's request and the committee action on G71. (Vote: 14-0)

E91-21

### E92-21

Committee Action: Disapproved

**Committee Reason:** The proposal was disapproved since Section 909.20.1 already permits this option. The exception as written could be any balcony, not just an egress balcony. There was concern that the level of protection would not be maintained to an exit. (Vote: 13-1)

E92-21

# E93-21

Committee Action: Disapproved

**Committee Reason:** The proposal was disapproved as the adjacent lot line could be be any side of the property, not just an interior lot line. The proponent said this was intended to allow for consideration of a public right-of-way, but that was not in the proposed text. There were concerns that if public right-of-way was added that a minimum width should also be included. (Vote: 14-0)

E93-21

# E94-21

Committee Action: Disapproved

**Committee Reason:** The proposal was disapproved because Section 1022.1 already addressed this. There was a concern that the proposed rewording would let the physical room that was not normally occupied be outside the enclosure, but the door could open directly into the exit enclosure or exit passageway. (Vote: 13-0)

E94-21

# E95-21

Committee Action: Disapproved

Committee Reason: The proposal was disapproved because "directly serve" is too interpretive. The current language is clear. (Vote: 14-0)

E95-21

### E96-21

Committee Action: Disapproved

**Committee Reason:** This proposal was disapproved because the result would be a mishmash between rating of stairway enclosure and construction ratings. The current text is only for supporting the stair, not all construction. The proposal did not limit this to roof members which is what the proponent said his concern was. (Vote: 14-0)

E96-21

### E97-21

Committee Action: Disapproved

**Committee Reason:** The proposal was disapproved because there are issues with the language. This proposal missed the option to rate the exterior walls 10 feet up or the roof 10 feet out from the opening. The language in Section 1023.7.2 does not limit the roof to that near the area of concern. (Vote: 10-4)

E97-21

# E98-21

Committee Action: Disapproved

**Committee Reason:** The proposal was disapproved because the exit passageway need to be connected to the exit stairway, not just anywhere in the building. (Vote: 12-2)

E98-21

# E99-21

Committee Action: Disapproved

**Committee Reason:** The proposal was disapproved based on the proponents request. The proposal needs some additional descriptors to make the option in the exception clearly understood. Suggestions were the egress balcony runs perpendicular to the horizontal exit; and that the horizontal exit terminates at the egress balcony. (Vote: 14-0)

E99-21

# E100-21

Committee Action: Disapproved

Committee Reason: The proposal was disapproved because the committee felt that both thresholds - 6 stories above grade plane and highrise-were needed to address sloped sites. (Vote: 14-0)

E100-21

### E101-21

Committee Action: Disapproved

**Committee Reason:** The proposal was disapproved because the text would allow for all the exterior exit stairways to have reduced protection levels. It was suggested that this should be distance from the face of the stairway instead of fire separation distance. (Vote: 14-0)

E101-21

### E102-21

Committee Action: Disapproved

**Committee Reason:** The current language has you measure to all of the items, so you would never get to the center of the public way in new item 4 because this would always be past the adjacent lot line in existing item 1. The proponent needs to fix this in the base paragraph. The definition of 'fire separation distance' includes the center line of a public way, so this is not needed. (Vote: 11-3)

E102-21

## E103-21

Committee Action: Disapproved

**Committee Reason:** The proposal was disapproved because Exp. 1 only requires sprinklers to the level of exit discharge, so there could be no sprinklers in the basement level. In Exp. 1 and 2 the lobby or vestibule could be filled with smoke from a fire on the floor below. (Vote: 14-0)

E103-21

# E104-21

Committee Action: Disapproved

Committee Reason: This proposal was disapproved. The committee felt this was a good idea, but had several issues that need to be addressed. The use of 'adjoining' roof could be a building that was not the same owner - so the exit off the roof could be locked or blocked. The proponent said this was for podium buildings, but the language would allow this for all buildings. If this is a two story building over a parking garage, there could be unrated exit access stairways in the building, so the roof people were exiting over would have no rating. What happens if the discharge can be to ground level but not to a public way? This could be a problem with landscaped roofs because the occupants could assume they were at grade when they were still on the roof. (Vote: 12-2)

E104-21

# E105-21

Committee Action: Disapproved

**Committee Reason:** This proposal was disapproved because this proposal does not indicate the larger of width versus capacity for the size. This could be read to be exempting rated walls and openings. The proposal seems to be assuming the buildings are sprinklered. (Vote: 12-1)

E105-21

### E106-21

Committee Action: Disapproved

**Committee Reason:** This proposal was disapproved because you need a path of travel more than 5 feet away to make it safe to eliminate the wall rating. How do you make sure people stay on the path away from the building? If this is 5 feet from each side, is this not already addressed under the main requirements. (Vote: 13-0)

E106-21

## E107-21 Part I

Committee Action: Disapproved

**Committee Reason:** This proposal was disapproved because the materials of which a bleacher is constructed should be addressed in the bleacher standard, ICC 300. The language is confusing and could be read to prohibit any part of a bleacher made out of wood. This would apply to all size bleachers, even just two rows. (Vote: 13-0)

E107-21 Part I

# E107-21 Part II

Committee Action: Disapproved

Committee Reason: The proposal was disapproved as the provision was not in the correct place. The committee recommended the topic for consideration for ICC 300 or Chapter 10. (Vote: 14-0)

E107-21 Part II

# E107-21 Part III

Committee Action: Disapproved

**Committee Reason:** The committee stated that the reasons for disapproval were that the language in the IFC is duplicated from the IBC which does reference ICC 300 and based on the previous disapproval of Parts I and II by the previous two committees. Additionally, it was stated that ICC 300 addresses new and existing installations of all types of bleacher seating including fixed and folding bleachers and the prevalence of seating in tents and membrane structures tend to be folding chairs. (Vote: 14-0)

E107-21 Part III

# E108-21

Committee Action: As Submitted

**Committee Reason:** The proposal was approved as this allows for the 75 feet common path of travel for all assembly spaces except fixed seating arrangements. This is coordination with Table 1006.2.1. While wheelchair spaces are not fixed seats, they should match the requirements for the surrounding space. (Vote: 14-0)

**Staff Analysis:** This proposal's revision to Section 1030.8 addresses requirements in a different or contradicting manner to those found in Code Change E14-21 to Table 1006.2.1 footnote c. The committee is urged to make their intentions clear with their actions on these proposals.

E108-21

## E109-21

Committee Action: As Submitted

**Committee Reason:** This proposal was approved as it fixes a hole in the code and provides consistency by providing the length versus number of rows. Theater designers spoke in support and stated that this is common design practice. (Vote: 13-0)

E109-21

### E110-21

Committee Action: As Submitted

**Committee Reason:** This proposal was approved as the new exception is has minimal occupants and a common path of travel distance that is reasonable and provides design options. (Vote: 13-0)

E110-21

## E111-21

Committee Action: As Submitted

Committee Reason: This proposal was approved as emergency escape and rescue openings that exit to egress balconies because this would be limited to single exit Group R-2 occupancies. This would provide additional options for design. (Vote: 11-1)

E111-21

## E112-21

Committee Action: Disapproved

**Committee Reason:** This proposal was disapproved because there was concern that it would be difficult to maintain accessways without easement requirements. (Vote: 9-4)

E112-21

# E113-21

Committee Action: Disapproved

**Committee Reason:** The proposal was disapproved. Why is Section 1031.3.3 limited to only windows? Emergency escape and rescue opening could also be doors or hatches. NFPA 80 uses swinging doors, not side hinged doors. Section 1031.4 should match NFPA 80 terminology. (Vote: 11-3)

E113-21

### E114-21

Committee Action: As Submitted

**Committee Reason:** The proposal was approved as this coordinates the ADA exception that is sometimes the Mrs. Murphy Bed-n-Breakfast exception, with the Groups for transient lodging in the IBC. (Vote: 14-0)

E114-21

### E115-21

Committee Action: As Submitted

Committee Reason: This proposal was approved as it clarifies that the accessible route needs to comply with all three items in the list. It was suggested that "to the building" be added to the end or Exception 1 for consistency. (Vote: 13-1)

E115-21

### E116-21

Committee Action: As Modified

#### **Committee Modification:**

**1105.1.1 Power-operated doors at public entrances.** In facilities with the occupancies and building *occupant loads* greater than indicated in Table 1105.1.1, each *public entrances* required to be *accessible* shall have a minimum of one door be a *power-operated* door or a *low-energy power-operated door*. Where the accessible *public entrance* includes <u>doors in series, such as</u> a vestibule, a minimum of one <del>door into and one door out of the vestibule</del> <u>set of two doors in series</u> shall meet the requirements of this section.

**Committee Reason:** The modification clarifies what happens with a vestibule and is consistent with the terminology in the ICC A117.1. The proposal was approved as it provides clarification for the power operated doors at the public entrances. (Vote: 14-0)

F116-21

# E117-21

Committee Action: Disapproved

**Committee Reason:** The proposal was disapproved because this could be read as applying to the interior tenants in an enclosed mall instead of exterior exit doors on a building/strip mall. This proposal would double count the occupant load since you would be evaluating both the individual tenant spaces and the overall building. The committee felt E118-21 addressed this better. (Vote: 14-0)

Staff Analysis: E117-21 and E118-21 addresses requirements in a different or contradicting manner. The committee is urged to make their

### E118-21

Committee Action: As Submitted

**Committee Reason:** This proposal was approved as it was preferred over E117-21. This would allow for strip malls to not require automatic doors for every small tenant space. There was a concern that this is confusing by using "separate facility or building" when you are not limited by exterior walls or fire walls. (Vote: 14-0)

**Staff Analysis:** E117-21 and E118-21 addresses requirements in a different or contradicting manner. The committee is urged to make their intentions clear with their actions on these proposals.

E118-21

### E119-21

Committee Action: As Modified

#### **Committee Modification:**

**1105.1.1 Automatic doors.** In facilities with the occupancies and building occupant loads indicated in Table 1105.1.1, public entrances that are required to be accessible shall have one door be either a full power-operated door or a low-energy power-operated door. Where the public entrance includes a vestibule, at least one door into and one door out of the vestibule shall meet the requirements of this section.

**Exception:** In mixed-use facilities, where the total building occupant load for the occupancies listed in the table is calculated as the sum of the ratios of the actual occupant load of each occupancy divided by the building occupant load threshold of each occupancy in Table 1105.1.1, and the sum of the ratios does not exceed is less than 1, the requirements of Section 1105.1.1 do not apply. Where the sum of the ratios is equal to 1 or greater, the requirements of Section 1105.1.1 are applicable.

Committee Reason: The modification is to eliminate the overlap of 1 in the calculations. The proposal was approved as the sliding ratio is a fairer approach to mixed occupancy buildings. (Vote: 11-3)

**Staff Analysis:** E119-21 and E120-21 addresses requirements in a different or contradicting manner. The committee is urged to make their intentions clear with their actions on these proposals.

E119-21

# E120-21

Committee Action: Disapproved

**Committee Reason:** The proposal was disapproved based on the committee action on E119-21 and the proponent's request. The proposal used the same worst case for mixed use buildings that was in the footnote to Table 1105.1.1. (Vote: 14-0)

Staff Analysis: E119-21 and E120-21 addresses requirements in a different or contradicting manner. The committee is urged to make their intentions clear with their actions on these proposals.

E120-21

## E121-21

Committee Action: As Submitted

**Committee Reason:** The proposal was approved as the best option of E121, E122 and E123. The proponents should work together to add the best options from all three in a public comment. Separating parking beneath the building (Item 4) into a new section provides a good clarification. This proposal clarifies that items 1 and 3 are not additive. (Vote: 9-5)

Staff Analysis: E121-21, E122-21 and E123-21 addresses requirements in a different or contradicting manner. The committee is urged to make their intentions clear with their actions on these proposals.

F121-21

### E122-21

Committee Action: Disapproved

Committee Reason: The proposal was disapproved as the committee preferred the language in E121, however the committee asked the proponents from E121, E122 and E123 to come forward with a public comment that took the best from all three proposals. Deletion of Group I-1 and R-1 from the charging paragraph and Item 2 that sends you back to Table 1106.2 for these occupancies improves clarity and removes unnecessary language. The text in the proposed Section 1106.3.1 is already addressed in Section 1106.2. (Vote: 14-0)

Staff Analysis: E121-21, E122-21 and E123-21 addresses requirements in a different or contradicting manner. The committee is urged to make their intentions clear with their actions on these proposals.

E122-21

### E123-21

Committee Action: Disapproved

**Committee Reason:** The proposal was disapproved as the committee preferred the language in E121, however the committee asked the proponents from E121, E122 and E123 to come forward with a public comment that took the best from all three proposals. (Vote: 14-0)

**Staff Analysis:** E121-21, E122-21 and E123-21 addresses requirements in a different or contradicting manner. The committee is urged to make their intentions clear with their actions on these proposals.

E123-21

# E124-21

Committee Action: Disapproved

**Committee Reason:** The proposal was disapproved as the committee felt that a lower limit should be permitted for small R-2 occupancies rather than always requiring electrical vehicle charging stations. Options discussed were where Type B units were required, or based on the total number of units. (Vote: 14-0)

E124-21

# E125-21

Committee Action: As Submitted

Committee Reason: The proposal was approved as the new exception is reasonable and logical. These type of parking areas are not for public

### E126-21

Committee Action: Disapproved

Committee Reason: The committee felt that this proposal is forward thinking, but it was disapproved for several reasons. Section 1107.2.1 and Table 1107.2.1 should say 'provided' instead of 'required.' The text does not indicate where the charger is in relation to the parking space and access aisles - this needs to be addressed so that someone will able to get out of the car and access the equipment. The text does not indicate where the charger is in relation to the parking space. The current requirements deal with this as a service, not a parking space- why the change? This should not require reserved signage at the accessible spaces. Use of 'van space' could be read to require the height requirements for van parking spaces. Part of these requirements are in the 2017 ICC A117.1 already. (Vote: 14-0)

E126-21

### E127-21

Committee Action: As Submitted

Committee Reason: The proposal was approved because the laundry list in this section is not all inclusive. (Vote: 14-0)

E127-21

## E128-21

This proposal includes the following errata 1108.5.1.4 Communication features. In addition to the requirements in Section 907.5.2.3.3 907.5.2.3.2, Group I-1 occupancies containing more than 20 dwelling units or sleeping units, at least 2 percent but not less than one of the units shall be provided with communications features as noted in Section 1106 of ICC A117.1. All Group I-1 units on a site shall be considered to determine the total number of units and the required number of units with communications features and shall be dispersed among the various classes of units.

Committee Action: Disapproved

Committee Reason: The committee disapproved this proposal because it felt the Group R-2 facilities could add communication features such as doorbells on demand as an accommodation for a resident. There are many options available with the new technologies. Many buildings are set up with whole building entry systems, so you know if someone is coming to your apartment door. Not all units receive federal funding, so the requirement for these communication features should not be required for all apartment units. (Vote: 14-0)

F128-21

# E129-21

Committee Action: Disapproved

Committee Reason: The committee disapproved this proposal based on proponents request and because they wanted to see the technical data added to the ICC A117.1 before the removed it from the IBC. (Vote: 12-0)

E129-21

### E130-21

Committee Action: As Submitted

Committee Reason: The proposal was approved as this will remove the misinterpretation that a hotel has to put in accessible tubs and could not choose to exceed requirements and provide all roll-in showers. (Vote: 14-0)

**Staff Analysis:** E130-21 and E131-21addresses requirements in a different or contradicting manner. The committee is urged to make their intentions clear with their actions on these proposals.

E130-21

### E131-21

Committee Action: Disapproved

**Committee Reason:** The proposal was disapproved as the committee preferred E130-21. This option would only be available if there were no tubs in the entire hotel - including rooms with both a tub and shower. The language does not allow the option for transfer showers. (Vote: 14-0)

**Staff Analysis:** E130-21 and E131-21addresses requirements in a different or contradicting manner. The committee is urged to make their intentions clear with their actions on these proposals.

E131-21

### E132-21

Committee Action: Disapproved

**Committee Reason:** This proposal was disapproved. The base code does not need to be aligned with federal funding requirements. If this information in needed, it should be in Appendix E and limited to funded projects. An increase in the number of Accessible units has been addressed in the code in assisted living facilities or will be served by market demand. (Vote: 10-4)

E132-21

## E133-21

Committee Action: As Submitted

Committee Reason: This proposal was approved as this is a very minimal increase in accessibility in some Type A units. The roll-in shower will provide for a higher level of access for persons with disabilities than what would be provided by a tub. (Vote: 14-0)

E133-21

# E134-21

Committee Action: As Submitted

Committee Reason: This proposal was approved as this provides clarity that not all the exceptions are applicable to Type A units. (Vote: 12-0)

E134-21

#### E135-21

Committee Action: Disapproved

**Committee Reason:** This proposal was disapproved based on proponent's request. This proposal has requirements for access that go substantially past the Fair Housing Act requirements. This would require access to the first floor for all multi-story townhouses - which is opposite of the current exception. (Vote: 14-0)

E135-21

### E136-21

Committee Action: As Modified

#### **Committee Modification:**

1109.2 Assembly area seating. A building, room or space used for assembly purposes with spectator seating with fixed seating, bleachers, grandstands or folding and telescopic seating shall comply with Sections 1109.2.1 through 1109.2.5. Lawn seating shall comply with Section 1109.2.6. Assistive listening systems shall comply with Section 1109.2.7. Performance areas viewed from assembly seating areas shall comply with Section 1109.2.8. Dining areas shall comply with Section 1109.2.9.

**Committee Reason:** The modification to remove 'with spectator seating' was removed as it added confusion and could be mis-interpreted to only apply to Group A4 and A5 facilities. The proposal was approved as it clarified that bleacher systems, even if they are moveable, are required to incorporate wheelchair spaces as indicated in ICC A117.1. (Vote: 14-0)

E136-21

## E137-21

Committee Action: Disapproved

**Committee Reason:** The proposal was disapproved as captioning of motion pictures is in the film or an operational issue - not a construction issue. This requirement is addressed by federal requirements in a more comprehensive manner. (Vote: 14-0)

E137-21

# E138-21

Committee Action: Disapproved

Committee Reason: This proposal was disapproved for several reasons. The new term 'semi-ambulatory seating' is confusing. There was no justification for the 25% of the tables to have a different level of access in addition to the accessible tables. The proposal adds type of seating as a requirement - so how would someone interpret a 'similar element'. Dining surface requirements should stay in Section 1109. A requirement for 5% of fixed seating and 5% of loose seating does not improve accessibility. The proposed language has removed the requirements for work surfaces in other occupancies. What happens when a facility changes furniture or adds tables? (Vote: 12-2)

E138-21

# E139-21

Committee Action: Disapproved

Committee Reason: The proposal was disapproved because the term 'public use' is confusing and could be interpreted incorrectly - such as would this apply inside a unit? (Vote: 12-2)

E139-21

### E140-21

Committee Action: Disapproved

**Committee Reason:** This proposal was disapproved because the committee felt that the language was confusing and would negate the current cluster exception that mirrors the ADA allowance. This would have minimal or no impact on large facilities and significant impact on small tenants and doctor's offices. This appears to be in conflict with Section 2902.1 Exp. 3. (Vote: 14-0)

E140-21

### E141-21

Committee Action: Disapproved

**Committee Reason:** This proposal was disapproved as an adult changing table is not a plumbing fixture, so it does not need to be listed as an exception. Adding this could be read by code official as not allowing other common items, such as baby changing tables or lockers - which are required to provide same amenities. (Vote: 11-2)

E141-21

## E142-21

Committee Action: As Submitted

Committee Reason: The proposal was approved, however it needs a public comment to address some of the language concerns. Adult changing tables are a much needed item to serve some people with disabilities and their caregivers when they are out in public. The technical questions for adult changing table and the rooms they will be located in will be addressed in the next edition of ICC A117.1. Adding to the existing requirements for family/assisted use toilet rooms is a good idea, however the scoping language in Section 1110.3.1 needs some improvement. Section 1110.3.1 Item 2 could be read as the business offices in colleges, and the proponents said the intent was to serve the classrooms and lecture halls. Section 1110.3.1 Item 1 and 3 are redundant. There should be signage requirements for where this is located within the building. Section 1110.3.2 may not be needed if this is addressed in the technical provisions (see the committee action on E141-21). Section 1110.3.4 - if the intent is to require the adult changing tables in every other family/assisted use toilet room in large facilities it may be better to say that rather than set a travel distance that may be read differently. (Vote: 14-0)

E142-21

# E143-21

Committee Action: As Submitted

Committee Reason: The proposal was approved as a side approach to deep sinks is a practical way to provide access. (Vote: 12-1)

E143-21

#### E144-21

Committee Action: As Modified

#### **Committee Modification:**

**1111.4.14 Swimming pools, wading pools, cold baths, hot tubs and spas.** *Swimming pools*, wading pools, cold baths, hot tubs and spas shall be *accessible* and be on an accessible route.

#### **Exceptions:**

- 1. Gatch pools A catch pool or a designated section of a pool used as a terminus for a water slide flume shall not be required to provide an accessible means of entry, provided that a portion of the catch pool edge is on an accessible route or, where the area at the catch pool edge is located on a raised platform restricted to use by staff and persons exiting the pool, an accessible route serves the gate or area where participants discharge from the activity.
- 2. Where spas, cold baths or hot tubs are provided in a cluster, at least 5 percent, but not less than one of each type of spa, cold bath or hot tub in each cluster, shall be accessible and be on an accessible route.
- 3. Swimming pools, wading pools, spas, cold baths and hot tubs that are required to be accessible by Sections 1111.2.2 and 1111.2.3 are not required to provide accessible means of entry into the water.

#### **Committee Reason:**

The modification clarified the exception by removing the raised only to instead allow for access to locations where viewers meet with participants. The proposal was approved as this is a common practice for water parks. The committee had some suggestions for public comments. The term catch pool is defined in the ICC A117.1, but it is not defined in the IBC - this needs to be clarified. The ISPSC use the term 'deck' - that would be more consistent terminology than 'area'. (Vote: 14-0)

F144-21

### E145-21

Committee Action: As Modified

#### **Committee Modification:**

TACTILE SIGN. Building signage in a location where visually impaired person could feasibly read informational elements with the sense of touch.

**Committee Reason:** The modification removed the proposed definition which was not clear. Moving the requirements for room signage from Appendix E to Chapter 11 is needed for persons with visual impairments. (Vote: 13-0)

E145-21

# E146-21

Committee Action: Disapproved

**Committee Reason:** This proposal was disapproved as the language is too open for interpretation and it is not clear how this will be done. Signage manufacturers should be responsible for the correct braille information, not the code official or a third party reviewer. The phrase 'prior to acceptance of final inspection' is not proper code language. The exceptions are unclear. (Vote: 12-1)

E146-21

### E147-21

Committee Action: As Submitted

**Committee Reason:** This proposal was approved as this coordinates with the 2010 ADA language for dispersion of transient lodging with communication features. (Vote: 14-0)

E147-21

## E148-21

Committee Action: As Submitted

Committee Reason: The proposal was approved because it clarifies what accessibility is required for public or shared laundry facilities by moving this from Appendix E to the code. Laundry in dwelling units is addressed in the ICC A117.1. (Vote: 11-3)

E148-21

## E149-21

Committee Action: As Submitted

Committee Reason: This proposal was approved as it clarifies the requirements for shared/public laundry facilities. (Vote: 11-3)

E149-21

# **International Building Code - Structural**

2021 Group A - Report of the Committee Action Hearing Results

**S1-21** 

Committee Action: As Modified

**Committee Modification:** 

TABLE 1505.1 MINIMUM ROOF ASSEMBLY COVERING CLASSIFICATION FOR TYPES OF CONSTRUCTION<sup>a, b</sup>

ΙA	ΙB	IIA	IIB	IIIA	IIIB	IV	VA	VB
В	В	В	Сс	В	Cc	В	В	Сс

For SI: 1 foot = 304.8 mm, 1 square foot =  $0.0929 \text{ m}^2$ .

- a. Unless otherwise required in accordance with the *International Wildland-Urban Interface Code* or due to the location of the building within a fire district in accordance with Appendix D.
- b. Nonclassified roof coverings shall be permitted on buildings of Group R-3 and Group U occupancies, where there is a minimum fireseparation distance of 6 feet measured from the leading edge of the roof.
- c. Buildings that are not more than two stories above grade plane and having not more than 6,000 square feet of projected roof area and where there is a minimum 10-foot fire-separation distance from the leading edge of the roof to a lot line on all sides of the building, except for street fronts or public ways, shall be permitted to have roofs of No. 1 cedar or redwood shakes and No. 1 shingles constructed in accordance with Section 1505.7.

**Committee Reason:** The committee determined the modification makes TABLE 1505.1 consistent with the proposal. The committee based their approval on the proponent's reason statement and concluded the code change clarifies the existing language. The committee suggested fixing TABLE 1505.1 footnote b, "Nonclassified roof coverings" to "Nonclassified roof assembly" in the public comment phase. (Vote: 12-1)

S1-21

## **S2-21**

Committee Action: As Submitted

**Committee Reason:** The committee concluded this proposal is a good change in the direction of safety. As indicated by manufacturers, there are many designs that people can choose from. This proposal is not a limiting factor. One of the committee members mentioned this proposal contradicts with an exception in the IRC. (Vote: 11-2)

S2-21

# S3-21

Committee Action: As Submitted

Committee Reason: The committee based their approval on the proponent's reason statement and concluded the code change correlates the existing code text. (Vote: 13-0)

S3-21

# S4-21

Committee Action: Withdrawn

S4-21

# S5-21

Committee Action: Withdrawn

## S6-21

Committee Action: As Submitted

Committee Reason: The proposal was approved as it matches the intent of the code and is a good clarification. (Vote: 14-0).

S6-21

## **S7-21**

Committee Action: As Submitted

**Committee Reason:** The proposal was approved as it revises the language to meet the intent and corrects what could have been misread. (Vote: 13-1)

S7-21

## S8-21

Committee Action: Disapproved

**Committee Reason:** The proposal was disapproved because the committee felt the current text was clear and this revision was not needed. (Vote: 14-0)

S8-21

## S9-21

Committee Action: Disapproved

**Committee Reason:** This proposal was disapproved because the committee felt that Section 711 already covers the concerns expressed by the proponent. The extra language is not needed. (Vote: 13-1)

S9-21

# S10-21

Committee Action: As Modified

#### Committee Modification:

1511.9.1 Installation. The installation of a raised-deck system shall comply with all of the following:

- The perimeter of the raised-deck system shall be surrounded on all sides by parapet walls or by a noncombustible enclosure approved to
  prevent fire intrusion below the raised-deck system. The parapet wall or enclosure shall extend above the plane of at least to the top surface
  of the raised deck system.
- 2. A raised-deck system shall be installed above a listed roof assembly.

#### **Exception:**

Where the roof assembly is not required to have a fire classification in accordance with Section 1505.2.

- 3. A raised-deck system shall be installed in accordance with the manufacturer's installation instructions.
- 4. A raised-deck system shall not obstruct or block plumbing or mechanical vents, exhaust, or air inlets.

**1511.9.2 Fire classification.** The *raised-deck system* shall be tested, listed and labeled\_identified with a fire classification in accordance with Section 1505 and shall be tested in accordance with either Section 1511.9.2.1 or Section 1511.9.2.2.. The fire classification of the *raised deck system* shall be not less than the fire classification for the *roof covering* over which it is installed.

Exception: Where the top surface of the raised deck system consists of brick, masonry or concrete materials, a fire classification is not required.

1511.9.2.1 Fire testing of the raised deck system installed over a classified roof assembly. The raised deck system shall be tested separately from the roof assembly over which it is installed. The fire classification of the raised deck system shall be not less than the fire classification for the roof assembly over which it is installed.

**Exception**: Where the top surface of the raised deck system consists of brick, masonry or concrete materials, fire testing of the raised deck system is not required.

1511.9.2.2 Fire testing of the raised deck system together with the roof assembly. The roof assembly and the raised deck system shall be tested together.

**1511.9.4 Structural requirements.** The *raised-deck system* shall be designed for wind <u>all applicable</u> loads in accordance with Chapter 16 and <u>performance requirements in</u> Section 1504.5. The *raised-deck system* shall be designed for seismic loads in accordance with Chapter 16.

**Committee Reason:** The committee determined the modification corrects terminology problems, identified multiple test path methods, and corrects wind and seismic load requirements. The proposal provides design options and reduces the potential hazard. One of the committee members asked the proponent to address the following in the public comment phase:

- 1) Identify parapet.
- 2) Section 1511.9.5 needs to address the snow accumulation issue.
- 3) Section 1511.9.1, #4 needs to address obstruction of roof drainage.
- 4) Section 1511.9.2 exception could include a material standard for thickness.
- 5) Section 1511.9.3 needs to address the load distribution of the intersect between roof membrane with foam plastic underneath.
- 6) Consider the dead load of this system on the roof structure.

For the group B hearing, one of the committee members suggested that the proponent consider introducing more details for Ballasted photovoltaic panel systems. The only reference for those systems is in section 1607.14.4.5, Ballasted photovoltaic panel systems).(Vote: 12-1)

S10-21

## **International Code Council Performance Code**

2021 Group A - Report of the Committee Action Hearing Results

PC1-21

Committee Action: As Modified

**Committee Modification:** 

**SECTION 303** 

#### **PISK CATEGORIES PERFORMANCE GROUPS**

**[BG] 303.1** Risk category Performance group allocation Use groups and hazard-related occupancies have been allocated to risk category performance group using the risk factors identified in Section 302.4. Specific buildings and other structures have been allocated to risk categories performance groups using the risk factors identified in Section 302.4 combined with the relative importance of protecting the building or other structure to the community. These risk category performance group allocations are shown in Table 303.1.

[BG] TABLE 303.1

-RISK CATEGORY OF PERFORMANCE GROUP CLASSIFICATIONS FOR BUILDINGS AND OTHER STRUCTURES

RISK CATEGORIES	NATURE OF OCCUPANCY					
PERFORMANCE	USE AND OCCUPANCY CLASSIFICATIONS FOR SPECIFIC					
GROUP	BUILDINGS OR FACILITIES					
I	Buildings and other structures that represent a low hazard to human life in the event of failure, including, but not limited to:  1. Agricultural facilities.  2. Certain temporary facilities.  3. Minor storage facilities.					
II	All buildings and other structures except those listed in Risk Categories Performance Categories I, III and IV.					
III	Buildings and other structures that represent a substantial hazard to human life in the event of failure, including, but not limited to:  1. Buildings and other structures where more than 300 people congregate in one area.  2. Buildings and other structures with elementary school, secondary school or day care facilities with a capacity greater than 250.  3. Buildings and other strutures with a capacity greater than 500 for colleges or adult education facilities.  4. Health-care facilities with a capacity of 50 or more residents but not having surgery or emergency treatment facilities.  5. Jails and detention facilities.  6. Any other occupancy with an occupant load greater than 5,000.  7. Power-generating facilities, water treatment for potable water, wastewater treatment facilities and other public utilities facilities not included in Risk Category Performance Group IV.  Buildings and other structures not included in Rick Category Performance Group IV containing sufficient quantities of highly 8. toxic gas or explosive materials capable of causing acutely hazardous conditions that do not extend beyond property boundaries.					
IV	Buildings and other structures designated as essential facilities, including, but not limited to:  1. Hospitals and other health-care facilities having surgery or emergency treatment facilities.  2. Fire, rescue and police stations and emergency vehicle garages.  3. Designated earthquake, hurricane or other emergency shelters.  4. Designated emergency preparedness, communication, and operation centers and other facilities required for emergency response.  5. Power-generating stations and other utilities required as emergency backup facilities for Risk Category Performance Group IV buildings or other structures.  6. Buildings and other structures containing highly toxic gas or explosive materials capable of causing acutely hazardous conditions beyond the property boundaries.  7. Aviation control towers, air traffic control centers and emergency aircraft hangars.  8. Buildings and other structures having critical national defense functions.  9. Water treatment facilities required to maintain water pressure for fire suppression.  Ancillary structures (including, but not limited to, communication towers, fuel storage tanks or other structures housing or 10. supporting water or other fire suppression material or equipment) required for operation of Risk Category Performance Group IV structures during an emergency.					

[BG] 303.3 Magnitudes of event and level of damage Risk categories Performance groups identify the minimum required performance of buildings or other structures through a relationship of the magnitude of an event to the maximum level of impact or damage to be tolerated shown in Table 303.3. The use of Table 303.3 shall be an iterative process. It shall be used to determine the acceptable impact of certain events based on their magnitude, and then used iteratively to evaluate various designed mitigation features. Assignment of risk categories is accomplished through consideration of building or other structures uses, building or other structure risk factors, and the importance of a building or other structures to a community.

[BG] TABLE 303.3

MAXIMUM LEVEL OF IMPACT OR DAMAGE TO BE TOLERATED BASED ON RISK CATEGORIES PERFORMANCE GROUPS AND DESIGN

#### **EVENT MAGNITUDES**

		INCREASING LEVEL OF	PERFORMANCE				
		$\rightarrow \rightarrow $					
		RISK CATEGORIES PERFORMANCE GROUPS					
		Risk Category Performance Group I	Risk Category Performance Group II	Risk Category P erformance Group III	Risk Category Performance Group IV		
	VERY LARGE (Very Rare)	SEVERE	SEVERE	HIGH	MODERATE		
MAGNITUDE OF DESIGN EVENT	LARGE (Rare)	SEVERE	HIGH	MODERATE	MILD		
DESIGN EVENT	MEDIUM (Less Frequent)	HIGH	MODERATE	MILD	MILD		
	SMALL (Frequent)	MODERATE	MILD	MILD	MILD		

[BG] 303.4 -Risk categories Performance groups There are four -risk categories performance groups (RC\_PG), identified as I, II, III and IV.

**[BG] 303.4.1** Risk category Performance group I The minimum design performance level with which all buildings or other structures posing a low risk to human life, should the buildings or other structure fail, shall comply.

[BG] 303.4.2 Risk Category Performance Group II The minimum design performance level with which all buildings or other structures subject to this code, except those classified as PC PG I, PC PG III or PC PG IV, shall comply.

[BG] 303.4.3 Risk Category Performance Group III The minimum design performance level with which buildings or other structure of an increased level of societal benefit or importance shall comply.

[BG] 303.4.4 Risk Category Performance Group IV The minimum design performance level with which buildings or other structures that present an unusually high risk or that are deemed essential facilities shall comply.

[BG] 303.5 Alternative risk category designations The risk category performance group for specific buildings or other structures or classes of buildings or other structures is permitted to be redesignated with the approval of the code official. If a higher design performance level is desired, the design team, with the approval of the code official, shall be permitted to choose a higher risk category performance group. For existing buildings or other structures, the code official is authorized to adjust tolerable limits of impact to a building or other structures and its contents.

[BG] 305.2 Definition of magnitude of event Magnitude of event can be defined, quantified and expressed either deterministically or probabilistically in accordance with the best current practice of the relevant profession as published in recognized authoritative documents. In some authoritative documents, magnitude of event may be expressed only for a single risk group performance group. In other cases, magnitude of event may be provided for all performance levels such as seismic provisions. In all cases, it is the responsibility of the design engineer to demonstrate that the design performance levels are met for the loads anticipated.

**[F] 602.2 Functional statement** Buildings shall be designed with safeguards against the spread of fire so that persons not directly adjacent to or involved in the ignition of a fire shall not suffer serious injury or death from a fire and so that the magnitude of the property losses are limited as follows:

- Risk Category Performance Group I—High
- Risk Gategory Performance Group II—Moderate
- Risk Category Performance Group III—Mild
- Risk Category Performance Group IV—Mild

[F] 1701.2 Functional statements Facilities shall be designed with safeguards against the spread of fire so that persons not directly adjacent to or involved in the ignition of a fire shall not suffer serious injury or death from a fire, and so that the magnitude of the property loss is limited as follows:

- Risk Category Performance Group I—High
- Risk Category Performance Group II—Moderate
- Risk Category Performance Group III—Mild
- Risk Category Performance Group IV—Mild

[F] 1701.3.15.2 Range of fire sizes Magnitudes of design fire events shall be defined as small, medium, large and very large, based on the quantification of the design fire event as a function of the building use and associated risk category performance

#### group.

**[F] 1701.3.15.3.2 Design parameters** Multiple design fire scenarios, ranging from small to very large design fire events, shall be considered to ensure that associated levels of tolerable damage are not exceeded as appropriate to the risk category performance group.

**[F] 2201.3.19.5 Design parameters** Multiple scenarios, ranging from small to very large design events, must be considered to ensure that associated levels of tolerable damage are not exceeded as appropriate to the risk category performance group.

#### **APPENDIX B**

#### WORKSHEET FOR ASSIGNING SPECIFIC STRUCTURES TO RISK CATEGORIES PERFORMANCE GROUPS

**[BG] B101.1 General** Table B101.1 shall be used as a guide for determining the appropriate <u>risk category</u> <u>performance group</u> allocation for specific structures that have unique characteristics.

**[BG] 301.2 Objective** To establish <u>risk categories</u> <u>performance groups</u> for buildings and other structures and to establish minimum acceptable losses based on those <u>risk categories</u> <u>performance groups</u>.

[BG] 301.3.2 Demonstration of performance Performance is acceptable where the design performance levels are demonstrated to be met or exceeded, to the satisfaction of the code official, in accordance with the assigned or designated use groups, risk categories performance groups, magnitudes of event and maximum tolerable damage limits; and the objectives, functional statements and performance requirements of this code.

[BG] 303.2 Unique performance group allocation. Where necessary or desired, allocation of specific buildings or other structures to risk categories performance groups differing from Table 303.1 is permitted based on the needs specific to a community or owner or if there are unusual circumstances associated with the building or other structure. [BG] 304.1 General Design performance levels establish how a building or other structure is expected to perform, in terms of tolerable limits, under varying load conditions. For each magnitude of event (small to very large), considered as a design load, based on realistic event scenarios, the design shall provide high confidence that the corresponding maximum level of damage to be tolerated for the appropriate risk category performance group will be met. This relationship is illustrated in Table 303.3

**[F] 2201.3.19.5 Design parameters** Multiple scenarios, ranging from small to very large design events, must be considered to ensure that associated levels of tolerable damage are not exceeded as appropriate to the <u>risk category</u> <u>performance group</u>.

**Committee Reason:** The purpose of the modification is to return to the existing 'performance group' instead of changing to 'risk category'. To avoid confusion, the Performance code should not use the term 'risk category' where the intent is different from the IBC Chapter 16. The update to the terminology in the Performance Code will bring this code more in line with terminology used in the current I-codes. Adding "damage to impact" in Section 303.3 clarifies what is needed to be addressed for engineering. (Vote: 14-0)

Staff Analysis: This proposal for Table 303.1 addresses requirements in a different or contradicting manner to those found in Code Change PC2-21.

PC1-21

### **PC2-21**

Committee Action: As Modified

#### **Committee Modification:**

[BG] 303.1 Performance group allocation Use groups and hazard-related occupancies have been allocated to performance groups using the risk factors identified in Section 302.4. Specific buildings and facilities have been allocated to performance groups using the risk factors identified in Section 302.4 combined with the relative importance of protecting the building or facility to the community. The allocated performance group shall not be lower than the corresponding risk category determined in accordance with Section 1604.5 of the International Building Gode\_ Table 303.1.

Risk Category of Buildings and Other Structures

(Note: Copy of IBC Table 1604.5)

RISK CATEGORY NATURE OF OCCUPANCY					
Ī	Buildings and other structures that represent a low hazard to human life in the event of failure, including but not limited to:  • Agricultural facilities.				
	• Certain temporary facilities.				
	Minor storage facilities.				
<u>II</u>	Buildings and other structures except those listed in Risk Categories I, III and IV.				
	Buildings and other structures that represent a substantial hazard to human life in the event of failure, including but not limited to:  Buildings and other structures whose primary occupancy is public assembly with an occupant load greater than 300.  Buildings and other structures containing one or more public assembly spaces, each having an occupant load greater than 300 and a cumulative occupant load of the public assembly spaces of greater than 2,500.				
	<ul> <li>Buildings and other structures containing Group E or Group I-4 occupancies or combination therof, with an occupant load greater than 250.</li> <li>Buildings and other structures containing educational occupancies for students above the 12th grade with an occupant load</li> </ul>				
	greater than 500.				
<u> III</u>	<ul> <li>Group I-2, Condition 1 occupancies with 50 or more care recipients.</li> <li>Group I-2, Condition 2 occupancies not having emergency surgery or emergency treatment facilities.</li> </ul>				
	• Group I-3 occupancies.				
	• Any other occupancy with an occupant load greater than 5,000.ª				
	• Power-generating stations, water treatment facilities for potable water, wastewater treatment facilities and other public				
	utility facilities not included in Risk Category IV.				
	• Buildings and other structures not included in Risk Category IV containing quantities of toxic or explosive materials that:				
	• Exceed maximum allowable quantities per control area as given in Table 307.1(1) or 307.1(2) or per outdoor control				
	area in accordance with the International Fire Code; and				
	• Are sufficient to pose a threat to the public if released.   - The sufficient to pose a threat to the public if released.				
	Buildings and other structures designated as essential facilities, including but not limited to:				
	<ul> <li>Group I-2, Condition 2 occupancies having emergency surgery or emergency treatment facilities.</li> <li>Ambulatory care facilities having emergency surgery or emergency treatment facilities.</li> </ul>				
	Fire, rescue, ambulance and police stations and emergency vehicle garages				
	Designated earthquake, hurricane or other emergency shelters.				
<u>IV</u>	Designated emergency preparedness, communications and operations centers and other facilities required for emergency				
	response.				
	• Power-generating stations and other public utility facilities required as emergency backup facilities for Risk Category IV				
	structures.				
	• Buildings and other structures containing quantities of highly toxic materials that:				
	• Exceed maximum allowable quantities per control area as given in Table 307.1(2) or per outdoor control area in				
	accordance with the International Fire Code; and				
	<ul> <li>Are sufficient to pose a threat to the public if released.b</li> <li>Aviation control towers, air traffic control centers and emergency aircraft hangars.</li> </ul>				
	Buildings and other structures having critical national defense functions.				
	Water storage facilities and pump structures required to maintain water pressure for fire suppression.				
	the state of the s				

a. For purposes of occupant load calculation, occupancies required by Table 1004.5 of the International Building Code to use gross floor area calculations shall be permitted to use net floor areas to determine the total occupant load.

b. Where approved by the building official, the classification of buildings and other structures as Risk Category III or IV based on their quantities of toxic,

highly toxic or explosive materials is permitted to be reduced to Risk Category II, provided that it can be demonstrated by a hazard assessment in accordance

with Section 1.5.3 of ASCE 7 that a release of the toxic, highly toxic or explosive materials is not sufficient to pose a threat to the public.

**[BG] 303.2 Unique performance group allocation** Where necessary or desired, allocation of specific buildings or facilities to performance groups differing from the corresponding risk category in Table 303.1 1604.5 of the *International Building Code* is permitted based on the needs specific to a community or owner or if there are unusual circumstances associated with the building or facility.

[BG] 303.4 Performance groups There are four performance groups (PG), identified as I, II, III and IV.

[BG] 303.4.1 Performance Group I The minimum design performance level with which all buildings or facilities allocated to Risk Category I per Section 1604.5 of the International Building Code Table 303.1 or posing a low risk to human life, should the buildings or facilities fail, shall comply. [BG] 303.4.3 Performance Group III The minimum design performance level with which buildings or facilities allocated to Risk Category III per Section 1604.5 of the International Building Code Table 303.1 or of an increased level of societal benefit or importance shall comply. [BG] 303.4.4 Performance Group IV The minimum design performance level with which buildings or facilities allocated to Risk Category IV per Section 1604.5 of the International Building Code Table 303.1 or that present an unusually high risk or that are deemed essential facilities shall comply.

**Committee Reason:** The modification copies IBC Table 1604.5 into the Performance code instead of a reference. Having this table in the Performance code will improve ease of use. The committee asked that control of this table be scoped to the IBC structural committee so that the tables will remain consistent over time. This proposal was approved as it will improve coordination between the IBC and ASCE 7 and includes the best information for risk categories available. (Vote: 10-4)

Staff Analysis: This proposal for Table 303.1 addresses requirements in a different or contradicting manner to those found in Code Change PC1-21.

PC2-21

### PC3-21

Committee Action: As Submitted

**Committee Reason:** The proposal was approved because the change reinforces that all 4 design events must be met. This clarifies the intent and facilitates use. (Vote: 14-0)

PC3-21

## **PC4-21**

Committee Action: As Submitted

**Committee Reason:** This proposal was approved because it addresses the impact of the high hazard materials instead of the amount present. This would be consistent with ASCE7 and other hazard analysis evaluation options. There was concern that there were not any significant differences between the low, medium and high impact requirements in the proposal. (Vote: 11-3)

PC4-21

# PC5-21

Committee Action: Disapproved

**Committee Reason:** This proposal was disapproved for several reasons. The proposal was a significant change to Section 304.2.3.3 for the occupant hazards in high impact. The occupant hazards are more than structural, so this should not be aligned only with ASCE 7. Proximity to the event could make a significant difference in the hazard. The current text aligns with Table 303.3 - high risk is not permitted for many building types. (Vote: 13-1)

PC5-21

# PC6-21

Committee Action: Disapproved

**Committee Reason:** This proposal was disapproved because the proposed language did not clarify the debris obstruction limits as intended. Generally the means of egress is already addressed in the general requirements and this proposal does not address the number of exits (e.g. one or all) or possible accessible means of egress concerns. (Vote: 8-6)

PC6-21

#### PC7-21

Committee Action: As Submitted

Committee Reason: The proposal was approved because it is the 'application' of loads causes the collapse, not the occupancy. (Vote: 14-0)

PC7-21

## PC8-21

Committee Action: Disapproved

**Committee Reason:** This proposal was disapproved because it would limit the options for some existing buildings to only use the International Existing Building Code. The Performance Code should be an option for existing buildings and is commonly used. (Vote: 14-0)

PC8-21

### PC9-21

Committee Action: Disapproved

**Committee Reason:** This proposal was disapproved to be consistent with the committee action on PC8-21. Existing buildings should be permitted to use either the IEBC or the Performance code. The phrase "structural system" is not clear for what this could include. The IEBC is typically more restrictive, so the cost impact saying this will decrease the cost impact is incorrect. (Vote: 14-0)

PC9-21

## PC10-21

Committee Action: As Modified

#### **Committee Modification:**

**[F] 1601.1 Objective.** To limit or control the likelihood that a fire will start because of the design, operation or maintenance of a facility or its systems so as to minimize impacts on people, property, processes and the environment.

**[F]1601.2 Functional statement.** Facility services, systems and activities that represent a potential source of ignition or can contribute fuel to an incipient fire shall be designed, operated, managed and maintained to reduce the likelihood of a fire starting.

1601.2.1 Fuel-burning appliances and services. Fuel-burning appliances and services shall be installed in a manner that reduces their potential as sources of fire ignition.

1601.2.2 Electrical equipment, appliances and services. Electrical equipment, appliances and services shall be installed in a manner that reduces their potential as sources of fire ignition.

[F] 1601.3 Performance requirements.

**[F]1601.3.1 Ignition sources.** Electrical, mechanical and chemical systems or processes and facility services capable of supplying sufficient heat under normal operating conditions or anticipated failure modes to ignite combustible system components, facility elements or nearby materials shall be designed, operated, managed and maintained to prevent the occurrence of fire.

[F] 1601.3.1.1 Uncontrolled combustion and explosion. Fuel-burning appliances and services shall be installed so that the appliance or service

will not cause uncontrolled combustion or explosion.

[F] 1601.3.1.2 Fuel-burning appliances and services as sources of ignition. Fuel-burning appliances and services shall be installed so that they will not become sources of ignition.

[F] 1601.3.1.3 Sparks and arcing. Electrical equipment, appliances and services shall be installed so that they will not allow sparks or arcing to escape their enclosures.

[F] 1601.3.1.4 Electrical equipment, appliances and services. Electrical equipment, appliances and services shall be installed so that they will not become sources of ignition.

[F] 1601.3.1.5 Flammable, combustible and explosive atmospheres. Separate ignition sources from areas where a flammable, combustible or explosive atmosphere may exist.

**[F] 1601.3.2 Fuel sources.** The quantities, configurations, characteristics or locations of combustible materials, including components or facility systems, facility elements, facility contents and accumulations of readily ignitable waste or debris shall be managed or maintained to prevent ignition by facility service equipment and other ignition sources associated with processes normally present or expected to be present within the facility.

**[F] 1601.3.3 Ignition and fuel source interactions.** Design, operate, and maintain facility services and facility system installation locations to prevent the occurrence or to control the extent of atmospheres likely to pose an ignition hazard.

**[F] 1602.2 Functional statements.** Facilities shall be designed with safeguards against the spread of fire so that persons shall not suffer serious injury or death from a fire, and so that the magnitude of the property loss is limited and consistent with the design Risk Gategory performance group determined in Chapter 3 as follows:

- Performance Group I—High
- Performance Group II—Moderate
- Performance Group III—Mild
- Performance Group IV—Mild

Committee Reason: The proposal was approved based upon the need to consolidate the provisions on fire prevention and impact management into a single location to streamline the code. This both removes the provisions from Chapter 6 and places within Chapter 16 and removes impact management from Chapter 17 and places within Chapter 16. Chapter 16 will now address both fire prevention and impact management. The modifications correct the terminology "risk category" to "performance level" to be consistent with the terminology used in Chapter 3 and on previous action on PC1 to continue to use the term Performance Group. The second modification adds back in subsections into the new location within Chapter 16 that had not been carried over from Chapter 6. (Vote: 7-6)

PC10-21

## PC11-21

Committee Action: As Submitted

**Committee Reason:** This proposal was approved as it coordinates with the committee action on P10-21. This reorganization for means of egress is needed to help update the Performance Code. (Vote: 14-0)

PC11-21

# PC12-21

Committee Action: As Submitted

**Committee Reason:** The proposal was approved as it will improve application of the code by removing duplication of language in the document. (Vote: 12-1)

## PC13-21

Committee Action: Disapproved

Committee Reason: The proposal was disapproved because the committee had several concerns. "Adequately controlled" is too broad. Does Section 1002.3.2 Item 6 not already address air quality sufficiently? Are there any HVAC systems available that could protect occupants to this lever? The comparison to hospital levels is incorrect - hospitals use negative pressure in individual rooms or spaces with controlled access - that is significantly different than open assembly spaces. What is the difference between airborne particles and airborne pathogens? How would it be possible to protect anyone in a room from the person next to them "coughing, sneezing, laughing or close personal contact"? A reference to IMC and ASHRE standards as benchmarks was suggested as an option. (Vote: 9-5)

PC13-21

### PC14-21

Committee Action: Disapproved

**Committee Reason:** The proposal was disapproved because the committee had the following concerns: although this is a performance code, a baseline for compliance is needed; maybe filtering the air is not the only option; seems reactive and needs more study over time. (Vote: 11-0)

PC14-21

# PC15-21

Committee Action: As Submitted

**Committee Reason:** This type of language for performance codes is typical although there could be some improvements with respect to not using ambiguous terms such as "clearly", "ensure" and "leakfree manner." (10-4)

PC15-21

# PC16-21

Committee Action: Disapproved

Committee Reason: The proposal was disapproved based on the proponents request as there is a conflict in the proposed language. (Vote: 14-0)

PC16-21

# PC17-21

Committee Action: As Submitted

Committee Reason: Approval of the proposal was based upon the need to consolidate all notification requirements in Chapter 8. In addition the action is consistent with that made on PC12-21. (Vote: 10-3)

## PC18-21

Committee Action: As Modified

#### **Committee Modification:**

[F]2201.3.19 Levels of impact or damage. Levels of impact or damage to processes, structure, contents and to the environment and the impact related to business and or community and injuries to persons, shall comply with the requirements of Section 304 for design performance levels.

**Committee Reason:** This proposal based upon the modification was approved as it gives a straightforward reference to Chapter 3 for performance levels. The modification appropriately removes the laundry list of items which simply causes confusion on the application. (Vote: 13-0)

PC18-21

## **International Fire Code**

2021 Group A - Report of the Committee Action Hearing Results

### F1-21

Committee Action: As Submitted

Committee Reason: The committee stated that the reason for the approval was that the proposal aligns the code definition with the referenced standard definition which the designers are currently using and it improves the code and makes it consistent with the standards. (Vote: 12-2)

F1-21

### F2-21

Committee Action: As Modified

#### **Committee Modification:**

**ENERGY STORAGE SYSTEM CABINET.** An enclosure A listed eabinet that contains containing emponents of the an energy storage system that is included in and meeting the applicable requirements of the UL 9540 listing for the system. Personnel are not able to enter the enclosure other than reaching in to access components for maintenance purposes.

**Committee Reason:** This proposal clarifies that the cabinet or enclosure is part of the listing of the ESS. The modification makes it clear that the reference to listing is to UL 9540 versus requiring the cabinet itself to be listed. There was some concern that portions of the definition are considered requirements and should be removed. (Vote: 7-6)

F2-21

## F3-21

Committee Action: As Submitted

**Committee Reason:** This proposal was approved as it appropriately breaks down the classification of flammable gases in two categories. This will assist in safely addressing the new types of refrigerants and provides a better framework as to how they need to be regulated. (Vote: 14-0)

F3-21

# F4-21

Committee Action: As Submitted

Committee Reason: The committee stated that the reason for the approval was that standardizing the definitions across the code is always appreciated and the one concern about it not matching what is in the IBC will be corrected in Group B. (Vote: 14-0)

F4-21

#### F5-21

Committee Action: As Modified

#### **Committee Modification:**

[BG] 203.2.5 Special Amusement Building. Special amusement areas shall comply with Section 411 of the International Building Code.

**Committee Reason:** The committee stated that the reason for the approval of the modification was that it was necessary to add the missing section for special amusement building to match the IBC. The stated reasons for the approval of the proposal were that the reorganization provide alignment with the IBC in a more logical access to the definitions of various occupancy types and by moving this definition to a separate section and getting it out of the old definition makes it a whole lot easier and a little more user friendly. (Vote: 12-2)

F5-21

## F6-21

Committee Action: Disapproved

**Committee Reason:** The committee stated that the reasons for disapproval were based on the proponent's request and the previous action on G86-21. (Vote: 13-0)

F6-21

### F7-21

Committee Action: As Modified

#### **Committee Modification:**

**VEGETATIVE ROOF.** An <u>A roof</u> assembly of interacting components designed to waterproof a building's top surface that includes, by design, vegetation and related landscape elements.

**Committee Reason:** The reason for the approval of the modification was based on the clarification it provided. The committee stated that the reason for the approval of the proposal was based on the previous actions on proposals F15-21 and F16-21. (Vote 14-0)

F7-21

## F8-21

Committee Action: As Modified

#### **Committee Modification:**

VALET WASTE-TRASH COLLECTION. A service that removes trash or recycling materials placed outside of dwelling units or sleeping units for collection. A waste collection service that collects and removes the waste from the doorsteps of tenants.

**304.1.1 Valet <u>trash Waste</u>**. Valet trash collection shall only be permitted where approved. The owner and valet trash collection service provider shall comply with the rules and limitations established by the jurisdiction. Valet waste collection is prohibited.

Exception: Where approved by the fire code official.

**Committee Reason:** The approval of this proposal was consistent with the actions taken on F236-21 and F237-21 as modified. The first modification revises the definition to be consistent with the modification to F236-21. The second modification rewords the proposed language to both make the owner responsible and provide the necessary language to give the jurisdiction the authority to allow or prohibit such services. The code is

currently silent on the issue and provisions are necessary to address the hazard however is appropriate to the jurisdiction. Generally this proposal is intended to work together with the new appendix proposed by F236-21 and F237-21. (Vote: 13-1)

F8-21

### F9-21

Committee Action: As Submitted

**Committee Reason:** The committee stated that the reason for approval was that it makes sense to locate and consolidate these requirements in Chapter 3 and the improvement of having the test specifications in one section that can be pointed to. (Vote: 12-2)

F9-21

## F10-21

This proposal includes published errata

https://cdn-web.iccsafe.org/wp-content/uploads/2021-GROUP-A-CONSOLIDATED-MONOGRAPH-UPDATES-Updated-4-02-2021-complete.pdf

Committee Action: Disapproved

Committee Reason: The committee stated that the reason for disapproval was based on the preference for proposal F9-21. (Vote: 14-0)

F10-21

## F11-21

Committee Action: As Submitted

Committee Reason: The committee stated that the reason for approval was that it was never really the intent of the section to only prohibit sky lanterns in particular in wildfire risk areas. (Vote: 11-3)

F11-21

# F12-21

Committee Action: Disapproved

**Committee Reason:** The committee stated that the reasons for disapproval were the specifics of this section are for hazardous locations and by adding in criteria that is just generic is inappropriate for this to go in this location and in addition the current referenced standard NFPA 505 lists NFPA 583 and NFPA 558 as reference standards within it so it would be redundant to add them. (Vote: 12-1)

F12-21

# F13-21

Committee Action: As Modified

#### **Committee Modification:**

314.4 Vehicles. Liquid-fueled or gaseous-fueled vehicles, aircraft, boats or other motorcraft shall not be located indoors except as follows:

- 1. The engine starting system is made inoperable or ignition batteries are disconnected except where the *fire code official* requires that the batteries remain connected to maintain safety features.
- 2. Fuel in fuel tanks does not exceed any of the following:
  - 2.1. Class I, II and III liquid fuel does not exceed one-quarter tank or 5 gallons (19 L) (-, whichever is least less ).
  - 2.2. LP gas does not exceed one-quarter gallon-tank or 6.6 gallons (25 L), (whichever is least less).
  - 2.3. CNG does not exceed one-quarter tank or 630 cubic feet (17.8 m3), (whichever is least less).
  - 2.4. Hydrogen does not exceed one-quarter tank or 2000 cubic feet (0.57 m3), whichever is least less ).
- 3. Fuel tanks and fill openings are closed and sealed to prevent tampering.
- 4. Vehicles, aircraft, boats or other motorcraft equipment are not fueled or defueled within the building.

Committee Reason: The committee stated that the reason for the approval of the modification was that it corrects the code language to something that's more acceptable. The stated reasons for the approval of the proposal were the addition of ignition batteries is very important particularly with electric vehicles since eventually electric batteries that are the power batteries will probably need to be put into this section as well. It was also noted that this code change does a good job of breaking it down and especially breaking down the fuels into different types as there are more alternative fuels being used. (Vote: 14-0)

F13-21

### F14-21

Committee Action: Disapproved

Committee Reason: The committee stated that the reasons for disapproval were the issues that were brought up throughout the testimony specifically dealing with the outdoor storage distances, policies and configurations that need to be addressed. Vote: (14-0)

F14-21

# F15-21 Part I

Committee Action: As Submitted

Committee Reason: The committee stated that the reasons for approval were that it cleans up the language and makes it consistent and the previous action on Part II by the IBC FS committee. (Vote 14-0)

F15-21 Part I

# F15-21 Part II

Committee Action: As Submitted

**Committee Reason:** The committee concluded the proposal coordinates the proper terminology. The proposal covers both the IFC and the IBC to use the term "vegetative roof" consistently". (Vote: 13-0)

F15-21 Part II

#### F16-21 Part I

Committee Action: As Modified

#### **Committee Modification:**

317.3 Maintenance plan. The fire code official is authorized to require a maintenance plan for vegetation placed on roofs due to the size of a vegetative roof, materials used or where a fire hazard exists to the building or exposures due to the lack of maintenance.

317.4 Maintenance equipment. Fueled equipment stored on roofs and used for the care and maintenance of vegetation on roofs shall be stored in accordance with Section 313.

**Committee Reason:** The committee stated that the reason for the approval of the modification is it adds back in language that's necessary in that section. The reason for the approval of the proposal was it coordinates proper terminology for these roof systems and removes obsolete requirements. (Vote: 14-0)

F16-21 Part I

### F16-21 Part II

Committee Action: As Submitted

Committee Reason: The committee determined the proposal properly correlated terminology. The term "landscaped roofs" has been used by the public to mean the same as "vegetative roofs". Also, based on the committee's action on F15-21 Part II. (Vote: 12-1)

F16-21 Part II

## F17-21

Committee Action: Disapproved

Committee Reason: The committee stated that the reason for disapproval was based on the action taken on F16-21 Part I. (Vote: 14-0)

F17-21

# F18-21

Committee Action: As Submitted

Committee Reason: The committee stated that the reason for approval was that NFPA 96 is the appropriate referenced standard and that committee has the expertise to really address all the issues that were heard in testimony. It was noted to be a very comprehensive standard and the place that the inspectors need to go for all the requirements for these systems. Finally, it was stated that mobile food trucks are very complex, and they are best dealt with now in the standard that involves all the experts for how these systems are designed, installed, operated, maintained and tested. Thus, as stated, the correct pointer is to NFPA 96. (Vote: 9-5)

F18-21

# F19-21

Committee Action: Disapproved

**Committee Reason:** The committee stated that the reasons for disapproval were opposition to moving the requirements into an appendix based on the discussions on how mobile food trucks need regulation and they do cause a fire safety hazard. Additionally, it was stated that it would be problematic and create jurisdictional problems to write a permit on something that's not in the code if we move the requirements to an appendix. (Vote: 14-0)

F19-21

### F20-21

Committee Action: Disapproved

**Committee Reason:** The committee stated that the reasons for disapproval were based on the action on F18-21 and the requirements are already in the code and the proposed language is not necessary. (Vote: 13-1)

F20-21

### F21-21

Committee Action: As Modified

#### **Committee Modification:**

321.1 General. The storage of lithium-ion and lithium metal batteries shall comply with Section 321.

#### **Exceptions:**

- 1. New or refurbished B batteries installed in the equipment, devices, or vehicles they are designed to power.
- 2. New or refurbished B batteries packed for use with the equipment, devices, or vehicles they are designed to power.
- 3. Batteries in original retail packaging that are rated at 300 watt-hours or less for lithium-ion batteries or contain 25 grams or less of lithium metal for lithium metal batteries.
- 4. Temporary storage of batteries or battery components during the battery manufacturing process prior to completion of final quality control checks.
- 5. Temporary storage of batteries during the vehicle manufacturing or repair process.

Committee Reason: The committee stated that the reason for the approval of the modification that added exception 5 of Section 321.1 was that the repair process specifically is essential to this as a repair shop could have several of these batteries out of the cars at one time, and that these are relatively new batteries and they are involved in a repair process which was noted as an essential change to the proposal. The stated reason for the approval of the modification that added the "New or refurbished" language was that in the testimony it was pointed out that a refurbished battery is essentially the same thing as far as the safety components and so the intent here is not to address these in the same way that storage batteries are being addressed. The reason for the approval of the proposal with the modifications was stated that this is a very reasonable approach to look at how you can mitigate the hazard that is recognized with this type of battery chemistry with mitigation that includes detection, suppression, emergency plans, and coordination with facility owners and emergency responders. (Vote: 14-0)

F21-21

# F22-21

Committee Action: Disapproved

Committee Reason: The committee stated that the reasons for disapproval were technical issues with the requirements including the distance requirements and permanently attached versus temporary or nonattached which would result in unintended consequences as well as difficulty in enforcement. (Vote: 14-0)

## F23-21

Committee Action: Disapproved

Committee Reason: The committee stated that the reason for disapproval was consistent with the action on F22-21, which had similar reasons for disapproval. (Vote: 14-0)

F23-21

### F24-21

Committee Action: Disapproved

**Committee Reason:** The committee stated that the reason for disapproval was that the proposal would technically prohibit more than five tenants in a multifamily building renting micro mobility devices. The committee preference was for F25-21. (Vote: 11-2)

F24-21

## F25-21

Committee Action: As Submitted

**Committee Reason:** The committee stated that although there is need for requirements for these devices, they had multiple concerns with the proposal. These included the exception for not more than five battery powered mobility devices, which was noted to be unenforceable in a residential occupancy and also would technically prohibit more than five tenants in a multifamily building renting micro mobility devices. Other concerns included the device name difference between the proposed section and the referenced standard and the restriction on the charging equipment and 18-inch distance during charging operations. (Vote: 8-6)

Staff Analysis: Note that proposed Section 322.5 refers to proposed Section 403.10.6 within proposal F28-21.

F25-21

# F26-21

Committee Action: Disapproved

**Committee Reason:** This proposal was disapproved for a couple reasons. First it was felt that a one size fits all approach for this may not work. There is concern this could actual delay egress as it is another decision point added the the evacuation process. In addition, some buildings may not have fire alarm boxes due to exceptions for sprinklers. Finally there was concern with how a fire code official will know if the diagrams have been updated. (Vote:13-0)

F26-21

# F27-21

Committee Action: Disapproved

F27-21

### F28-21

Committee Action: As Modified

#### **Committee Modification:**

**403.10.6 Lithium-ion and lithium metal batteries.** An approved fire safety and evacuation plan in accordance with Section 404 shall be prepared and maintained for occupancies that involve activities for the research and development, testing, manufacturing, handling, <u>or</u> storage of lithium-ion batteries or lithium metal batteries. or the repair or servicing of vehicles powered by lithium-ion batteries or lithium metal batteries.

Exceptions. A fire safety and evacuation plan is not required for the storage or merchandizing of any of the following:

- 1. New or refurbished batteries installed for use in the equipment or vehicles they are designed to power
- 2. New or refurbished batteries packed for use with the equipment or vehicles they are designed to power for merchandizing purposes;
- 3. New or refurbished lithium-ion batteries rated at no more than 300 Watt-hours and lithium metal batteries containing no more than 25 grams of lithium metal in their original retail packaging;
- 4. The storage, repair and charging activities in detached one- and two-family dwellings and townhouses, provided that such devices are for personal use.
- 5. The storage, repair and charging activities associated with personal use in sleeping units and dwelling units of Group R-1 and R-2 occupancies.

**Committee Reason:** This proposal is correlates with the actions taken on F21-21 and F25-21. This proposal was felt necessary to address the fire hazards that activities associated with lithium ion or lithium metal batteries create. A fire safety and evacuation plan is critical. Each occupancy may need to be treated differently but this provides the general framework with appropriate exceptions. The modification provides an exemption for multifamily dwelling units to be consistent with existing exceptions for one and two family dwellings. (Vote: 13-1)

F28-21

# F29-21

Committee Action: As Submitted

**Committee Reason:** The proposal clarifies that the provisions for hazardous materials communication apply continuously during operation not just initially during the permitting stage. (Vote: 11-3)

F29-21

# F30-21

Committee Action: Disapproved

Committee Reason: There were several concerns with moving from Section 503.1.1 under the general section for fire apparatus access roads (Section 503.1). The current location is felt to be the right balance between water supply and access. With this movement maintenance requirements may be lost and the ability to use these provisions to negotiate for additional fire protection will be lost. This will also make it more difficult to get proper access from developers. Finally, as written, item 1.4 is unclear that the intention is only for solar farms and not for photovoltaics on buildings. (Vote: 13-1)

## F31-21

Committee Action: As Submitted

Committee Reason: This proposal appropriately provides the necessary reference to ASME A17.1/CSA B44 for the requirements for emergency or standby power selector switches that are required in a fire command center. (Vote: 12-2)

F31-21

### F32-21

Committee Action: As Submitted

**Committee Reason:** This proposal appropriately aligns the terminology for in-building communication systems with that used by the industry. Note that IBC Section 918.1 was editorially revised to add the term "system" to state "In-building emergency responder communication enhancement system." (Vote: 14-0)

F32-21

## F33-21

Committee Action: Disapproved

Committee Reason: It is understood that some flexibility is needed but these exceptions were felt to be excessively lenient. (Vote: 13-1)

F33-21

# F34-21

Committee Action: As Modified

#### **Committee Modification:**

TWO-WAY EMERGENCY RESPONDER COMMUNICATIONS SYSTEM. An infrastructure solution installed within a building to enhance the communications capabilities for first responders that utilizes solutions such as a signal booster, voting receiver, base station, or other technology capable of enhancing the radio frequency (RF) to ensure effective public safety communications. The standard industry term for these systems is an In-building Emergency Responder Communications Enhancement System (ERCES).

**Committee Reason:** The proposal was approved as it adds necessary definitions and an exception recognizing the lack of need for such systems in smaller buildings. The modification simply removes the definition "two-way emergency responder communications system" as the terminology was more appropriately revised to "emergency responder communications enhancement system (ERCES)" in proposal F32-21. (Vote: 10-4)

F34-21

# F35-21

Committee Action: Disapproved

**Committee Reason:** The language being added is focused upon what is allowed versus what is required. The provisions should be written as an exception. There was general concern for the increase in IFC scope by including these provisions. (Vote: 11-3)

F35-21

## F36-21

Committee Action: As Submitted

Committee Reason: The proposal adds necessary operational permits to address the long term use of such systems which will require ongoing inspection, testing and maintenance. It was noted that the terminology needs to be coordinated with F32-21. (Vote: 13-1)

F36-21

## F37-21

Committee Action: As Submitted

Committee Reason: The proposal correlates terminology with that typically used by industry regarding minimal signal strength for emergency responder communication enhancement systems. (Vote: 12-1)

F37-21

## F38-21

Committee Action: Disapproved

**Committee Reason:** There was concern with the concept addressed in Section 510.4.2.2.2 related to access to documentation as it may reveal proprietary information. It was noted that there are protections afforded for proprietary materials. (Vote: 10-3)

F38-21

# F39-21

Committee Action: As Modified

#### **Committee Modification:**

510.4.2.4 Signal booster requirements. If used, signal boosters shall meet the following requirements:

- 1. All signal booster components shall be contained in a National Electrical Manufacturer's Association (NEMA) 4-type waterproof NEMA Type 4 cabinet.
- 2. Battery systems used for the emergency power source shall be contained in a NEMA Type 3R or higher-rated cabinet.
- 3. Equipment shall have FCC or other radio licensing authority certification and be suitable for public safety use prior to installation.
- 4. Where a donor antenna exists, isolation shall be maintained between the donor antenna and all inside antennas to not less than 20dB greater than the system gain under all operating conditions.
- 5. Active RF-emitting devices used for in-building, two-way emergency responder communication coverage systems shall have built-in oscillation detection and control circuitry to reduce gain and maintain operation. When a signal booster detects oscillation, a supervisory signal shall be transmitted. In the event of uncorrectable oscillation, the system shall be permitted to shut down.
- 6. The installation of amplification systems or systems that operate on or provide the means to cause interference on any in-building, two-

way emergency responder communication coverage network shall be coordinated and approved by the fire code official and the frequency license holder(s).

**Committee Reason:** This proposal addresses a necessary concern for the need for a supervisory signal in the case of oscillations avoiding an automatic shutdown without warning. Adding the frequency license holder was seen as critical to makes sure the appropriate agencies are involved to protect the wider public safety network. The modification is a simple clean up to be consistent with NEMA cabinet terminology. (Vote: 14-0)

F39-21

### F40-21

Committee Action: As Submitted

Committee Reason: The proposal appropriately removes the term "donor antenna" which is not used by all systems and gives better clarification on the low battery capacity supervision criteria. (Vote: 14-0)

F40-21

## F41-21

Committee Action: As Submitted

Committee Reason: Approval was based upon the proponents reason statement. (Vote: 14-0)

F41-21

# F42-21

Committee Action: As Submitted

**Committee Reason:** The proposal appropriately clarifies the original intent which is to have the frequency license holder involved in the process. Note that "near-far effect" will be deleted from the end of the Section 510.4.2.8 editorially. (Vote: 14-0)

F42-21

# F43-21

Committee Action: As Submitted

**Committee Reason:** The proposal was approved based upon the consolidation of NFPA standards. NFPA 1221 has now been consolidated into NFPA 1225. (Vote: 13-1)

F43-21

# F44-21

Committee Action: As Submitted

Committee Reason: This section appropriately ensures the correct officials are involved when an Active RF emitting device is installed. (Vote: 14-0)

F44-21

## F45-21

Committee Action: As Submitted

**Committee Reason:** This proposal was approved allowing a performance based approach for testing specifically due to the rapidly evolving nature of this technology. Flexibility is necessary for testing methods. There was some concern that such wording could lead to inappropriate test methods. (Vote: 11-3)

F45-21

## F46-21

Committee Action: Disapproved

**Committee Reason:** The proposal was disapproved as it was felt that the reference to NFPA 1225, as approved by proposal F43-21, will provide the requirements for lightening protection through the TIA that was submitted to that standard. If it is placed into the code it will have to be removed later from Section 510 to remain consistent with the the standard. (Vote: 9-4)

F46-21

# F47-21

Committee Action: Disapproved

Committee Reason: Disapproval was based upon the concern that this needs to be addressed within the installation standard rather than in the IFC. There was also concern for how concealed spaces would be addressed. (Vote: 14-0)

F47-21

# F48-21

Committee Action: Disapproved

**Committee Reason:** There was concern that the fire code official should not be placed in position of enforcing federal regulations. Note that there was some agreement that the issue addressed by the proposal had some validity to ensure that regulations are being appropriately applied (Vote: 9-5)

F48-21

# F49-21

Committee Action: Disapproved

Committee Reason: This proposal was disapproved with concerns to the deletion of the permit requirements. (Vote: 12-1)

F49-21

### F50-21

Committee Action: Disapproved

**Committee Reason:** The proposal was disapproved due to concern with the reference to UL 2930 which is only an outline of investigation. This reference will be problematic for the healthcare industry. (Vote: 13-0)

F50-21

## F51-21

Committee Action: As Submitted

Committee Reason: The proposal appropriately correlates with the NFPA 70 for grounding. (Vote: 13-0)

F51-21

### F52-21

Committee Action: As Submitted

Committee Reason: Standard UL 142A is the proper standard for field installed tanks and will more closely align the IFC with NFPA 30. (Vote: 14-0)

F52-21

# F53-21 Part I

Committee Action: As Submitted

Committee Reason: Appropriately removes all ammonia specific requirements and correlates with the action taken on F53-21 Part II. (Vote: 14-0)

F53-21 Part I

## F53-21 Part II

This proposal includes published errata

https://cdn-web.iccsafe.org/wp-content/uploads/2021-GROUP-A-CONSOLIDATED-MONOGRAPH-UPDATES-Updated-4-02-2021-complete.pdf

Committee Action: As Submitted

Committee Reason: This proposal has been passed as submitted because ammonia is no longer applicable and a deletion is needed to clean up prior language that is no longer deemed necessary in the code based on the requirements in IIAR. (Vote: 11-0)

## F54-21 Part I

Committee Action: As Submitted

**Committee Reason:** The proposal correlates the IMC and IFC with the specific references for ammonia refrigeration. This proposal makes it clear ammonia is addressed by the referenced standards from IIAR. Note that the removal of ammonia specific requirements are addressed in proposal F53-21 Part I. (Vote: 14-0)

F54-21 Part I

## **F54-21 Part II**

This proposal includes published errata

https://cdn-web.iccsafe.org/wp-content/uploads/2021-GROUP-A-CONSOLIDATED-MONOGRAPH-UPDATES-Updated-4-02-2021-complete.pdf

Committee Action: As Submitted

Committee Reason: This proposal has passed as submitted because it clarifies mechanical refrigeration systems, other than ammonia, shall be in accordance with ASHRAE 15. (Vote: 11-0)

F54-21 Part II

## F55-21

Committee Action: As Modified

#### **Committee Modification:**

**608.1.1Refrigerants other than ammonia.** Where a refrigerant other than ammonia is used, refrigeration systems and the buildings in which such systems are installed shall be in accordance with ASHRAE 15. Refrigeration systems containing carbon dioxide as the refrigerant shall also comply with BSR/IIAR CO2.

ANSIBSR/IIAR CO2-2021 Safety Standard for Closed-Circuit Carbon Dioxide Refrigeration Systems

**Committee Reason:** Approval is based upon the proponents reason statement. The modification merely addresses the fact that the standards is now an ANSI approved standard. (Vote: 14-0)

F55-21

# F56-21

Committee Action: As Submitted

Committee Reason: The proposal was approved as it adds a reasonable exception for a common practice during repairs. (Vote: 14-0)

F56-21

#### F57-21 Part I

Committee Action: Disapproved

**Committee Reason:** The proposal was disapproved with concerns that it may actually increase the hazard versus decrease. In addition, there was concern that enforcement of these provisions would create issues with privacy infringement. The language as currently written is preferred. (Vote: 10-3)

F57-21 Part I

## F57-21 Part II

Committee Action: As Submitted

**Committee Reason:** The committee felt that adding maintenance requirements for dryer exhaust duct systems was appropriate and aligned with similar requirements recommended in the International Fire Code. (Vote 7-4)

F57-21 Part II

## F58-21

Committee Action: As Submitted

Committee Reason: The committee stated the reasons for approval were that it is just a rearrangement of existing code and it's a great pointer and useful for people that don't use the code all the time. (Vote: 10-4)

F58-21

# F59-21

Committee Action: As Modified

#### **Committee Modification:**

705.2.6 Testing of horizontal and vertical sliding fire doors. Horizontal and vertical sliding fire doors shall be inspected and tested annually to confirm proper operation and full closure. Records of inspections and testing shall be maintained.

705.2.6 Testing. Horizontal and vertical sliding and rolling *fire doors* shall be inspected and tested annually to confirm proper operation and full closure. Records of inspections and testing shall be maintained.

705.2.7Periodic inspection and testing of rolling fire doors. Rolling fire door assemblies shall be periodically inspected and tested in accordance with NFPA 80. Service personnel providing or conducting inspection and testing shall possess a valid certificate issued by an approved organization, or the fire door assembly manufacturer, for the type of system and work performed. Records of inspections and testing shall be maintained.

705.2.7 Periodic inspection and testing of rolling steel fire doors. Rolling steel fire doors shall be inspected and tested annually by a trained rolling steel fire door systems technician in accordance with the applicable provisions of NFPA 80. Records of inspections and testing shall be maintained.

**Committee Reason:** The committee stated that the reason for the approval for the modification is that it aligns the language with the standard that is currently referenced for training inspectors. The stated reason for the approval of the proposal was that the proposed language clearly identifies the inspection requirements for rolling fire doors consistent with NFPA 80. (Vote: 14-0)

## F60-21 Part I

Committee Action: As Submitted

Committee Reason: The committee stated that the reason for approval was that the proposal is correlating language and IBC Section 2603 has all the information necessary and there is no need to redirect people to Section 104.10 since it is known that it is there and additionally the action correlates with the decision that's already made being by the IBC FS committee unanimously on Part II. (Vote: 13-1)

F60-21 Part I

## F60-21 Part II

Committee Action: As Submitted

**Committee Reason:** The committee determined that the four prescriptive paths in this section are already allowed using section 104.11. The committee sees no issue with allowing different tests and standards for Foam plastic, special approval. The four different prescriptive paths need to be considered individually. The committee also prefers to reference chapter 1, section 104.11, Alternative materials, design, and methods of construction and equipment.

One of the committee members mentioned unintended consequences. In some instances, AHJ's use this section for products that pass the prescriptive tests, but they think it was not the same as the application, and they use this section to require a full-scale test. (Vote: 13-0)

F60-21 Part II

## F61-21

Committee Action: As Submitted

**Committee Reason:** The committee stated that the reason for approval was that it provides a good pointer and since they are already addressed in the chapter, the addition of the appropriate referenced standard to the table will ensure that they will be inspected, tested and maintained properly. (Vote: 14-0)

F61-21

# F62-21

Committee Action: As Modified

#### **Committee Modification:**

**903.2 Where required.** Approved automatic sprinkler systems in new buildings and structures shall be provided in the locations described in Sections 903.2.1 through 903.2.12.

**Exception:** Spaces or areas in telecommunications buildings used exclusively for telecommunications equipment, associated electrical power distribution equipment, batteries not required to have <u>fire suppression an automatic sprinkler system</u> by Section 1207 for energy storage systems and standby engines, provided that those spaces or areas are equipped throughout with an automatic smoke detection system in accordance with Section 907.2 and are separated from the remainder of the building by not less than 1-hour *fire barriers* constructed in accordance with Section 707 of the International Building Code or not less than 2-hour *horizontal assemblies* constructed in accordance with Section 711 of the International Building Code, or both.

**Committee Reason:** The committee stated that the reason for the approval of the modification was that it clarifies the proper terminology to correlate with the requirement by replacing the words fire suppression with automatic sprinkler system. The reason for the approval of the proposal

F62-21

### F63-21

Committee Action: Disapproved

**Committee Reason:** The committee stated that the reasons for disapproval were based on the issues discussed regarding occupancy classification and additionally the specific proposed requirement criteria of fire area. (Vote: 10-4)

F63-21

## F64-21

Committee Action: Disapproved

Committee Reason: The committee stated that the reasons for disapproval were the same as for F63-21. (Vote: 11-3)

F64-21

## F65-21

Committee Action: Disapproved

**Committee Reason:** The committee stated that the reasons for disapproval were the technical issues discussed with the way that it is written and the fact that there's no supporting data in the reason statement. Specifically, data that shows the fire incidents in these particular buildings as it is related to the cooking aspect and the relationship to other ignition causes including demonstration about how including sprinklers would actually mitigate injuries or fatalities in regard to the life safety aspect of adding the sprinklers. (Vote: 14-0)

F65-21

# F66-21

Committee Action: As Submitted

Committee Reason: The committee stated that the reason for approval was that this is the added protection that's needed for lithium ion batteries and it covers all the occupancies where they could be used and stored including Group M occupancies. (Vote: 14-0)

Staff Analysis: Note that several proposed sections refer to proposed Section 322 within proposal F25-21.

F66-21

# F67-21

Committee Action: As Submitted

Committee Reason: The committee stated that the reason for approval was that the sections proposed for deletion are unnecessary to be

F67-21

### F68-21

Committee Action: Disapproved

Committee Reason: The committee stated that the reason for disapproval was that this is a new code section and it has only been in a published code for about a couple months and it hasn't been applied yet as it was intended in the last code cycle. Additionally, it was stated that throughout the entire executive summary of the NFPA report that is referenced in the reason statement, it talks about the need for viable sprinkler protection with more research to be done and until that research is done that shows that sprinkler protection is not going to be effective, it should be remaining in the code. (Vote: 13-1)

F68-21

### F69-21

Committee Action: Disapproved

Committee Reason: The committee stated that the reasons for disapproval were that the proposal is scoped too large and the proposed definition includes very different types of uses of buildings and Group R occupancies are already covered under the sprinkler sections currently and could be enforced for that type. Additionally, it was noted that the cost increase for some of these buildings would be very significant. However it was acknowledged that there should be some type of protection, but the request was made to include informational data on the incidents that have occurred. (Vote: 12-2)

F69-21

## F70-21

Committee Action: As Submitted

**Committee Reason:** The committee stated that the reason for approval was that it eliminates redundant language but keeps the requirement. (Vote: 13-1)

F70-21

## F71-21

Committee Action: As Modified

**Committee Modification:** 

2021 International Fire Code

903.3.1.1.3 Lithium-lon or lithium metal batteries. Where sprinkler protection is <u>automatic sprinkler systems are</u> required by this code for areas containing lithium-ion or lithium metal batteries, the design of the system shall be based upon a series of fire tests conducted or witnessed and reported by an approved testing laboratory involving test scenarios that address the range of variables associated with the intended arrangement of the hazards to be protected.

2021 International Building Code

[F] 903.3.1.1.3 Lithium-ion or lithium metal batteries. Where sprinkler protection is automatic sprinkler systems are required by this code for areas containing lithium-ion or lithium metal batteries, the design of the system shall be based upon a series of fire tests conducted or witnessed and reported by an approved testing laboratory involving test scenarios that address the range of variables associated with the intended arrangement of the hazards to be protected.

**Committee Reason:** The committee stated that the reason for the approval of the modification was that it clarifies the intent by including the term automatic sprinkler systems. The stated reason for the approval of the proposal was that it adds the requirements for sprinkler protection needed for lithium batteries. (Vote: 14-0)

F71-21

### F72-21

Committee Action: Disapproved

Committee Reason: The committee stated that the reasons for disapproval were that during the last code cycle there was a very lengthy conversation and discussion regarding this requirement where it went to the floor and it went through the process and the members were able to speak. The past testimony about lowering it to 30 feet was regarding ladder access as most fire engines today per the NFPA standard carry 35-foot ladders which will reach 30 feet high and will reach a window. As noted, there is a need to stay at the current requirement until there is proof otherwise since it hasn't even been used yet. Additionally, there was concern about going lower below grade as it was brought up in the testimony and it was questioned why it's even being considered. (Vote: 9-5)

F72-21

## F73-21

Committee Action: Disapproved

Committee Reason: The committee stated that the reason for disapproval was that an exception already exists in the section charging text and all the other sections are subsections to that charging text. Additionally, it was noted that NFPA 13D systems are allowed for some structures that are not single family dwellings, which could be historic resources, and not having a bell that is going to tell you that there's a water flow going on inside is potentially going to damage those structures beyond repair. (Vote: 8-7)

F73-21

# F74-21

Committee Action: As Modified

#### **Committee Modification:**

#### 2021 International Fire Code

903.4.2 Alarms. An approved audible and visual device, located on the exterior of the building in an approved location, shall be connected to each automatic sprinkler system. Such sprinkler water flow alarm devices shall be activated by water flow equivalent to the flow of a single sprinkler of the smallest orifice size installed in the system. When the water flow switch is required by 903.4 to be supervised by a Fire Alarm Control Unit, the exterior audible and visual device shall be powered by the fire alarm control unit or fire alarm system. Where a fire alarm system is installed, actuation of the automatic sprinkler system shall actuate the building fire alarm system.

#### 2021 International Building Code

**[F] 903.4.2 Alarms.** An approved audible and visual device, located on the exterior of the building in an approved location, shall be connected to each *automatic sprinkler system*. Such sprinkler waterflow alarm devices shall be activated by water flow equivalent to the flow of a single sprinkler of the smallest orifice size installed in the system. When the water flow switch is required by 903.4 to be supervised by a Fire Alarm Control

<u>Unit.</u> The exterior audible and visual device shall be powered by the fire alarm control unit or fire alarm system. Where a fire alarm system is installed, actuation of the *automatic sprinkler system* shall actuate the building fire alarm system.

**Committee Reason:** The committee stated that reason for the approval of the modification is that it a good clarification that identifies when you have a water flow switch that this is required, and it does satisfy the issue about not wanting to require a fire alarm system. The stated reason for the approval of the proposal was that it is a good way to improve the response and that having the device monitored it will be known exactly when it's broken and it will be able to be fixed much sooner than during quarterly inspections. (Vote: 11-3)

F74-21

# F75-21 Part I

Committee Action: As Submitted

Committee Reason: The committee stated that the reason for approval was that the proposal updates the terminology for automatic sprinkler systems. (Vote: 14-0)

F75-21 Part I

## F75-21 Part II

Committee Action: As Submitted

Committee Reason: This is a necessary editorial revision being accomplished across all of the codes to standardize terminology. (11-0)

F75-21 Part II

## F76-21

Committee Action: As Modified

**Committee Modification:** 

2021 International Fire Code

**904.12 Hybrid** Fire Extinguishing Systems. Hybrid Fire Extinguishing Systems shall be <u>designed</u>, installed, maintained, periodically inspected, and tested in accordance with NFPA 770. Records of inspection and testing shall be maintained.

2021 International Building Code

**[F] 904.12 Hybrid <u>Fire Extinguishing Systems.</u>** Hybrid Fire Extinguishing Systems shall be <u>designed</u>, installed, maintained, periodically inspected, and tested in accordance with NFPA 770. Records of inspection and testing shall be maintained.

2021 International Fire Code

Add new definition as follows:

HYBRID FIRE EXTINGUISHING SYSTEM. A system which utilizes a combination of atomized water and inert gas to extinguish fire.

**Committee Reason:** The committee stated that the reason for the approval of the proposal with the modification was that it is an important addition to fire suppression systems with hybrid systems and it is expected to see expanded use and it provides a means to put it in the code and move forward along with the reason statement. (Vote: 14-0)

## F77-21

Committee Action: As Submitted

Committee Reason: The committee stated that the reason for approval was that maintaining the current requirement provides good guidance and the exception provides a jurisdiction the authority to accept alternate locations based on the individual unique situation. (Vote: 13-1)

F77-21

## F78-21

Committee Action: As Submitted

**Committee Reason:** The committee stated the reason for approval was that it makes sense not providing the standpipe hose connections in a townhouse as there is no practical place to provide them and this clarifies that standpipes are not required for tall townhouses. (Vote: 13-1)

F78-21

## F79-21

Committee Action: Disapproved

Committee Reason: The committee stated that the reason for disapproval was based on the action on F81-21. (Vote: 14-0)

F79-21

## F80-21

Committee Action: Disapproved

**Committee Reason:** The committee stated that the reason for disapproval was that the proposed language is cluttering up what is already written. Specifically that the proposed language of putting the hose connection now on the other side is unnecessary since it already clearly says if it's reachable from the adjacent floor area to the horizontal exit, then you don't need the other one. (Vote: 12-1)

F80-21

# F81-21

Committee Action: As Submitted

Committee Reason: The reason for approval was based on the proponent's reason statement. (Vote: 14-0)

F81-21

#### F82-21

Committee Action: As Submitted

Committee Reason: The committee stated that the reason for approval was that it is a simple clarification that will assist designers in identifying the transverse flue space. (Vote: 13-1)

F82-21

## F83-21

Committee Action: As Submitted

**Committee Reason:** The committee stated that the reason for approval was that it recognizes that the designs in this requirement are not currently used, outdated and should not be required. (Vote: 13-1)

F83-21

### F84-21

Committee Action: Disapproved

**Committee Reason:** The committee stated that the reasons for disapproval were that fire extinguishers increase property protection, redundancy is a critical concept of fire protection, fire extinguishers do no harm, they are cheap and the testimony from the opponents that provided the data on the effectiveness of fire extinguishers. (Vote: 13-1)

F84-21

# F85-21

Committee Action: As Submitted

Committee Reason: The committee stated that the reason for approval was that the proposal adds a missing cross reference. (Vote: 14-0)

F85-21

# F86-21

Committee Action: As Submitted

**Committee Reason:** The committee stated that the reasons for approval were that it addresses a situation not previously anticipated for Group A-5 occupancies, includes information contained in ICC 300 that has not previously been introduced and it adds reasonable exemptions for manual fire alarm boxes serving a Group A-5 outdoor bleacher type seating. Additionally, it was noted that is does not burden the end user with buying another standard when it could easily be put into the body of the code and it is probably already being done. (Vote: 9-5)

F86-21

#### F87-21

Committee Action: Disapproved

Committee Reason: The committee stated that the reason for disapproval was based on the lack of justification for the change in the requirement of an occupant load of 100 or more in Group A-2 occupancies. (Vote: 13-1)

F87-21

### F88-21

Committee Action: As Submitted

**Committee Reason:** The committee stated that the reason for approval was that the proposal ties up a lot of the issues that were looked at already with lithium batteries and brings in the detection part which is a very important aspect of the early detection in these types of fires. (Vote: 14-0)

Staff Analysis: Note that several proposed sections refer to proposed Section 321 within proposal F21-21.

F88-21

### F89-21

Committee Action: As Modified

**Committee Modification:** 

2021 International Fire Code

#### 907.2.11 Single- and multiple-station smoke alarms.

Listed single- and multiple-station smoke alarms complying with UL 217 shall be installed in accordance with Sections 907.2.11.1 through 907.2.11.7, NFPA 72 and the manufacturer's published instructions.

#### 907.2.11.3 Installation near cooking appliances.

Smoke alarms shall be installed a minimum of 10 ft (3.0 m) horizontally from a permanently installed cooking appliance.

**Exception:** Smoke alarms shall be permitted to be installed between a minimum of 6 ft. (1.8 m) and 10 ft. (3.0 m) horizontally from a permanently installed cooking appliance where necessary to comply with Section 907.2.11.1 or 907.2.11.2.

2021 International Building Code

#### [F] 907.2.11 Single- and multiple-station smoke alarms.

Listed single- and multiple-station smoke alarms complying with UL 217 shall be installed in accordance with Sections 907.2.11.1 through 907.2.11.7, NFPA 72 and the manufacturer's published instructions.

#### [F] 907.2.11.3 Installation near cooking appliances.

Smoke alarms shall be installed a minimum of 10 ft. (3.0 m) horizontally from a permanently installed cooking appliance.

**Exception:** Smoke alarms shall be permitted to be installed between-a minimum of 6 ft. (1.8 m) and 10 ft. (3.0 m) horizontally from a permanently installed cooking appliance where necessary to comply with Section 907.2.11.1 or 907.2.11.2.

2021 International Property Maintenance Code

#### [F]704.6 Single- and multiple-station smoke alarms.

Single- and multiple-station smoke alarms shall be installed in existing Group I-1 and R

occupancies in accordance with Sections 704.6.1 through 704.6.3.

[F]704.6.1.3Installation near cooking appliances.

Smoke alarms shall be installed a minimum of 10 ft. (3.0 m) horizontally from a permanently installed cooking appliance .

**Exception:** Smoke alarms shall be permitted to be installed between a minimum of 6 ft. (1.8 m) and 10 ft. (3.0 m) horizontally from a permanently installed cooking appliance where necessary to comply with Section 704.6.1 or 704.6.2.

**Committee Reason:** The committee stated that the reason for the approval of the modification and the proposal was that it aligns the codes: IFC, IBC, IPMC and the referenced standard, NFPA 72, and removes some outdated requirements. (Vote: 14-0)

F89-21

### F90-21

Committee Action: Disapproved

Committee Reason: The committee stated that the reason for the disapproval was that the fire tests have not been completed yet and thus not knowing what the ultimate requirement actually needs to be. (Vote: 10-4)

F90-21

## F91-21

Committee Action: Disapproved

Committee Reason: The committee stated that the reason for disapproval was that it does not address firewalls making separate buildings within a structure. (Vote: 14-0)

F91-21

## F92-21

Committee Action: As Submitted

**Committee Reason:** The committee stated that the reason for the approval was that the proposal increases the reduction of hazards for Group I-1 occupancies and they deserve to have low frequency alarms just as well as Groups R-1 and R-2. (Vote: 14-0)

F92-21

# F93-21

Committee Action: As Modified

#### **Committee Modification:**

#### 2021 International Fire Code

**907.10 Smoke alarm maintenance.** Smoke alarms shall be tested and maintained in accordance with the manufacturer's <del>published</del> instructions and this code.

907.10.1Original construction. Smoke alarms installed in compliance with the adopted building code at the time of their installation shall be permitted in accordance with 907.10.2.

907.10.1 Replacement. Smoke alarms shall be replaced where any of the following apply:

- 1. The smoke alarm fails to respond to operability tests-or does not function.
- 2. Where the smoke alarm exceeds 10 years from the date of manufacture marked on the unit, unless an earlier replacement is specified in the manufacturer's published instructions.

- 3. The smoke alarm end-of-life signal is sounded.
- 4. The smoke alarm date of manufacturer cannot be determined.

#### 2021 International Property Maintenance Code

[F] 704.7 Single- and multiple-station smoke alarms. Single- and multiple-station smoke alarms shall be tested and maintained in accordance with the manufacturer's published instructions and this code.

704.7.10 riginal construction. Single- and multiple-station smoke alarms installed in accordance with the adopted building code at the time of their installation shall be permitted in accordance with 704.7.2.

704.7.1 Replacement. Smoke alarms shall be replaced where any of the following apply:

- 1. The smoke alarm fails to respond to operability tests-or does not function.
- Where the smoke alarm exceeds 10 years from the date of manufacture marked on the unit, unless an earlier replacement is specified in the manufacturer's published instructions.
- 3. The smoke alarm end-of-life signal is sounded.
- 4. The smoke alarm date of manufacturer cannot be determined.

Committee Reason: The committee stated that the approval of the modification that removed the word "published" was consistent with the action on F89-21. The stated reason for the approval of the modification that deleted the original construction sections was that based on the testimony that since low frequency smoke alarms are becoming more commercially available; an existing smoke alarm would not have to be replaced with the same type if there is a superior or a new technology available. Additionally, it was noted by the committee regarding the approval of the modification that deleted the original construction sections was that it is not the intent for existing smoke alarms that are working to be replaced, rather it was when something fails it gets replaced which is addressed as one of the four conditions in the approved replacement section. The approval of the entire proposal was stated that it is a good clarification of the code and will simplify things. (Vote: 13-0)

F93-21

## F94-21

Committee Action: Disapproved

Committee Reason: The committee stated that the reason for disapproval was that there are quite a few issues that need to be worked out and they are not in support of replacing hardwired with complete battery backup. (Vote: 14-0)

F94-21

# F95-21

Committee Action: Disapproved

Committee Reason: The committee stated that the reason for disapproval was that it is going to be conflicting with the life safety code and other provisions within the ICC codes. (Vote: 13-1)

F95-21

# F96-21

Committee Action: As Submitted

**Committee Reason:** The committee stated that the reason for approval was based on the proponent's reason statement. Additionally, it was noted by the committee that the reference to these standards is specifically regarding the testing aspect of the requirement because the section states dampers shall be tested for function in their installed condition in accordance with those standards. (Vote: 14-0)

### F97-21

Committee Action: Disapproved

Committee Reason: The committee stated that the current language of the footnote is fine for the requirement in the table and it allows for easier enforcement of the code. (Vote: 11-3)

F97-21

## F98-21

Committee Action: As Submitted

**Committee Reason:** This proposal was approved based upon the actions taken on G41-21, F3-21 and F192-21. There was a minor concern about the verbiage used for the burning velocity of "not exceeding" and that "not less than" is more appropriate. (Vote: 14-0)

F98-21

## F99-21

Committee Action: As Submitted

Committee Reason: The committee stated that the reason for approval was that it is already a requirement in NFPA 14 and it is a good pointer to include for the inspectors as a clarification. (Vote: 14-0)

F99-21

# F100-21

Committee Action: As Submitted

**Committee Reason:** The committee stated that the reason for approval was that the proposal is necessary to reference the correct standard. (Vote: 14-0)

F100-21

# F101-21

Committee Action: Disapproved

Committee Reason: The committee stated that the reason for disapproval was that the changes add a lot more confusion not clarification and the existing language provides the necessary information and provides you with the right direction. (Vote: 14-0)

F101-21

#### F102-21

Committee Action: Disapproved

Committee Reason: The committee stated that the reason for disapproval was that it is proposing an all-encompassing requirement to put carbon monoxide alarms everywhere without statistical data for all these other occupancies than what is currently covered in the code. Additionally, it was noted that the expansion of carbon monoxide detection throughout all the different occupancies will have very little impact to the majority of the deaths due to carbon monoxide poisoning since 54% of carbon monoxide deaths occurred in a home and over 60% of carbon monoxide poisoning deaths were due to suicide. The current minimum requirements in the IFC and IBC are helping to continue to reduce these incidents, but the leading cause is in education of the general public, increasing the cost of construction requiring these devices is not going to provide much benefit as increasing education will. An apology was given to everybody who spoke about their losses and as stated it is an awful thing to happen but the incidents that were presented were in occupancies that, the overwhelming majority, are already required by the IBC and IFC to have these devices and in existing buildings which are also already required to have these devices. Several states, including New Jersey and Washington, were discussed by the committee as examples of jurisdictions that already had specific requirements in place. In closing it was stated that this proposal is a good start in a good direction, and the committee applauded the proponents that put the proposal together. (Vote: 12-0)

F102-21

## F103-21

Committee Action: Disapproved

Committee Reason: The committee stated that the reason for disapproval was that there is not anything wrong with the section and adding these extra definitions which are also talking about living spaces is just making it more confusing. (Vote: 14-0)

F103-21

## F104-21

Committee Action: As Submitted

**Committee Reason:** The committee stated that the reason for approval was that carbon monoxide levels really need to be measured in the area of human occupancy since that is what we're trying to determine and what initiates an alarm if there's a problem. Additionally, it was noted that it avoids a life safety issue that could be created by the substitution. (Vote: 13-0)

F104-21

# F105-21

Committee Action: As Submitted

**Committee Reason:** The committee stated that the reason for approval was that it only requires that a risk assessment be performed to determine if a mass notification system is needed. By providing this requirement, it will allow for ample consideration for the inclusion of such a system in facilities where small children and youth will be regularly present. Additionally, it was noted that this has already been put this in the code for colleges and universities, so it makes sense to provide it for younger children as well. (Vote: 13-0)

F105-21

# F106-21

Committee Action: As Submitted

**Committee Reason:** The committee stated that the reason for approval was that this is a housekeeping item to relocate maintenance provisions for fire escapes from Chapter 11 for existing building construction to Section 1032 for the maintenance of the means of egress. It was additionally noted that the new examination section that gives a performance characteristic to which they should be examined was a good addition based on actual experience with this issue. (Vote: 14-0)

F106-21

### F107-21 Part I

Committee Action: Disapproved

**Committee Reason:** The committee stated that the reason for disapproval was that the language "immediately discernible" is subjective and not enforceable language and internally illuminated exit signs are designed to last for years and a monthly inspection of these devices including the documentation is a significant labor effort. It was additionally noted that the preference was for the section requirements to be separated out into a list. (Vote: 13-0)

F107-21 Part I

## F107-21 Part II

Committee Action: Disapproved

**Committee Reason:** The proposal was disapproved because "immediately discernable" is vague. This is already addressed in Sections 1032.4 and 1013.1. This could be read to force a relocation of exit signs. (Vote: 13-0)

F107-21 Part II

# F108-21

Committee Action: As Modified

#### **Committee Modification:**

**1032.8 Inspection, testing and maintenance.** The inspection, testing and maintenance for two-way communication systems shall be in accordance with this code and NFPA 72, and shall not be conducted <u>not less</u> than annually or more frequently where required by the fire code official

**1032.8.1 Records.** Records of inspections, testing and maintenance shall be maintained on site in an approved cabinet at the command center or a location approved by the fire code official.

Committee Reason: The committee stated that the reason for the approval of the modification was that it allows the fire code official to approve the location based upon their recommendation and it is necessary in the instance where there is not a command center and it is not known where you could put it, so this gives the full discretion to the fire code official. The stated reason for the approval of the proposal was that it is already required for NFPA 72 systems where you have to keep it right there by the panel in a box. (Vote: 12-1)

F108-21

# F109-21

Committee Action: Disapproved

Committee Reason: The committee stated that the reason for disapproval was that it does not do anything to clarify the code. The suggestion was that if they do think it needs to be in the code and if their intent is to make sure that places that didn't have them need them then it belongs in Chapter 11. If they are thinking that it needs to be maintained than this language needs to be rewritten to say that those signs required in 1004.9 be maintained. (Vote: 12-0)

F109-21

## F110-21

Committee Action: Disapproved

**Committee Reason:** The committee stated that the reason for disapproval was that this language is necessary and the code already gives some discretion in the instance that occupant load is going to be exceeded and the fire code official needs to take into consideration the egress requirement as part of it. (Vote: 13-0)

F110-21

## F111-21

Committee Action: Disapproved

**Committee Reason:** This proposal was disapproved with several concerns. Generally, it was felt that the focus was on economic impact versus safety. The approach lacks flexibility and does not recognize concepts such as a fire watch. The list of items addressed seems limiting and may reduce the authority of the fire code official. It was suggested that perhaps a reference back to Section 112 would be more appropriate and perhaps the conditions in Section 1101.4.2 should be eliminated. (Vote: 13-1)

F111-21

## F112-21

Committee Action: Disapproved

Committee Reason: The proposal was disapproved based upon the action on F111-21. (Vote: 14-0)

F112-21

# F113-21

Committee Action: Disapproved

**Committee Reason:** This proposal was disapproved as E37-21 Part II offers a better approach more aligned with ASME A17.1/CSA B44. (Vote: 12-1)

F113-21

# F114-21

Committee Action: Withdrawn

### F115-21

Committee Action: Withdrawn

F115-21

# F116-21

Committee Action: Disapproved

**Committee Reason:** This proposal was disapproved for the same reasons as expressed in F102-21. It was encouraged for some instances in existing buildings to look beyond allowing simply battery operated alarms and potentially to require connection to building power. Additionally the proponent is encouraged to bring this proposal and F102-21 back during the public comment phase. (Vote: 12-0)

F116-21

## F117-21 Part I

This proposal includes published errata

https://cdn-web.iccsafe.org/wp-content/uploads/2021-GROUP-A-CONSOLIDATED-MONOGRAPH-UPDATES-Updated-4-02-2021-complete.pdf

Committee Action: Disapproved

**Committee Reason:** This proposal was disapproved as it was consistent with the action on Part II of the proposal. In addition, the wording "adopted building code" is confusing and the scope of Section 1104.1 appears to address already. (Vote: 14-0)

F117-21 Part I

## F117-21 Part II

Committee Action: Disapproved

**Committee Reason:** The committee disapproved this proposal as they felt the language did not match other I-codes (adopted building code vs. at the time of construction) and therefore caused confusion. Further, they felt the requirement should permit lower existing guard installations. Lastly, they felt that the new language seemed to require taller guards than previously allowed. (Vote: 10-1)

F117-21 Part II

# F118-21 Part I

Committee Action: Disapproved

Committee Reason: This proposal was disapproved based upon lack of clarity and concern that the building code may actually raise the height of the guard in some cases with the proposed exception. Generally, the exception seems confusing and what is trying to be accomplished is already addressed by the scoping statement in Section 1104.1. It was suggested that perhaps the section could simply be revised to require compliance with the building code at the time of construction. (Vote: 13-1)

### F118-21 Part II

Committee Action: As Submitted

Committee Reason: The committee agreed that this proposal aligns the guard and handrail requirements with other I-codes. Further, separating handrail requirements from guardrail requirements is appropriate.. (Vote: 11-0)

F118-21 Part II

## F119-21 Part I

Committee Action: Disapproved

Committee Reason: The proposal was disapproved with a concern that it would be too difficult for existing electrical systems to comply. (Vote: 13-0)

F119-21 Part I

### F119-21 Part II

Committee Action: Disapproved

Committee Reason: The proposal was disapproved. If this requirement is for just Group I-2, this needs to be in the text, not just in the title. The committee also asked if this was not sufficiently addressed in Section 2702.2.8 and 407.11 for Group I-2? (Vote: 8-6)

F119-21 Part II

# F120-21

Committee Action: As Submitted

Committee Reason: The proposal appropriately makes the unlatching and opening force requirements consistent with the IBC for new construction. (Vote: 9-3)

F120-21

# F121-21

Committee Action: As Submitted

**Committee Reason:** This new section requiring a failure mode effects analysis, early detection and a corrective action plan, where applicable, were seen as a necessary edition to Chapter 11 for energy storage systems built prior to the implementation of the 2018 IFC provisions. It was suggested that perhaps Section 1107.1.2 could be revised to address "where required" versus simply requiring the action plan to be submitted. (Vote: 14-0)

F121-21

#### F122-21

Committee Action: As Submitted

**Committee Reason:** This proposal was approved to ensure that energy storage systems whether under the purview of utilities is regulated no differently than other ESS installations. The hazards remain the same and there is particular concern for emergency responder safety. It should be noted that this is both applicable to public and private utilities. (Vote: 10-4)

F122-21

## F123-21

Committee Action: Disapproved

Committee Reason: The reference to NFPA 855 should more appropriately be located in Section 1207. Also, there was concern with the current lack of scope in NFPA 855 and the need for the fire code official to easily access the provisions within the IFC. (Vote: 14-0)

F123-21

### F124-21

Committee Action: Disapproved

Committee Reason: This exception is too broad in scope and would remove all regulation. Such an exception needs to be more surgically made within Section 1207 as applicable to each issue. (Vote: 14-0)

F124-21

# F125-21

Committee Action: Disapproved

Committee Reason: Generally full exemption from regulation from the IFC for ESS under control of a utility was felt to be inappropriate based upon losses such as in Surprise, Arizona. There was concern with the current form of the IEEE standard and also the lack of scope in NFPA 855. In addition the reference to NFPA 1620 appeared inappropriate as it is intended for use by the fire service and such a plan should not be prepared by other entities. (Vote: 14-0)

F125-21

# F126-21

Committee Action: As Submitted

**Committee Reason:** This proposal provided the appropriate clarification that the approval related to the mixed systems present within the fire area. (Vote: 13-0)

F126-21

#### F127-21

Committee Action: Disapproved

**Committee Reason:** The language in Section 1204.5 "any structure with a combustible wall or from" may cause confusion as it should simply refer to "a combustible wall or from." A structure could have some walls that are combustible and some that are non combustible. In addition there was concern that reference to a stationary generator standard for portable generators may cause confusion. (Vote: 13-1)

F127-21

## F128-21

Committee Action: As Submitted

Committee Reason: This proposal adds the necessary listing standard for BIPV to allow the exceptions in Section 1205. (Vote: 14-0)

F128-21

## F129-21

Committee Action: As Submitted

**Committee Reason:** This proposal appropriately clarifies the intent of the markings which is simply to provie under an eave and visible from grade to assist ladder placement for the fire department. A necessary listing standard used by industry has been added to replace the NFPA 70 reference. (Vote: 14-0)

F129-21

# F130-21

Committee Action: Withdrawn

F130-21

# F131-21

Committee Action: As Submitted

Committee Reason: This proposal was approved based upon the proponents reason statement. (Vote: 14-0)

F131-21

# F132-21

Committee Action: As Modified

**Committee Modification:** 

**1207.1.1Utilities and Industrial applications.** This section shall not apply to capacitors and capacitor equipment for electric utilities and industrial facilities where such equipment complies with section 10.1.4 of the NFPA 855 used in applications such as flexible ac transmission (FACTS) devices, filter capacitor banks, power factor correction, and standalone capacitor banks for voltage correction and stabilization.

**1207.1.2 Mobile ESS.** Mobile ESS deployed at an electric utility substation or generation facility for 90 days or less <u>in accordance with section 1.3.3</u> of NFPA 855 shall not add to the threshold values in Table 1207.1.1 for the stationary ESS installation if both of the following conditions apply:

- 1. The mobile ESS complies with Section 1207.10.
- 2. The mobile ESS is only being used during periods in which the facility's stationary ESS is being tested, repaired, retrofitted or replaced.

#### Add new standard(s) as follows:

NFPA 855-2020: Standard for the Installation of Stationary Energy Storage Systems

**Committee Reason:** This proposal was approved as it provides the necessary exceptions to capacitors associate with utilities and industrial facilities in certain applications and short term use of mobile ESS. The modification provide specific references to NFPA 855 to address duplicated language. There was some concern that the table was not consistent with NFPA 855. (Vote: 10-4)

F132-21

### F133-21

Committee Action: Disapproved

**Committee Reason:** This language would be more appropriate for Chapter 4 of the IFC as it relates to preplanning which is done after construction is complete. The proposal seems to be mixing preplanning with a hazardous mitigation analysis which is already required in Section 1207.1.4. It was suggested that perhaps the analysis in Section 1207.1.4 should be required in the construction documents or within the section addressing commissioning. (Vote: 13-0)

F133-21

## F134-21

Committee Action: As Modified

#### **Committee Modification:**

1207.1.3.1 Utilities applicability. Plans and specifications associated with ESS owned and operated by electric utilities shall comply with section 4.1.2.1.2 of NFPA 855 as a component of the electric grid that are considered critical infrastructure documents in accordance with the provisions of the North American Electric Reliability Corporation and other applicable governmental laws and regulations shall be made available to the fire code official for viewing based on the requirements of the applicable governmental laws and regulations.

#### Add new standard(s) as follows:

NFPA 855-2020: Standard for the Installation of Stationary Energy Storage Systems

Committee Reason: This proposal both clarifies when the fire code official can review plans and specifications as permitted by applicable laws and regulations and coordinates with NFPA 855. The modification provide specific references to NFPA 855 to address duplicated language. (Vote 14-0)

F134-21

### F135-21

Committee Action: As Submitted

**Committee Reason:** This proposal was approved as it represents a good coordination between fire code officials and industry. It cleans up the language for the hazard mitigation analysis to better understand when such analysis is required and what specifically needs to be addressed. An example includes the revision to use the term "fire area" within Section 1207.1.4 to better fit within the context of the IFC. (Vote: 14-0)

F135-21

## F136-21

Committee Action: As Submitted

**Committee Reason:** This proposal clarifies the appropriate duration of protection based upon the fact that the furnace test cannot be used as a criteria. Instead the focus is on the testing enclosure provided for UL 9540A for such pass/fail criteria. (Vote: 14-0)

F136-21

### F137-21

Committee Action: As Submitted

**Committee Reason:** The proposal provides a more enforceable time frame of 15 minutes versus specifying "immediately." The time frame of 15 minutes is consistent with other regulations. (Vote: 12-1)

F137-21

# F138-21

Committee Action: As Modified

#### **Committee Modification:**

**1207.2.1 Commissioning.** Commissioning of newly installed ESS and existing ESS that have been retrofitted, replaced or previously decommissioned and are returning to service shall be conducted prior to the ESS being placed in service in accordance with a commissioning plan that has been approved prior to initiating commissioning. The commissioning plan shall include the following:

- A narrative description of the activities that will be accomplished during each phase of commissioning, including the personnel intended to accomplish each of the activities.
- A listing of the specific ESS and associated components, controls and safety-related devices to be tested, a description of the tests to be performed and the functions to be tested.
- 3. Conditions under which all testing will be performed, which are representative of the conditions during normal operation of the system.
- 4. Documentation of the owner's project requirements and the basis of design necessary to understand the installation and operation of the FSS.
- 5. Verification that required equipment and systems are installed in accordance with the approved plans and specifications.
- 6. Integrated testing for all fire and safety systems.
- 7. Testing for any required thermal management, ventilation or exhaust systems associated with the ESS installation.
- 8. Preparation and delivery of operation and maintenance documentation.
- 9. Training of facility operating and maintenance staff.

- 10. Identification and documentation of the requirements for maintaining system performance to meet the original design intent during the operation phase.
- 11. Identification and documentation of personnel who are qualified to service, maintain and decommission the ESS, and respond to incidents involving the ESS, including documentation that such service has been contracted for.
- 12. A decommissioning plan for removing the ESS from service, and from the facility in which it is located. The plan shall include details on providing a safe, orderly shutdown of energy storage and safety systems with notification to the code officials prior to the actual decommissioning of the system. The decommissioning plan shall include contingencies for removing an intact operational ESS from service, and for removing an ESS from service that has been damaged by a fire or other event.

**Exceptions:** Commissioning shall not be required for lead-acid and nickel-cadmium battery systems at facilities under the exclusive control of communications utilities that comply with NFPA 76 and operate at less than 50 VAC and 60 VDC. A decommissioning plan shall be provided and maintained where required by the fire code official.

- 1. Lead-acid and nickel-cadmium battery systems less than 50 V ac, 60 V dc that are in telecommunications facilities for installations of communications equipment under the exclusive control of communications utilities and located outdoors or in building spaces or walk-in units used exclusively for such installations that are in compliance with NFPA 76 shall be permitted to have a commissioning plan in compliance with recognized industry practices in lieu of complying with Section 1207.2.1.
- 2. Lead-acid and nickel-cadmium battery systems that are designed in accordance with IEEE G2, used for dc power for control of substations and control or safe shutdown of generating stations under the exclusive control of the electric utilities, and located in building spaces or walk-in units used exclusively for such installations shall be permitted to have a commissioning plan in compliance with applicable governmental laws and regulations in lieu of developing a commissioning plan in accordance with Section 1207.2.1.

IEEEC2-2017 National Electrical Safety Code(R) (NESC(R))

Committee Reason: Provides the necessary exceptions to commissioning for lead-acid and nickel-cadmium battery systems in certain applications and provides consistency with NFPA 855. The modification removes an unnecessary standard reference to IEEE C2. (Vote: 12-2)

F138-21

## F139-21

Committee Action: Disapproved

**Committee Reason:** Although it is important to allow access to the fire code official to this documentation the additional language was seen as unnecessary and is unclear how this may be accomplished. Will keys for access or other methods of access be required? If the proposal is ultimately approved it was noted that the term "approved" should be italicized. (Vote: 8-5)

F139-21

# F140-21

Committee Action: As Modified

#### **Committee Modification:**

1207.3.1 Energy storage system listings. ESS shall be listed in accordance with UL 9540.

#### **Exceptions:**

- Lead-acid and nickel-cadmium battery systems less than 50 V ac, 60 V dc in telecommunications facilities for installations of communications equipment under the exclusive control of communications utilities located outdoors or in building spaces used exclusively for such installations that are in compliance with NFPA 76.
- Lead-acid and nickel-cadmium battery systems that are designed in accordance with IEEE G2, used for dc power for control of substations and control or safe shutdown of generating stations under the exclusive control of the electric utility, and located outdoors or in building spaces used exclusively for such installations.

3. Lead-acid battery systems in uninterruptable power supplies listed and labeled in accordance with UL 1778 and utilized for standby power applications.

#### IEEEC2-2017 National Electrical Safety Code(R) (NESC(R))

**Committee Reason:** The proposal was approved to be consistent with the previous action on F138-21. This includes both the need to address exceptions for certain battery technologies and also the removal of IEEE C2 as the modification addresses. There is concern that fire code officials should not have to familiar with IEEE C2. (Vote: 12-1)

F140-21

#### F141-21

Committee Action: As Modified

#### **Committee Modification:**

**1207.3.7.1 Retrofitting lead acid and nickel cadmium.** Changing out or retrofitting of lead-acid and nickel-cadmium batteries with other lead-acid and nickel-cadmium batteries in the following applications shall be considered repairs where there is no increase in system size or energy capacity greater than 10 percent of the original design

- 1. At facilities under the exclusive control of communications utilities that comply with NFPA 76 and operate at less than 50 VAC and 60 VDC.
- Battery systems designed in accordance with IEEE C2, used for dc power for control of substations and control or safe shutdown of
  generating stations under the exclusive control of the electric utility, and located outdoors or in building spaces used exclusively for such
  installations.
- 3. Batteries in uninterruptible power supplies listed and labeled in accordance with UL 1778 and used for standby power applications only.

#### IEEEC2-2017 National Electrical Safety Code(R) (NESC(R))

Committee Reason: This proposal appropriately clarifies what is considered a repair and not viewed as a new installations. The modification is consistent with the actions taken on F138-21 and F140-21 to remove the reference to IEEE C2. (Vote: 13-1)

F141-21

### F142-21

Committee Action: As Submitted

Committee Reason: This proposal was approved based upon the proponents reason statement. (Vote: 14-0)

F142-21

# F143-21

Committee Action: As Modified

#### **Committee Modification:**

**1207.5.1 Size and separation.** Electrochemical ESS shall be segregated into groups not exceeding 50 kWh (180 megajoules). Each group shall be separated a minimum of 3 feet (914 mm) from other groups and from walls in the storage room or area. The storage arrangements shall comply with Chapter 10.

#### **Exceptions:**

- 1. Lead-acid and nickel-cadmium battery systems in facilities under the exclusive control of communications utilities and operating at less than 50 VAC and 60 VDC in accordance with NFPA 76.
- Lead-acid and nickel cadmium systems that are designed in accordance with IEEE G2, used for dc power for control of substations and
  control or safe shutdown of generating stations under the exclusive control of the electric utility, and located outdoors or in building spaces
  used exclusively for such installations.
- 3. Lead-acid battery systems in uninterruptable power supplies listed and labeled in accordance with UL 1778, utilized for standby power applications, and limited to not more than 10% of the floor area on the floor on which the ESS is located.
- The fire code official is authorized to approve larger capacities or smaller separation distances based on large-scale fire testing complying with Section 1207.1.5.

#### IEEE C2-2017 National Electrical Safety Code(R) (NESC(R))

Committee Reason: The proposal was approved based upon the need for consistency with NFPA 855 and providing appropriate technology specific exceptions. The modifications clarify that the list is actually a list of exceptions and also to remove IEEE C2 consistent with modifications made to F138-21, F140-21 and F141-21. (Vote: 14-0)

F143-21

### F144-21

Committee Action: As Modified

#### **Committee Modification:**

**1207.5.3 Elevation.** Electrochemical ESS shall not be located in the following areas:

- 1. Where the floor is located more than 75 feet (22 860 mm) above the lowest level of fire department vehicle access.
- 2. Where the floor is located below the lowest level of exit discharge.

#### **Exceptions:**

- Lead-acid and nickel-cadmium battery systems less than 50 VAC and 60 VDC installed in facilities under the exclusive control of communications utilities in accordance with NFPA 76.
- 2. Lead-acid and nickel cadmium systems that are designed in accordance with IEEE C2, used for dc power for control of substations and control and safe shutdown of generating stations under the exclusive control of the electric utility, and located outdoors or in building spaces used exclusively for such installations.
- 3. Lead-acid battery systems in uninterruptable power supplies listed and labeled in accordance with UL 1778, utilized for standby power applications, which is limited to not more than 10% of the floor area on the floor on which the ESS is located.
- 4. Where approved, installations shall be permitted in underground vaults complying with NFPA 70, Article 450, Part III.
- 5. Where approved by the fire code official, installations shall be permitted on higher and lower floors.

#### IEEE C2-2017 National Electrical Safety Gode(R) (NESC(R))

**Committee Reason:** This proposal was approved based upon consistency with NFPA 855 and recognizing battery technology specific exceptions. The modification removes the reference to IEEE C2 consistent with the actions on F138-21, F140-21, F141-21 and F143-21. (Vote: 13-0)

F144-21

# F145-21

Committee Action: As Modified

#### **Committee Modification:**

**1207.5.4.1 System status.** Lead-acid and nickel-cadmium battery systems that are designed in accordance with IEEE C2, used for dc power for control of substations and control or safe shutdown of generating stations under the exclusive control of the electric utility, and located outdoors or in building spaces used exclusively for such installations shall be allowed to use the process control system to monitor the smoke or radiant energy—sensing fire detectors required in Section 1207.5.4.

IEEEC2-2017National Electrical Safety Code(R) (NESC(R))

Committee Reason: This proposal was approved and modified based upon past actions on F138-21, F140-21, F141-21, F143-21 and F144-21. (Vote: 14-0)

F145-21

### F146-21

Committee Action: As Modified

#### **Committee Modification:**

**1207.5.5 Fire suppression systems.** Rooms and areas within buildings and walk-in units containing electrochemical ESS shall be protected by an automatic fire suppression system designed and installed in accordance with one of the following:

- 1. Automatic sprinkler systems for ESS units (groups) with a maximum stored energy capacity of 50 kWh, as described in Section 1207.5.1, shall be designed with a minimum density of 0.3 gpm/ft² (1.1 l/min) based over the area of the room or 2500 ft² (232 m²) design area, whichever is smaller, unless a lower density is approved based upon large-scale fire testing in accordance with Section 1207.1.5.
- Automatic sprinkler systems for ESS units (groups) exceeding 50 kWh shall use a density based on large-scale fire testing complying with Section 1207.1.5.
- 3. The following alternative automatic fire-extinguishing systems designed and installed in accordance with Section 904, provided that the installation is approved by the fire code official based on large-scale fire testing complying with Section 1207.1.5:
  - 3.1. NFPA 12, Standard on Carbon Dioxide Extinguishing Systems.
  - 3.2. NFPA 15, Standard for Water Spray Fixed Systems for Fire Protection.
  - 3.3. NFPA 750, Standard on Water Mist Fire Protection Systems.
  - 3.4. NFPA 2001, Standard on Clean Agent Fire-Extinguishing Systems.
  - 3.5. NFPA 2010, Standard for Fixed Aerosol Fire-Extinguishing Systems.

#### **Exceptions:**

- 1. Fire suppression systems for lead-acid and nickel-cadmium battery systems at facilities under the exclusive control of communications utilities that operate at less than 50 VAC and 60 VDC shall be provided where required by NFPA 76.
- 2. Lead-acid and nickel cadmium systems that are designed in accordance with IEEE C2, used for dc power for control of substations and control or safe shutdown of generating stations under the exclusive control of the electric utility, and located outdoors or in building spaces used exclusively for such installations shall not be required to have a fire suppression system installed.
- Lead-acid battery systems in uninterruptable power supplies listed and labeled in accordance with UL 1778, utilized for standby power
  applications, which is limited to not more than 10% of the floor area on the floor on which the ESS is located shall not be required to have
  a fire suppression system.

#### Delete without substitution:

IEEEC2-2017 National Electrical Safety Code(R) (NESC(R))

**Committee Reason:** This proposal was approved and modified based upon past actions on F138-21, F140-21, F141-21, F143-21, F144-21 and F145-21. In addition, it provides the scoping of the criteria for automatic sprinkler protection and focuses on the specific room or area versus fire area. (Vote: 14-0)

#### F147-21

Committee Action: As Submitted

Committee Reason: This proposal appropriately captures new ESS technologies. (Vote: 13-1)

F147-21

## F148-21

Committee Action: As Submitted

Committee Reason: This proposal was approved as it coordinates with the same allowance within NFPA 855. (Vote: 14-0)

F148-21

### F149-21

Committee Action: Disapproved

**Committee Reason:** Natural ventilation is already an option as it simply asks for an exhaust ventilation currently. Natural ventilation is one way to provide exhaust ventilation where demonstrated to work. There is some concern that relying on natural ventilation can be more problematic. Section 1207.6.1.2 provides a revision to the title but not the code and may need further revising. (Vote: 14-0)

F149-21

## F150-21

Committee Action: Disapproved

**Committee Reason:** The proposal is based upon a misunderstanding of the application of NFPA 72. Proprietary monitoring is allowed which would permit either onsite or off site supervision by the utilities or telecommunication companies. It was suggested that perhaps the reference to on-site location should be deleted based upon the confusion it adds with those terms. (Vote: 14-0)

F150-21

# F151-21

Committee Action: As Modified

#### **Committee Modification:**

**1207.6.3 Explosion control.** Where required by Table 1207.6 or elsewhere in this code, explosion control complying with Section 911 shall be provided for rooms, areas ,ESS cabinets or ESS walk-in units containing electrochemical ESS technologies.

#### **Exceptions:**

1. Where approved, explosion control is permitted to be waived by the fire code official based on large-scale fire testing complying with

Section 1207.1.5 that demonstrates that flammable gases are not liberated from electrochemical ESS cells or modules .

- 2. Where *approved*, explosion control is permitted to be waived by the *fire code official* based on documentation provided in accordance with Section 104.7 that demonstrates that the electrochemical ESS technology to be used does not have the potential to release flammable gas concentrations in excess of 25 percent of the LFL anywhere in the room, area, walk-in unit or structure under thermal runaway or other fault conditions.
- 3. Where approved, ESS cabinets that have no debris, shrapnel, or enclosure pieces ejected during large scale fire testing complying with Section 1207.1.5 shall be permitted in lieu of providing explosion control complying with Section 911.
- 4. Explosion control is not required for lead-acid and nickel cadmium battery systems less than 50 V ac, 60 V dc in telecommunication facilities under the exclusive control of communications utilities located in building spaces or walk-in units used exclusively for such installations.
- 5. Explosion control is not required for lead-acid and nickel cadmium systems designed in accordance with IEEE C2, used for dc power for control of substations and control or safe shutdown of generating stations under the exclusive control of the electric utility located in building spaces or walk-in units used exclusively for such installations.
- 6. Explosion control is not required for lead-acid battery systems in uninterruptable power supplies listed and labeled in accordance with UL 1778, utilized for standby power applications, and housed in a single cabinet in a single fire area in buildings or walk-in units.

#### IEEEC2-2017 National Electrical Safety Code

Committee Reason: This proposal was approved and modified based upon past actions on F138-21, F140-21, F141-21, F143-21, F144-21, F145-21 and F146-21. (Vote: 14-0)

F151-21

### F152-21

Committee Action: As Modified

#### **Committee Modification:**

**1207.10.1 Charging and storage.** For the purpose of Section 1207.10, charging and storage covers the operation where mobile ESS are charged and stored so they are ready for deployment to another site, and where they are charged and stored after a deployment.

**Exception:** Mobile ESS used to temporarily provide power to lead-acid and nickel cadmium systems that are designed in accordance with IEEE G2, used for dc power for control of substations and control or safe shutdown of generating stations under the exclusive control of the electric utility, and located outdoors or in building spaces used exclusively for such installations.

**1207.10.2 Deployment.** For the purpose of Section 1207.10, deployment covers operations where mobile ESS are located at a site other than the charging and storage site and are being used to provide power.

**Exception:** Mobile ESS used to temporarily provide power to lead-acid and nickel cadmium systems that are designed in accordance with IEEE C2, used for dc power for control of substations and control or safe shutdown of generating stations under the exclusive control of the electric utility, and located outdoors or in building spaces used exclusively for such installations.

#### IEEE C2-2017 National Electrical Safety Code

Committee Reason: This proposal was approved and modified based upon past actions on F138-21, F140-21, F141-21, F143-21, F144-21, F145-21, F146-21 and F151-21. (Vote: 14-0)

F152-21

# F153-21

Committee Action: As Submitted

**Committee Reason:** This proposal was approved as it aligns with the IRC provisions. There was some concern on Item 4 of Section 1207.11.3 regarding the need for approval from the Fire Code Official. However that was not seen as necessary by the committee and had been heavily

F153-21

### F154-21

Committee Action: As Submitted

**Committee Reason:** This proposal was approved based upon the revision from "detector" to "alarm" which is more technically correct. The proponent is encouraged to address the issue of interconnection during public comment. (Vote: 11-3)

F154-21

### F155-21

Committee Action: As Submitted

Committee Reason: This proposal provides much needed options for impact protection. There was some concern that the solutions provided are still too costly. (Vote: 12-2)

F155-21

## F156-21

Committee Action: Disapproved

Committee Reason: The proposal was disapproved as the delivery hose is regulated by the DOT versus the IFC. (Vote: 14-0)

F156-21

# F157-21

Committee Action: Disapproved

**Committee Reason:** This proposal was disapproved as Section 2310.4 is intended for transfer activities not for fueling and was not intended as ondemand mobile fueling. (Vote: 13-0)

F157-21

# F158-21

Committee Action: As Submitted

**Committee Reason:** The proposal was approved as currently the code is silent and enforcement of portable spray booths operations is difficult. The use of portable spray booths is becoming quite prevent and fire code officials need a tool to address. Note that the provisions for limited spray space would allow many smaller operations without further regulation. The key is not allowing portable spray booths to replace permanent code compliant spray booths. NFPA 33 task group is still reviewing this issue as well. (Vote: 14-0)

### F159-21

Committee Action: As Submitted

Committee Reason: This proposal appropriately provides the ability to use the concept of limited finishing workstations through a direct reference to NFPA 33. This is a defined concept and the requirements are found in Section 14.3 of NFPA 33. (Vote: 14-0)

F159-21

## F160-21

Committee Action: As Submitted

Committee Reason: This proposal was approved as it keeps the IFC consistent with NFPA 33. (Vote: 14-0)

F160-21

## F161-21

Committee Action: As Submitted

**Committee Reason:** This proposal was approved as it keeps the provisions for glass panels associated with lighting for spray finishing operations consistent with NFPA 33. (Vote: 14-0)

F161-21

## F162-21

Committee Action: As Submitted

Committee Reason: This proposal appropriately aligns quantity limits in a single fabrication area with NFPA 418. (Vote: 14-0)

F162-21

# F163-21

Committee Action: As Submitted

**Committee Reason:** The committee stated that the reason for approval was that based on when these things that go bad, having a definition of inflatable amusement devices and then the requirements that help with that, it is certainly a welcome change. (Vote: 14-0)

F163-21

# F164-21

Committee Action: As Modified

#### **Committee Modification:**

**105.5.49 Temporary membrane structures, special event structures and tents.** An operational permit is required to operate an air-supported temporary membrane structure, a temporary *special event structure* or a tent having an area in excess of 400 square feet (37 m<sup>2</sup>).

#### **Exceptions:**

- 1. Tents used exclusively for recreational camping purposes.
- 2. Funeral tents and curtains, or Tents, curtains and extensions attached thereto, when used for funeral services.
- 3. Tents open on all sides, which comply with all of the following:
  - 3.1 Individual tents having a maximum size of 700 square feet (65 m<sup>2</sup>).
  - 3.2 The aggregate area of multiple tents placed side by side without a fire break clearance of not less than 12 feet (3658 mm) shall not exceed 700 square feet (65 m²) total.
  - 3.3 A minimum clearance of 12 feet (3658 mm) to structures and other tents shall be provided.

**Committee Reason:** The committee stated that the approval of the modification was that the change of the language makes it easier to understand and, as one of the proponents explained, it is more direct to what they're trying to explain. The stated reason for the approval of the proposal was it removes redundant language and clarifies terminology in a necessary cleanup of this section. (Vote: 14-0)

F164-21

### F165-21

Committee Action: As Submitted

Committee Reason: The committee stated that the reasons for approval were that this will improve the anchorage of tents and membrane structures and as a code official, calling out the water barrels as being prohibited really is necessary otherwise the presumption is you know that it's equivalent in terms of its anchoring capacity. Additionally, it was noted that in reviewing some of the manufacturers specifications, they don't necessarily say exactly how to anchor them, they just say they shall be anchored and this addresses specifically how we don't want them to be anchored. (Vote: 14-0)

F165-21

## F166-21

Committee Action: Disapproved

Committee Reason: The committee stated that the reason for disapproval was that tying this to a California Code of Regulation is probably not a good idea as there is an active effort for it to be removed from Title 19. If the intent is to use those provisions, they need to spell out the requirements and not use the CCR, which was stated to be less restrictive than NFPA 701. Additionally, it was noted that it is it unnecessary to say Test 1 or Test 2 because it is going to be within the NFPA 701 standard. (Vote: 14-0)

F166-21

## F167-21

Committee Action: As Submitted

Committee Reason: The committee stated that the reason for approval was that it provides more clarification as well as make it a little clearer for

the inspector out in the field when they go out and perform inspections. It was additionally noted that the way the language is written somebody could be overzealous and ask when the flame retardant was last applied to the plastic material, which was suggested as a cleanup for public comment. (Vote: 14-0)

F167-21

## F168-21

Committee Action: As Submitted

**Committee Reason:** The committee stated that the reason for approval was that based on experience with festivals and the separation requirements for cooking tents, the rework of calling out specifically cooking tents with the regulations associated with that, is a good cleanup of the requirements. (Vote: 14-0)

F168-21

## F169-21

Committee Action: Disapproved

Committee Reason: The committee stated that the reason for disapproval was that it is too broadly scoped in the new language and needs to address all the issues that were talked about regarding equipment batteries and appliance batteries awaiting recycling. (Vote: 14-0)

F169-21

# F170-21

Committee Action: Disapproved

Committee Reason: The committee stated that the reason for disapproval was that if you have a wall that does not face an access road, but the opposite of it does, then you don't have to put the doors in. It is taking something out that is going to make it much more difficult and it doesn't seem like there's a conflict in the current language. Additionally, it was noted that the original code language says where it does not face an access road and the concern is that code officials who are going to look at these buildings and then say you do have to put in access roads. (Vote: 10-4)

F170-21

# F171-21

Committee Action: Disapproved

Committee Reason: The committee stated that the reason for disapproval was that the way it is written it will be misinterpreted that you can use stickers only and it will allow storage to be pushed back into the transverse flue space. It was additionally noted that currently there is no requirement for any mechanical means on the transverse side so if they want to use stickers they could but that's the option for the code official to decide. It is not necessary to put this option into the code when there is no requirement to protect the transverse side with mechanical means. (Vote: 14-0)

F171-21

#### F172-21

Committee Action: As Submitted

Committee Reason: This reorganization makes no technical changes and will make the chapter more user friendly. (Vote: 13-0)

F172-21

### F173-21

Committee Action: Disapproved

Committee Reason: This proposal was disapproved for a number of reasons. There was concern that NFPA 1620 which is a pre-planning standard for the fire service was being inappropriately applied for site planning. It is feared that such equipment may be the source of unnecessary false alarms. The revisions to existing definitions may cause confusion in applying the code and were not intended for temporary equipment. There is subjective language found throughout the proposal such as the need to determine where devices and sensors must be placed based upon the level of combustibility. Finally, the proposal will simply be an added burden on the fire department for equipment that is not required but is simply optional. Such responsibility should be with the owner. It was suggested that if this concept were to be addressed an appendix may be a better location. (Vote: 14-0)

F173-21

## F174-21

Committee Action: As Submitted

**Committee Reason:** The proposal was approved as it addresses the concern that the risk from exposed floors during construction was low and provides a more practical approach. There was some concern that the term "floor levels" may be confusing in this application. Additionally, the exception, as written, may go further than anticipated in terms of scope of application. (Vote: 9-4)

F174-21

# F175-21

Committee Action: Disapproved

**Committee Reason:** This proposal was disapproved as the increase in scope was viewed not within the original intent of the provisions. There was a concern that the increased scope would allow this concept in buildings containing non ambulatory patients. This proposal as written would not limit health care laboratories to Group I-2 occupancies. In addition, it was felt that clinical laboratories need to be defined. Finally, it was noted that the broadening of this scope was turned down in 2018. (Vote: 13-1)

Staff Analysis: This proposal addresses requirements in a different or contradicting manner to those found in Code Change F176-21. The committee

is urged to make their intentions clear with their actions on these proposals.

F175-21

# F176-21

Committee Action: Disapproved

Committee Reason: The proposal was disapproved as this method of regulating laboratories is necessary for high-rise university laboratories and should not be deleted. (Vote: 13-1)

**Staff Analysis:** This proposal addresses requirements in a different or contradicting manner to those found in Code Change F175-21. The committee is urged to make their intentions clear with their actions on these proposals.

F176-21

#### F177-21

Committee Action: As Modified

#### **Committee Modification:**

105.5.39 Indoor plant cultivation. An operational permit is required for plant cultivation where a carbon dioxide monoxide (CO<sub>2</sub>) enriched environment is created.

**3901.1 Scope.** Facilities where plant processing <u>and solvent based extraction are conducted</u>; including <u>but not limited to, cultivation</u> and <del>other related activities; or where either</del> pre-extraction or post-extraction <del>are conducted</del> shall comply with this chapter and the *International Building Code*. The use, storage, transfilling and handling of hazardous materials in these facilities shall comply with this chapter, other applicable provisions of this code and the *International Building Code*.

Exception: Greenhouses in compliance with Section 3112 of the International Building Code not utilizing carbon dioxide enrichment.

**Committee Reason:** This proposal was approved as it addresses fire hazards from improperly listed lighting. The proposal also appropriately recognizes the need to regulate cultivation and associated generation of carbon dioxide atmospheres. The modifications is intended to clarify that Chapter 39 it is only regulating solvent based extraction versus all types of extraction processes. Additionally, some minor technical edits such as changing Carbon Monoxide to Carbon Dioxide were made. (Vote: 14-0)

F177-21

## F178-21

Committee Action: As Modified

#### **Committee Modification:**

**3901.2 Existing buildings or facilities.** Existing buildings or facilities used for the processing and or extraction of plant oils using solvents shall comply with this chapter. Existing extraction processes where the medium of extraction is changed to include the use of solvents shall comply with this chapter.

**Committee Reason:** This proposal clarifies the scope to existing operations to include processing and extraction but only those extraction processes including solvents. The modification simply clarifies that the provisions apply not based upon a condition of having both processing and extraction occurring but instead where either of these activities are occurring. (Vote: 9-4)

F178-21

# F179-21

Committee Action: Disapproved

Committee Reason: Though the IFC does not regulate the construction of one and two family dwellings scoped to the IRC operational activities relative to hazardous materials would still be applicable. Adding the reference to the IRC in this location was felt to cause confusion. (Vote: 13-0)

### F180-21

Committee Action: As Modified

#### **Committee Modification:**

**3905.3.1 Extraction processes using flammable** gases or combustible liquids or gases. Continuous mechanical exhaust ventilation shall provide be provided where extraction processes use flammable or combustible liquids or gases. The mechanical exhaust ventilation shall provide a minimum airflow rate of not less than 5 cfm/ft2 (0.0038 m3/(s\*m2)) of floor area to prevent an accumulation of flammable vapors from exceeding 25 percent of the lower explosive limit (LEL). Recirculation of such air is prohibited.

#### Exception:

Where the *registered design professional* demonstrates that an engineered mechanical exhaust ventilation system design will prevent the maximum concentration of contaminants from exceeding 25% of the LEL, the minimum required rate of exhaust shall be reduced in accordance with such engineered system design.

**3905.3.2 Extraction processes using compressed asphyxiant or inert gases.** Continuous mechanical exhaust ventilation shall be provided where extraction processes use compressed asphyxiant or inert gases. Mechanical exhaust ventilation shall be provided in accordance with Section 5307.2. Recirculation of such air is prohibited.

**3905.3.3 Post-extraction processes using flammable or combustible liquids or gases.** Where flammable liquids, combustible liquids headed heated above their flashpoint, or flammable gases are used in post-extraction processing the room or area shall be provided with continuous mechanical exhaust in accordance with Section 5004.3.

**3905.3.4 Interlocks.** Interlocks shall be provided where electrical Electrical equipment and appliances <u>are</u> used in processes that generate flammable vapors or gases . Such equipment and appliances shall be interlocked with ventilation fans so that the equipment <u>and appliances</u> cannot be operated unless the exhaust ventilation fans are in operation.

**Committee Reason:** This proposal was approved as it provides the appropriate pointer for asphyxiants and provides clearer requirements for necessary ventilation. The modification provides editorial clean up by bringing in language from the titles of the new sections into the text and cleaning up spelling errors. The modification also better correlates these provisions with the IMC with the removal of the prohibition of recirculation. (Vote: 13-0)

F180-21

### F181-21

Committee Action: Withdrawn

F181-21

# F182-21

Committee Action: Disapproved

**Committee Reason:** The proposal was disapproved as the applicability and need for the standards needs to be clarified. There was concern that UL 471 a standard for commercial refrigerators and freezers is not applicable for these types of applications. (Vote: 13-0)

F182-21

### F183-21

Committee Action: Disapproved

**Committee Reason:** Although the proposal is heading right direction the proposal as written does not currently address the the intent clearly. It was preferred that the provisions simply point to other portions of the code such as Chapter 57 as Chapter 39 was generally already structured that way. (Vote 14-0)

F183-21

### F184-21

Committee Action: Disapproved

**Committee Reason:** The proposal was disapproved as there is concern that there is too much focus on some issues and not others in Chapter 39. This can give the impression that other code requirements, that are still applicable, are not required since they are not discussed in Chapter 39. There was some concern that the egress component of this proposal should remain as it is a specific need not addressed currently by Chapter 10. (Vote: 8-6)

F184-21

### F185-21

Committee Action: As Modified

#### **Committee Modification:**

**3904.2.1 Listings.** Systems or equipment used for the extraction or processing of oils from plant material shall be *listed* and *labeled* in accordance with UL 1389 and installed in accordance with the listing and the manufacturer's installation instructions.

#### Committee Reason:

The proposal was approved as it will improve the application of the code by clarifying the scope of application of the provisions. The modification removes "or processing" from Section 3904.2.1 since processing is not addressed by UL 1389. There was some concern that processing is not addressed in Section 3904.2 and should be reviewed as to whether the reference to processing in Section 3904.2 is applicable. (Vote: 12-2)

F185-21

## F186-21 Part I

This proposal includes published errata

https://cdn-web.iccsafe.org/wp-content/uploads/2021-GROUP-A-CONSOLIDATED-MONOGRAPH-UPDATES-Updated-4-02-2021-complete.pdf

Committee Action: As Submitted

Committee Reason: The committee stated that the reason for approval was that the basis of this new prescriptive code section is data. As noted, it is not a one size fits all issue. The section addresses both the small and large distilleries and more importantly, the different configurations of storage based on the full-scale fire test data. Additionally, since there is a lot of these distilleries, it is necessary to make sure that they have a reasonable type of sprinkler system to provide appropriate mitigation for the hazards that are known to be possible with alcoholic beverages, which are now up to 20%. (Vote: 12-2)

### F186-21 Part II

Committee Action: As Submitted

Committee Reason: This proposal was approved for S-1 and F-1 occupancies and the alcohol content of beverages as providing consistency with other provisions in the IBC and IFC, including IFC Table 3203.8. (Vote: 14-0)

F186-21 Part II

## F187-21

Committee Action: Disapproved

**Committee Reason:** The committee stated that two of the reasons for disapproval were that adding a fire alarm system into a booth is technically infeasible and the procedure for installing an automatic fire sprinkler in a booth is very difficult and can cause water damage. Additional comments included: It is fine as a guidance document in the appendix, but it needs to remain in the appendix and if it is included in the body of the code, it is extremely restrictive and creates a cost issue. (Vote: 10-4)

F187-21

## F188-21

Committee Action: As Submitted

**Committee Reason:** The committee stated that the reason for approval was that the code is very difficult to use as it relates to temporary things such as eating and cooking and this brings them all into one central location which will help code officials and businesses. (Vote: 13-1)

F188-21

# F189-21

Committee Action: Disapproved

**Committee Reason:** This proposal was disapproved as the code currently covers the hazard. Additionally, the reason statement to the proposal notes the exception only partially fixes the problem related to the allowance of relaxation for some configuration of Class IIIB liquids in storage. (Vote: 14-0)

F189-21

# F190-21

Committee Action: As Submitted

**Committee Reason:** This proposal was approved as the pandemic has demonstrated that these materials have not caused any major incidents. The social distancing requirements of 6 feet will provide the separation of dispensers that is of concern. There was concern that the verbiage could be clarified including how bulk storage is being addressed by including storage in the exception. (Vote: 11-2)

### F191-21

Committee Action: As Submitted

**Committee Reason:** This proposal clarifies the application of the maximum allowable quantity increases and allowable aggregate quantities. These revisions also provides more consistency in requirements between the IBC and IFC. (Vote: 14-0)

F191-21

## F192-21

Committee Action: As Submitted

**Committee Reason:** This proposal was approved based upon the proponents reason statement and the thorough collaboration between code officials and industry. (Vote: 14-0)

F192-21

## F193-21

Committee Action: As Submitted

Committee Reason: This proposal was approved based upon the proponents reason statement. (Vote: 14-0)

F193-21

## F194-21

Committee Action: As Submitted

**Committee Reason:** This proposal was approved as it simplifies the language by breaking into subsections which will make the application more clear. This will facilitate the proper use of hazardous materials storage cabinets. (Vote: 13-0)

F194-21

# F195-21

Committee Action: As Submitted

Committee Reason: This proposal was approved as it is a simple clarification of the proper term regarding seismic design. (Vote: 14-0)

F195-21

# F196-21

Committee Action: As Submitted

**Committee Reason:** This proposal appropriately aligns with DOT standards and is a very minimal increase in quantity. In addition, allowing larger containers is seen as more environmentally friendly as it facilitates less frequent deliveries. (Vote: 13-0)

F196-21

## F197-21

Committee Action: As Submitted

**Committee Reason:** This proposal provides a method of addressing rooftop storage which is not currently addressed. There was some concern raised as to how a helipad may be addressed with these new requirements. (Vote: 13-1)

F197-21

## F198-21

Committee Action: As Submitted

Committee Reason: This proposal was approved based upon the proponents reason statement. (Vote: 13-1)

F198-21

## F199-21

Committee Action: Disapproved

**Committee Reason:** The proposal was disapproved as the testing supporting the revisions is not yet complete. It was noted that the title of Table 5104.3.1 should also be correlated with the revisions in F198-21 if this proposal is utilitimately approved. (Vote: 14-0)

F199-21

# F200-21

Committee Action: As Submitted

Committee Reason: This proposal was approved as it will correlate the IFC with NFPA 99 with regard to medical gases. One concern was that the term "management" may be better revised to "maintenance" in Section 5306.5.1 (Vote: 14-0)

F200-21

# F201-21

Committee Action: Withdrawn

F201-21

#### F202-21

Committee Action: Withdrawn

F202-21

### F203-21

Committee Action: As Submitted

**Committee Reason:** This proposal was approved as it provides more direction as to how these sections are to be applied with specific verbiage relating to the need for an adopting ordinance. (Vote: 14-0)

F203-21

## F204-21

Committee Action: Disapproved

**Committee Reason:** This proposal was disapproved as the details are not complete with the proposal such as how a fill pipe is addressed to avoid accidental filling. It allows the fill pipe to remain in place if filled with concrete. Also, it was pointed out that as written the contents of the tank need to be cleaned versus the tank itself. (Vote 13-0)

F204-21

## F205-21

Committee Action: As Modified

#### **Committee Modification:**

**5001.1 Scope.** Prevention, control and mitigation of dangerous conditions related to storage, dispensing, use and handling of hazardous materials shall be in accordance with this chapter. This chapter shall apply to all hazardous materials, including those materials regulated elsewhere in this code, except that where specific requirements are provided in other chapters, those specific requirements shall apply in accordance with the applicable chapter. Where a material has multiple hazards, all hazards shall be addressed.

#### **Exceptions:**

- 1. In retail or wholesale sales occupancies, medicines, foodstuff, cosmetics and commercial or institutional products containing not more than 50 percent by volume of water-miscible liquids and with the remainder of the solutions not being flammable, provided that such materials are packaged in individual containers not exceeding 1.3 gallons (5 L).
- Alcoholic beverages in retail or wholesale sales occupancies, provided that the liquids are packaged in individual containers not exceeding 1.3 gallons (5 L).
- 3. Application and release of pesticide and agricultural products and materials intended for use in weed abatement, erosion control, soil amendment or similar applications where applied in accordance with the manufacturer's instructions and label directions.
- 4. The off-site transportation of hazardous materials where in accordance with Department of Transportation (DOTn) regulations.
- 5. Building materials not otherwise regulated by this code.
- 6. Refrigeration systems (see Section 608).
- 7. Stationary storage battery systems regulated by Section 1207.
- 8. The display, storage, sale or use of fireworks and explosives in accordance with Chapter 56.

- 9. Corrosives utilized in personal and household products in the manufacturer's original consumer packaging in Group M occupancies.
- 10. The storage of beer, distilled spirits and wines in barrels and casks.
- 11. The use of wall-mounted dispensers containing alcohol-based hand rubs classified as Class I or II liquids where in accordance with Section 5705.5.
- 12. Specific provisions for flammable liquids in motor fuel-dispensing facilities, repair garages, airports and marinas in Chapter 23.
- 13. Storage and use of fuel oil in tanks and containers connected to oil-burning equipment. Such storage and use shall be in accordance with Section 605. For abandonment of fuel oil tanks, Chapter 57 applies.
- 14. Storage and display of aerosol products complying with Chapter 51.
- 15. Storage and use of *flammable* or *combustible liquids* that do not have a fire point when tested in accordance with ASTM D92, not otherwise regulated by this code.
- 16. Flammable or combustible liquids with a flash point greater than 95°F (35°C) in a water-miscible solution or dispersion with a water and inert (noncombustible) solids content of more than 80 percent by weight, which do not sustain combustion, not otherwise regulated by this code.
- 17. Commercial cooking oil storage tank systems located within a building and designed and installed in accordance with Section 607 and NFPA 30.

**5705.5.1 Corridor installations.** In addition to the provisions of Section 5705.5, where dispensers containing alcohol-based hand rubs are located in *corridors* or rooms and areas open to the *corridor*, they shall be in accordance with all of the following:

- 1. Level 2 and 3 aerosol containers shall not be allowed in *corridors*.
- 2. The maximum capacity of each Class I or II liquid dispenser shall be 41 ounces (1.21 L) and the maximum capacity of each Level 1 aerosol dispenser shall be 18 ounces (0.51 kg).
- 3. The maximum quantity allowed in a *corridor* within a *control area* shall be 10 gallons (37.85 L) of Class I or II liquids or 1135 ounces (32.2 kg) of Level 1 aerosols, or a combination of Class I or II liquids and Level 1 aerosols not to exceed, in total, the equivalent of 10 gallons (37.85 L) or 1,135 ounces (32.2 kg) such that the sum of the ratios of the liquid and aerosol quantities divided by the allowable quantity of liquids and aerosols, respectively, shall not exceed one.
- 4. The minimum corridor width shall be 72 inches (1829 mm).
- 5.4. Projections into a corridor shall be in accordance with Section 1003.3.3.

Committee Reason: This proposal was approved as it provides the most enforceable language than found in the other proposals. Means of egress concerns are addressed. This proposal also better deals with practical issues such as ignition sources and controls how the dispensers operate. A key element is removing the limitation of enforcing only for wall mounted dispensers. This provides the basic tools for enforcement of all dispenser types. It is encouraged that all F190-21, F205-21, F206-21 and F207-21 be reviewed together and to come back with a coordinated public comment to address additional concerns with issues such as corridor width and enforcement. The modifications remove an additional occurrence of "wall-mounted" that was missed and removes the corridor width limitation that is not appropriate beyond healthcare facilities. (Vote: 9-4)

F205-21

## F206-21

Committee Action: Disapproved

Committee Reason: This proposal was disapproved with various enforcement concerns. First the requirement that regulates personal use alcohol-based hand rub could inadvertently cause inspectors to regulate the ABHR that people carry with them. There is also a concern with the intrusion into the corridor width with freestanding dispenser including the base. Spill control could also be an issue depending on the type of freestanding dispenser used. This proposal prohibits storage in the basement which does not work for the healthcare industry. It was encouraged that proponents of proposals F190-21, F205-21, F206-21 and F207-21 and other key stakeholders such as the healthcare committee work together to assemble a public comment to resolve these concerns. (Vote: 13-0)

F206-21

#### F207-21

Committee Action: Disapproved

Committee Reason: This proposal was disapproved based upon the actions taken on F190-21, F205-21 and F206-21. (Vote: 13-0)

F207-21

## F208-21

Committee Action: As Submitted

**Committee Reason:** This proposal was approved as it is simply an editorial change that provides the correct reference to Section 5706.5.3.3 which relates to process transfer. (Vote: 14-0)

F208-21

## F209-21

Committee Action: As Submitted

Committee Reason: This proposal was approved as it clarifies that vehicles are only filled from tank vehicles not tank cars. (Vote: 14-0)

F209-21

## F210-21

Committee Action: Disapproved

**Committee Reason:** This proposal was disapproved based upon the action on F209-21 and the fact this section is unique from on-demand mobile fueling. (Vote: 13-0)

F210-21

# F211-21

Committee Action: Disapproved

**Committee Reason:** Although the correlation with Section 2310.4 may be appropriate the reference to Section 5707 confuses the issue. Section 5707 if dealing with on-demand mobile fueling which is a different concept. The proponent is encouraged to revise this proposal through public comment to make the correlation back to Section 2310.4. (Vote: 13-0)

F211-21

# F212-21

Committee Action: As Submitted

**Committee Reason:** The proposal was approved as it a reasonable allowance. This operation deals with commercial, governmental, industrial and farming installations which is limited to certain location and the fire code official will be involved with issuing an operational permit so it will be properly regulated. The term "approved" as revised gives clear authority to the fire code official. There is some concern that this could encourage bypassing compliance with Section 5707. (Vote: 9-5)

F212-21

## F213-21

Committee Action: Disapproved

**Committee Reason:** This proposal was disapproved as the reason statement did not properly explain why specifically this is an issue of concern. In addition, this appears to be a hose manufacturing issue not addressed by the IFC. The phrase "at the conclusion" is vague as there is no time frame associated with the action. (Vote: 14-0)

F213-21

## F214-21

Committee Action: Disapproved

Committee Reason: This proposal was disapproved as it takes away the specific site plan requirement and depends too much on the operator to simply follow a safety plan. Site plans are necessary to know where this is happening and in some cases may cause fueling is prohibited in certain locations based upon specific concerns with the site. Although these site plans are filed away they will likely be used in case of emergency. There is concern with how the operator will "take into consideration" the items proposed for the safety and emergency response plan. It was also noted that fueling location the scale of site plan and how spills will be handled are not addressed in revised Section 5707.3.1. The committee agreed that this language could be cleaned up but there were too many concerns as proposed. (Vote: 14-0)

F214-21

# F215-21

Committee Action: Disapproved

Committee Reason: This proposal was disapproved with general concern with the code specifically calling out the acceptance of permits from other jurisdictions within the IFC. The fire code official already has the authority. Calling out only for on-demand mobile fueling will create confusion. It was questioned how far this could go in terms of beyond state lines or even extending to other countries. In addition, permits are often a source of fees to fund the operations of a jurisdiction and tracking permits from other jurisdictions would be very difficult from an administrative standpoint. (Vote: 14-0)

F215-21

# F216-21

Committee Action: As Submitted

**Committee Reason:** This proposal was approved as it both provides a clear reference to the permit requirements and clarifies the fueling location requirements by editorially creating a separate section. (Vote: 14-0)

F216-21

#### F217-21

Committee Action: Withdrawn

F217-21

### F218-21

Committee Action: Disapproved

**Committee Reason:** The proposal was discussed after F219-21 and the same concerns were expressed by the committee. There was no justification or hazard analysis undertaken to warrant an increase in tank capacity. (Vote: 13-1)

F218-21

## F219-21

Committee Action: Disapproved

**Committee Reason:** This proposal was disapproved as the increase in tank size is seen as excessive. No proposed mitigation for increased hazard has been presented nor has specific justification for the increase been provided. It should be noted that this proposal was heard prior to F218-21. (Vote: 14-0)

F219-21

# F220-21

Committee Action: As Submitted

**Committee Reason:** This proposal was approved as it provides the appropriate reference to the gas detection provisions in Section 916. Section 916 contains the consolidated provisions created for the 2018 IFC and IBC for gas detection. (Vote: 14-0)

F220-21

# F221-21

Committee Action: Disapproved

**Committee Reason:** This proposal was disapproved as the verbiage will shift the burden to the fire code official to determine where "special circumstances exist." Also there was concern with 3 acres as no data was submitted to justify that particular criteria. Even small locations less than 3 acres could have concerns for on-demand mobile fueling. The committee encouraged the proponent to provide an example of "special circumstances." (Vote: 14-0)

F221-21

# F222-21

Committee Action: Disapproved

Committee Reason: This proposal was disapproved with several concerns. Generally, this concept places more burden on the jurisdiction as they must determine which tier the on-site mobile fueling falls within. Essentially, the fire code official will likely default to Tier 2 for all sites due to the restrictive nature of 3 days. It was also stated that this state specific approach may not work in other jurisdictions. (Vote: 14-0)

F222-21

## F223-21

Committee Action: Disapproved

**Committee Reason:** This proposal was disapproved as the proposal was to all encompassing by removing the restrictions on public streets, public ways, inside building and fueling on roof levels of parking structures. This action is also based upon previsions actions on F224-21 and F225-21 which were heard prior to this proposal. (Vote: 14-0)

F223-21

## F224-21

Committee Action: Disapproved

**Committee Reason:** This proposal was disapproved as it was seen as too far reaching. The proposal would allow fueling on public ways and public streets which was never the intent when these provisions were placed in the code to allow these activities. (Vote: 14-0)

F224-21

# F225-21

Committee Action: Disapproved

**Committee Reason:** This proposal would allow mobile fueling within garages based only on the fire access being approved with no other criteria. There was concern with a sprinkler system being able to control a fuel spill fire within a parking garage that will be a much larger fire than a typical vehicle fuel fire. In addition NFPA 30A does not yet allow this activity. (Vote: 14-0)

F225-21

# F226-21

Committee Action: As Modified

#### **Committee Modification:**

**MOBILE FUELING, LIQUID.** The operation of dispensing liquid fuels from tank vehicles into the fuel tanks of motor vehicles. Mobile fueling may also be known by the terms "Mobile fleet fueling," "Wet fueling" and "Wet hosing."

**Committee Reason:** This proposal was approved as it provides a solid approach for on-demand mobile hydrogen fueling modelled off of the on-demand mobile fueling in Section 5707. It appropriately addresses permitting and the approvals process. Additionally, the proposal addresses the special hazards requirements for hydrogen. The modification simply revises the definition to be more generic to match the terminology already used for this activity in Section 5707. (Vote: 14-0)

### F227-21

Committee Action: Withdrawn

F227-21

## F228-21

Committee Action: Disapproved

**Committee Reason:** The committee stated that the reason for disapproval was the uncertainty of changing the technical requirement from the original intent for the fire flow requirement in open parking garages of Type IA and IB construction. (Vote: 11-3)

F228-21

## F229-21

Committee Action: Disapproved

**Committee Reason:** The committee stated that the reasons for disapproval were that modifying Section B103.2 is probably the better place to do it and there are prescriptive ways of calculating fire flow for these kinds of buildings that use square footage or volume or a number of different ways that are a much better way to approach this rather than changing the table. Additionally, it was noted the proposal is too open ended and there would also need to be some coordination with the water utility because the fire code official could require something that's not technically feasible that will exhaust the capacity of the water system. (Vote: 13-1)

F229-21

# F230-21

Committee Action: Disapproved

**Committee Reason:** The committee stated that one of reasons for disapproval was that the other pathways that are listed in the proposal may not be recognized as fire apparatus roads by the fire department, they could potentially slow response time and the locations listed are prone to obstructions. Another reason for disapproval was the need for a requirement to permanently identify these as a fire lane. (Vote: 12-2)

F230-21

# F231-21

Committee Action: Disapproved

Committee Reason: The committee stated that one of the reasons for disapproval was the issue of the hydrant locations and spacing that may need to be considered in the requirement. It was also noted that the proponent should consider the format of using an exception that may be better placed in a separate section. Additionally, it was stated that the 50 dwelling unit criteria is a lot of dwelling units on one road especially one that is a dead-end road. (Vote: 11-3)

### F232-21

Committee Action: As Submitted

Committee Reason: The proposal was approved as the transition to the globally harmonized standards (GHS) within the IFC is necessary and overdue. (Vote: 14-0)

F232-21

### F233-21

Committee Action: As Submitted

**Committee Reason:** This proposal was approved based upon the action on F232-21 and due to the need to transition the hazardous materials classifications to the globally harmonized standard (GHS). (Vote: 14-0)

F233-21

### F234-21

Committee Action: As Submitted

**Committee Reason:** The committee stated that the reason for approval was that the additional language being brought into the appendix is going to make it easier for those that do adopt this appendix to deal with immediate action that's necessary rather than just non-compliant action and it's just going to make up an improved document. (Vote: 11-3)

F234-21

# F235-21

Committee Action: Withdrawn

F235-21

# F236-21

Committee Action: As Modified

#### **Committee Modification:**

O102.1 Definitions.

**VALET TRASH COLLECTION.** A service <u>that removes</u> <u>provided whereby</u> trash or recycling <u>materials</u> <u>is-placed outside of dwelling units or sleeping units in approved containers during prescribed times-for collection by another party.</u>

**Committee Reason:** Approval was based upon the need to provide a framework for jurisdictions available where needed. This practice occurs currently with no guidance. It was noted that the appendix can be customized by a jurisdiction to meet their specific needs. This new appendix will offer a rated container whereas no rating is currently required. Note that some committee members struggled with locating such provisions in the

fire code and have concern about enforceability. The modification revises the definition to better explain what is intended to regulated. This clarifies also that it covers both dwelling units and sleeping units. (Vote: 9-5).

F236-21

## F237-21

Committee Action: As Modified

#### **Committee Modification:**

**O103.5 Construction materials.** Containers and lids used for valet trash collections shall be constructed entirely of noncombustible materials, or of materials that meet a peak rate of heat release not exceeding 300 kW/m2 when tested in accordance with ASTM E1354 at an incident heat flux of 50 kW/m2 in the horizontal orientation.

#### Exception:

Containers in exterior egress balconies in buildings protected by an approved automatic sprinkler system installed throughout in accordance with Section 903.3.1.1 or 903.3.1.2, including the exterior egress balcony.

**Committee Reason:** This proposal was approved consistent with action on taken F236-21 and addresses a necessary need for lids on the trash or recycling container. The exception for exterior egress balconies in buildings equipped throughout with a sprinkler systems was eliminated as it was felt necessary that the containers still comply with the fire performance criteria. (Vote: 9-5)

F237-21

### International Fuel Gas

2021 Group A - Report of the Committee Action Hearing Results

## **FG1-21**

Committee Action: Disapproved

Committee Reason: The proposed language would require IRC buildings to comply with the IBC earthquake requirements. The IRC already has specific bracing and earthquake requirements without needing IBC chapter 16 and ASCE requirements. (11-0)

FG1-21

### **FG2-21**

Committee Action: As Submitted

**Committee Reason:** This requirement has been in the code since the 2009 edition and no evidence was provided for the need to change the requirement. (7-4)

FG2-21

## **FG3-21**

Committee Action: As Submitted

Committee Reason: The Committee agreed with the published reason statement. (11-0)

FG3-21

# FG4-21

Committee Action: Disapproved

Committee Reason: There wasn't enough justification provided for changing the code nor do the changes clarify the code. (11-0)

FG4-21

# FG5-21

Committee Action: Disapproved

**Committee Reason:** This proposal appears to be connected to the approval of FG4. The Committee disapproved FG4 therefore, there is no need to approve this proposal. (11-0)

## FG6-21

Committee Action: Disapproved

**Committee Reason:** This proposal appears to be connected to the approval of FG4. The Committee disapproved FG4 therefore, there is no need to approve this proposal. Approving this proposal would put a definition in the code for a term that is not used in the code text. (11-0)

FG6-21

### FG7-21 Part I

Committee Action: Disapproved

Committee Reason: This new section creates some confusion with the next section in the code (Section 607) by using the phrase "commercial direct-fed incinerators". (7-4)

FG7-21 Part I

### FG7-21 Part II

Committee Action: As Submitted

**Committee Reason:** The proposal has passed as submitted because the proponent submitted correct UL standard references for devices. **UL 2790** covers factory-built cremation furnaces and commercial direct-fed incinerators, including those of the gas and electric ignition types, designed primarily for use in a crematory.

**UL 791** covers direct-fed incinerators, including those of the gas and electric ignition types, designed primarily for use in one-and two-family dwellings for the burning of ordinary combustible waste materials and garbage incidental to domestic occupancy and having a firebox or charging compartment of not over 5 cubic feet capacity. Incinerators of this type may also be employed in other occupancies including commercial establishments and institutions where the refuse is of a character for which the incinerator is designed and is not excessive in amount. (Vote: 10-1)

FG7-21 Part II

# FG8-21

Committee Action: As Submitted

Committee Reason: This minor change simply aligns the language in the code with previous code changes across all the codes in the last few cycles. (11-0)

FG8-21

## **International Mechanical Code**

2021 Group A - Report of the Committee Action Hearing Results

### M1-21

Committee Action: Disapproved

Committee Reason: The proposed update is not accurate, as some air-handling units are designed for 100% outside air. Further, definitions must be consistent between I-codes. (Vote: 11-0)

M1-21

### M2-21

Committee Action: As Submitted

Committee Reason: This is editorial and is important to have consistency within the family of I-codes. (Vote: 7-4)

M2-21

## M3-21

Committee Action: Disapproved

Committee Reason: The committee felt that terms currently defined in other I-codes should be revised in the code of origin before being duplicated in this code. The change should come back after that is accomplished. (Vote: 8-3)

M3-21

# M4-21 Part I

Committee Action: As Submitted

Committee Reason: The committee agrees this is editorial. Based on the reason statement, the definition is clarifying and is closely aligned with the term used in the two refrigeration standards referenced in the I-codes (ASHRAE 15 and UL 60335-2-40). (Vote: 6-5)

M4-21 Part I

# M4-21 Part II

Committee Action: Disapproved

Committee Reason: The definition is not consistent for the consumer trying to do construction, which may be the homeowner. (6-5)

### M5-21

Committee Action: As Submitted

**Committee Reason:** The current definition implies that it is the concentration that is the substance capable of propagating the flame, instead of the flame being what is capable. This proposal clarifies that the flame propagation is determined under specific test conditions in ASHRAE 34. (Vote: 7-4)

M5-21

### M6-21

Committee Action: As Submitted

**Committee Reason:** This proposal revises the definition of NONCOMBUSTIBLE to match the other codes. The standard will align with definition done during last cycle, defining material that passes ASTM. (Vote: 11-0)

M6-21

## M7-21

Committee Action: Disapproved

Committee Reason: The proposed revisions are inconsistent and blurs the difference between a plenum and a duct. (Vote: 10-0)

M7-21

## M8-21 Part I

Committee Action: As Submitted

Committee Reason: Necessary for correlation of other ICC I-codes and aligns with ASHRAE 15, which is referenced in the IMC.. (Vote: 10-0)

M8-21 Part I

## M8-21 Part II

Committee Action: As Submitted

Committee Reason: This proposal was approved to make the definitions consistent between the IFC, IMC and IRC. (Vote: 13-1)

M8-21 Part II

# M8-21 Part III

Committee Action: As Modified

#### **Committee Modification:**

[MP] REFRIGERANT. The fluid used for heat transfer in a refrigeration system that refrigerant undergoes a change of state to absorb heat.

**Committee Reason:** For the modification: The modification makes more sense. It correlates between the codes and clarifies the IRC definition. For the proposal as modified: It will correlate between the three codes. (11-0)

M8-21 Part III

### M9-21

Committee Action: As Modified

#### **Committee Modification:**

FLAMMABILITY CLASSIFICATION (REFRIGERANT). The alphabetical/numerical designation used to identify the flammability of refrigerants.

Class 1. Indicates a refrigerant with no flame propogation.

Class 2. Indicates a refrigerant with low flammability.

Class 2L. Indicates a refrigerant with low flammability and low burning velocity.

Class 3. Indicates a refrigerant with high flammability.

TOXICITY CLASSIFICATION (REFRIGERANT). An alphabetical designation used to identify the toxicity of refrigerants. Class A indicates a refrigerant with low toxicity. Class B indicates a refrigerant with high toxicity.

**Committee Reason:** This proposal clarifies that refrigerant safety group classifications are determined in accordance with ASHRAE 34. The modification appropriately relocates the definitions for "flammability classification" and "toxicity classification" as sub-definitions directly under the definition "refrigerant safety classification" provides for easier use and application of the code. These two relocated terms only apply to the main definition. (Vote: 10-0, 1 abstained)

M9-21

### M10-21 Part I

Committee Action: As Submitted

**Committee Reason:** The committee agreed that the proposal will better correlate the I-Codes with the industry standards, ASHRAE 15, for using the term refrigeration system rather than refrigerating systems. (Vote: 10-0)

M10-21 Part I

# M10-21 Part II

Committee Action: As Submitted

Committee Reason: Correlates the I-codes under one definition. (11-0)

#### M12-21

Committee Action: As Submitted

Committee Reason: The proposal was approved As Submitted, as there is no need for Polybutylene (PB) tubing to be referenced in code. Polybutylene (PB) tubing has not been manufactured for sale in the US since the late 1990s. PB was previously removed from Table 1202.4 "Hydronic Pipe" at some time before 2015. The referenced product standard, ASTM D3309 "Polybutylene (PB) Plastic Hot- and Cold-Water Distribution Systems" was withdrawn in 2010.(Vote: 10-0 w/ 1 abstained)

M12-21

### M13-21

Committee Action: As Modified

**Committee Modification:** 

# 306.5 Equipment and appliances on roofs or elevated structures.

Where *equipment* requiring access or *appliances* are located on an elevated structure or the roof of a building such that personnel will have to climb higher than 16 feet (4877 mm) above grade to access such *equipment* or *appliances*, an interior or exterior means of access shall be provided. Such access shall not require climbing over obstructions greater than 30 inches (762 mm) in height or walking on roofs having a slope greater than four units vertical in 12 units horizontal (33-percent slope). Such access shall not require the use of portable ladders. Where access involves climbing over parapet walls, the height shall be measured to the top of the parapet wall.

Permanent ladders installed to provide the required access shall comply with the following minimum design criteria:

- 1. The side railing shall extend above the parapet or roof edge or landing platform not less than). 42 inches (1067 mm)
- 2. Ladders shall have rung spacing not less than 10 inches (254 mm) and not to exceed 14 inches (356 mm) on center. The uppermost rung shall be not greater than 24 inches (610 mm) below the upper edge of the roof hatch, roof or parapet, as applicable.
- 3. Ladders shall have a toe spacing not less than 7 inches (178 mm) and not more than 12 inches (305 mm) deep
- 4. There shall be not less than 7 inches (178 mm) and not more than 12 inches (305 mm) between rails. 18 inches (547 mm) 16 inches (406 mm) between rails.
- 5. Rungs shall have a diameter not less than 0.75-inch (19.1 mm) and be capable of withstanding a 300-pound (136 kg) load.
- 6. Ladders over 30 feet (9144 mm) in height shall be provided with offset sections and landings capable of withstanding 100 pounds per square foot (488 kg/m²). Landing dimensions shall be not less than 18 inches (457 mm) and not less than the width of the ladder served. A quard rail shall be provided on all open sides of the landing.
- 7. Climbing clearance. The distance from the centerline of the rungs to the nearest permanent object on the climbing side of the ladder shall be not less than 30 inches (762 mm) measured perpendicular to the rungs. This distance shall be maintained from the point of ladder access to the bottom of the roof hatch. A minimum clear width of 15 inches (381 mm) shall be provided on both sides of the ladder measured from the midpoint of and parallel with the rungs except where cages or wells are installed.
- 8. Landing required. The ladder shall be provided with a clear and unobstructed bottom landing area having a minimum dimension of 30 inches (762 mm) by 30 inches (762 mm) centered in front of the ladder.
- 9. Ladders shall be protected against corrosion by approved means.
- 10. Access to ladders shall be provided at all times.

Catwalks installed to provide the required access shall be not less than 24 inches (610 mm) wide and shall have railings as required for service platforms.

Exception: This section shall not apply to Group R-3 occupancies.

FLOOR MODIFICATION # 2607

Committee Reason: Aligning equipment access requirements with OSHA requirements is critical. The modification corrects a typographical error

M13-21

### M14-21

Committee Action: As Submitted

Committee Reason: The committee approved this proposal as it does address a safety issue, however the committee also agreed the proposal should come back in the public comment process to address any conflicts with OSHA and to provide similar language in the IBC. (Vote: 6-5)

M14-21

### M15-21

Committee Action: Disapproved

Committee Reason: Terms "both directions" and "allow access" are too broad of statements and must be further clarified. (Vote: 9-1)

M15-21

### M<sub>16-21</sub>

Committee Action: As Submitted

**Committee Reason:** This proposal was approved as submitted based on the proponent reason statement. Factory-built intake/exhaust combination fittings are regularly provided by manufacturers and installed by builders to separate mechanical air intakes from mechanical exhaust serving dwelling unit or sleeping unit mechanical ventilation systems. Special approval should not be required for these types of fittings when installed in accordance with the manufacturer installation instructions. (Vote: 6-5)

M16-21

## M17-21

Committee Action: Disapproved

**Committee Modification:** 

Committee Reason: The committee does not believe the proposal takes into account implications of louvers. (Vote: 11-0)

M17-21

# M18-21

Committee Action: Disapproved

**Committee Modification:** 

**Committee Reason:** The committee finds the proposal is confusing as written with respect to the definition of supply air systems and its relationship to the definition of return air systems. (Vote: 10-1)

M18-21

### M19-21

Committee Action: As Modified

#### **Committee Modification:**

403.3.2.1Outdoor air for dwelling units.

An outdoor air ventilation system consisting of a mechanical exhaust system, supply system or combination thereof shall be installed for each dwelling unit. Local exhaust or supply systems, including outdoor air ducts connected to the return side of an air handler, are permitted to serve as such a system. The outdoor air ventilation system shall be designed to provide the required rate of outdoor air continuously during the period that the building is occupied. The minimum continuous outdoor airflow rate shall be determined in accordance with Equation 4-9.

 $Q_{OA} = \frac{0.01}{0.03} A_{floor} + 7.5(N_{br} + 1)$  (Equation 4-9) where:

 $Q_{OA}$  = outdoor airflow rate, cfm

 $A_{floor}$  = conditioned floor area, ft<sup>2</sup>

 $N_{br}$  = number of bedrooms; not to be less than one

#### **Exceptions:**

- 1. The outdoor air ventilation system is not required to operate continuously where the system has controls that enable operation for not less than 1 hour of each 4-hour period. The average outdoor airflow rate over the 4-hour period shall be not less than that prescribed by Equation 4-9.
- 2. The minimum mechanical ventilation rate determined in accordance with Equation 4-9 shall be reduced by 30 percent provided that both of the following conditions apply:
  - 2.1. A ducted system supplies ventilation air directly to each bedroom and to one or more of the following rooms:
    - 2.1.1. Living room.
    - 2.1.2. Dining room.
    - 2.1.3. Kitchen.
  - 2.2. The whole-house ventilation system is a balanced ventilation system.

Committee Reason: The proposal has passed as modified as the language is trying to align with ASHRAE 62.2 to avoid underventilation of spaces. (Vote: 7-4)

M19-21

# M20-21

Committee Action: As Submitted

Committee Reason: The proposal provides ventilation levels for adult change tables that are appropriate. (Vote: 11-0)

M20-21

#### M21-21

Committee Action: As Modified

#### **Committee Modification:**

#### 407.1General.

Mechanical ventilation for ambulatory care facilities and Group I-2 *occupancies* shall be designed and installed in accordance with this code, ASHRAE/ASHE 170 and NFPA 99.

#### CHAPTER 15REFERENCED STANDARDS

#### Revise as follows:

ASHRAE ASHRAE1791 Tullie Circle NE Atlanta, GA 30329

 $\frac{170-2017}{170-2021}$  Ventilation of Health Care Facilities

**Committee Reason:** This proposal appropriately updates the existing ventilation rate table in the IMC. Standard 62.1 is the source material for this table, and this updates table 403.3.1.1 to match the appropriate ventilation rates in 62.1-2019. The modification updates the edition year of the ASHRAE/ ASHE 170-2021 Standard. (Vote: 11-0)

M21-21

#### M22-21

Committee Action: As Submitted

Committee Reason: The committee agreed that this was a reasonable approach based upon the proponent reason statement. This proposal clarifies the application of Section 403.3.1.1, regarding required minimum outdoor airflow rates, in storage occupancies. The current code language is inconsistently applied when there are fixed storage areas that do not change without a permit. Examples of such floor areas may include those dedicated to high-piled rack storage, self-storage facility units that are not fully partitioned off from interior corridors, and other floor areas that are designated solely for storage. (Vote: 8-3)

M22-21

### M23-21

Committee Action: Disapproved

Committee Reason: The proposal is poorly worded using words such as "average". It is not clearly defined text and is confusing, implying that air force rate should be within 10% of their average. (Vote: 11-0)

M23-21

# M24-21

Committee Action: As Submitted

Committee Reason: Proposal correctly aligns Tables 403.3.1.1 with Table 403.3.2.3. (Vote: 11-0)

M24-21

### M25-21

Committee Action: As Modified

#### **Committee Modification:**

#### APPENDIX D Clean Air Delivery

#### 403.4 D101 Clean Air Delivery Capability.

Each mechanical system shall meet the requirements in 403.4.1 Section D101.1. Each occupiable space shall meet the requirements in 403.4.2 Section D101.2.

#### Exceptions:

- 1. Group R occupancies.
- 2. Occupiable spaces where 100% of the supply air meets High-efficiency Particulate Air filtration.
- 3. Rooms with less than 500 square feet of occupiable space.

#### 403.4101.1 D101.1 Airflow for Increased Filtration.

Mechanical systems shall be sized to accommodate a design airflow at a total static pressure drop which assumes the utilization of a supply air filter with a Minimum Efficiency Reporting Value of no less than 13.

#### 403.4.2 D101.2 Zonal Filtration or Disinfection Capability.

Each occupiable space greater than 500 square feet shall have at least one 125-volt, single-phase, 15- or 20-ampere receptacle outlet installed in an accessible location for the cord-and-plug connection of a supplemental air cleaning appliance. One additional receptacle outlet shall be installed for each additional 1000 square feet of occupiable space. The installation shall comply with NFPA 70. shall have 120-volt receptacles which provide at least 0.2 watts per square foot of occupiable space above the requirements of the National Electrical Code to support supplemental air cleaning devices. which provide at least 0.2 watts per square foot of occupiable space above the requirements of the National Electrical Code to support supplemental air cleaning devices.

**Committee Reason:** The committee has appropriately agreed that current code language must be clarified between residential and commercial in the appendix, Exempt Group 8 and electrical equipment. This proposal also requires that occupiable spaces be equipped with the electrical infrastructure needed to increase clean air delivery at the zonal level. The modifications further clarify acceptable industry practices and gives opportunities for jurisdictions. (Vote: 6-5)

M25-21

### M<sub>26</sub>-21

Committee Action: Disapproved

Committee Reason: The proponent references studies tied to school facilities only. Providing demand control ventilation to each occupiable space is too broad. (Vote: 11-0)

M26-21

# M27-21

Committee Action: Disapproved

Committee Reason: The committee agrees that existing building provisions will cause correlation problems with IBC. (Vote: 11-0)

M27-21

#### M28-21

Committee Action: As Submitted

**Committee Reason:** The proposal was passed As Submitted based on the proponent reason statement. With the increased popularity of multifamily units, many times with limited wall areas on the front and back of these dwellings, quite often it's difficult to find sufficient wall area to locate terminations compliant with the exhaust opening 3' clearance requirements in this section. The exhaust from dryers, bath fans and domestic ranges is not considered noxious or hazardous, and poses little if any health risk. Taking into account the buoyancy of the exhaust air, the chance of the exhaust air migrating down into an opening is minimal to none.

Imagine the simplification of the exhaust duct installation if terminations were allowed above windows with this 1' clearance requirement.

In IFGC 503.8 clearance requirements for direct vent gas appliance from these openings are in many cases less than these requirements for these environment exhausts. In fact the requirement for a through the wall direct vent termination < 10,000 Btu/hr. is 6" in any direction. These gas vents exhaust hazardous productions of combustion to outside, not *environment air*.

Meeting the current requirements often adds extra elbows and pipe to the exhaust duct system, reducing the airflow through the duct. This is a wasted expense of no value.

(Vote: 9-2)

M28-21

### M29-21 Part I

Committee Action: As Submitted

Committee Reason: Positive pressure would be problematic in negative pressure environments. Exhaust ducts that are under positive pressure cannot be joined because the airflow from one fan will leak out through the fan that is not running. Only if the fans that share an exhaust duct are all running simultaneously, could backflow be prevented. Backdraft dampers in common exhaust fans have a significant leakage rate, thus the fan that is not running will see backflow from the common duct and the exhaust air from one space will dump into another space. If the fans discharge to a common exhaust shaft that is under negative pressure, there is no problem and this proposal would not prevent that arrangement. It is extremely undesirable (and unthinkable) to use a common duct for fans that serve different dwelling and sleeping units because odors, smoke, pathogens, chemical irritants, etc. would be carried from one unit to another.

(Vote: 11-0)

M29-21 Part I

# **M29-21 Part II**

Committee Action: Withdrawn

M29-21 Part II

# M30-21

Committee Action: Disapproved

**Committee Reason:** The proposal is confusing and could conflict with the Makeup air provisions. The cost impact statement is also not accurate as this could increase construction costs. (Vote: 11-0)

M30-21

#### M31-21

Committee Action: As Submitted

Committee Reason: This proposal adds the appropriate UL standard for commercial clothes dryer installations. (Vote: 8-1)

M31-21

### M32-21

Committee Action: Disapproved

**Committee Reason:** The committee agrees that the proposal language as written is problematic in this section and is missing the option of ducted installations for domestic hoods provided over cook tops. (Vote: 11-0)

M32-21

## M33-21

Committee Action: Disapproved

**Committee Reason:** The proposal requirements are overreaching and would inappropriately cause loss of use of ductless range hoods in commercial applications. (Vote: 11-0)

M33-21

# M34-21

Committee Action: As Submitted

**Committee Reason:** This proposal passed based on the proponent reason statement that exhaust equipment exposed to the exterior would have to be protected against corrosion. (Vote: 6-5)

M34-21

# M35-21

Committee Action: As Submitted

Committee Reason: This proposal is editorial and adds a new definition of Grease Duct for more clarification. (Vote: 11-0)

M35-21

# M36-21

Committee Action: As Submitted

M36-21

### M37-21

Committee Action: Disapproved

**Committee Reason:** The wording within this proposal inappropriately makes water testing mandatory. The term "inconclusive" is unenforceable. Performing this test would increase the cost of construction. (Vote: 11-0)

M37-21

### M38-21

Committee Action: As Submitted

Committee Reason: This proposal was approved as submitted because, as opposed to M37-21, it helps give better directive and tools to use with respect to testing of Grease Ducts. (Vote: 7-4)

M38-21

### M39-21

Committee Action: As Submitted

Committee Reason: The proposal was passed as submitted based on the fact that it references the actual standard that equipment is being held to. The requirements for UL 762 have been completely incorporated into UL 705. The product certification listings are moving from UL 762 to UL 705. (Vote: 10-0)

M39-21

# M40-21

Committee Action: As Submitted

**Committee Reason:** This proposal passed as submitted based on the proponent reason statement. This proposal appropriately reorganizes the existing requirements in Section 507 into a logical order of application, while not making any substantive technical changes. (Vote: 11-0)

M40-21

## M41-21

Committee Action: As Submitted

**Committee Reason:** This proposal is not requiring anyone to use a Type I hood in applications requiring a Type II hood, rather it is allowing the Type I hood if it is installed in full compliance with Type I hood installation requirements. (Vote: 11-0)

### M42-21

Committee Action: As Submitted

**Committee Reason:** This proposal passed as submitted based on the reason statement provided by the proponent. This proposal appropriately clarifies the three existing exceptions for Section 507.1 where because of the particular type of product or cooking operation, a hood is not required above the product or cooking operation. (Vote: 11-0)

M42-21

### M43-21

Committee Action: As Submitted

**Committee Reason:** Passed as submitted because the committee agreed that the UL standard is appropriate to allow the exception for ovens. (Vote: 11-0)

M43-21

### M44-21

Committee Action: As Submitted

Committee Reason: This proposal appropriately aligns the code requirements while acknowledging the relocation of test methods within the body of UL197. (Vote: 11-0)

M44-21

# M45-21

Committee Action: As Submitted

**Committee Reason:** Appropriately adds an existing exception with commercial dishwasher listed and incorporating a self-contained condensing system. (Vote: 11-0)

M45-21

# M46-21

Committee Action: As Submitted

**Committee Reason:** The proposal passes as submitted based on the proponent reason statement. Where the heat and moisture loads from dishwashers and appliances that produce heat or moisture and do not produce grease or smoke as a result of the cooking process are incorporated into the HVAC system, a Type II hood above is not needed. (Vote: 11-0)

M46-21

#### M47-21

Committee Action: As Submitted

**Committee Reason:** The proposal has passed as submitted. It's an unfair competition for a draft hood appliance or an appliance with an open atmospheric burner to be located in a space with exhaust systems as large as that associated with commercial kitchens. Kitchens do not stay balanced very long as many things affect the dynamics over time often leading to negative pressures that can that can affect the gravity system. This can be a dangerous situation leading to combustion products spilling into the space. This language is the "provisions" the original section speaks of and will eliminate the subjectivity of this section by replacing it with mandatory language. (Vote:11-0)

M47-21

### M48-21

Committee Action: Disapproved

Committee Reason: The proposal was disapproved based on the action of M44-21 which references UL197 in lieu of UL710B. (Vote: 10-0)

M48-21

### M49-21

Committee Action: As Submitted

Committee Reason: This proposal passed as submitted based on the proponent reason statement which intends to clarify the intent which was to either design the HVAC system for the kitchen to handle makeup air loads, or to have a dedicated makeup air conditioning system. It is also clarified that the 10 degree differential applies to the thermostat setpoint temperature in the kitchen, not the temperature of the kitchen as it happens to be at any given point in the day. If the HVAC system can handle the loads from makeup air, then the kitchen space temperature will reflect the thermostat setpoint. If a dedicated makeup air system is installed, then it must adhere to the delta 10 degree criterion. The exception recognizes that makeup air fed directly to the integral makeup air plenum of a hood or directly into the mouth of a hood need not be conditioned, since it might not affect the comfort of the employees. (Vote: 11-0)

M49-21

# M50-21

Committee Action: Disapproved

**Committee Reason:** The standard is more stringent but is questionable whether it's enforceable by removing the material requirements of Section 512.2 and the slope requirements of Section 512.3, which do not specifically appear in the reference standard. (Vote: 11-0)

M50-21

# M51-21

Committee Action: As Submitted

**Committee Modification:** 

Committee Reason: This proposal clarifies the intent of this section without changing its meaning. Section 601.5 establishes requirements for

return air for "heating, ventilation, and air-conditioning systems" that shall not be taken from a closet, bathroom, toilet room, kitchen, garage, boiler room, furnace room or unconditioned attic. (Vote: 6-5)

M51-21

### M52-21

Committee Action: Disapproved

Committee Reason: This proposal is disapproved. The committee felt that this could allow 100% of the air from the bathroom to be recirculated and this would not be preferred. Furthermore, the committee felt the return air in the bathroom was necessary as passive return air occurs when the bathroom door is open. (Vote: 10-0)

M52-21

## M53-21

Committee Action: As Submitted

**Committee Reason:** This proposal has passed as submitted based on the published proponent reason statement and the fact that these return openings are being sized so as to not produce negative pressure in the closet. (Vote: 10-1)

M53-21

### M54-21

Committee Action: Disapproved

**Committee Reason:** This proposal was disapproved based on the committee disbelief of the ability to transfer this application equally between residential and commercial spaces. (Vote: 8-3)

M54-21

## M55-21

This proposal includes published errata

https://cdn-web.iccsafe.org/wp-content/uploads/2021-GROUP-A-CONSOLIDATED-MONOGRAPH-UPDATES-Updated-4-02-2021-complete.pdf

Committee Action: As Modified

#### **Committee Modification:**

#### Add new text as follows:

602.3.1 Ducts, connectors, duct coverings, linings, and tape. .

Rigid and flexible ducts and connectors shall conform to Section 603. Duct coverings, linings, tape and connectors shall conform to Sections 603 and 604.

602.3.2 Smoke detectors. .

Smoke detectors shall be listed and labeled.

Committee Reason: The committee agreed that the proposed provides clarity as to what various materials are permitted within a plenum under specific conditions. The current Sections 602.2 and 602.3 are requirements for the constructing the plenum, and thus the current Section 602.3

should be a subsection of Section 602.2. Section 602.2.1 and its subsections are not for the construction of the plenum, but what materials are permitted within the plenum, and thus should not be a subsection of Section 602.2. The modification brings in language that was originally intended to be part of the submittal. (Vote: 11-0)

M55-21

## M56-21

Committee Action: Disapproved

**Committee Modification:** 

Committee Reason: This proposal was disapproved because there is clarification of text already regarding plenums in M55-21. (Vote: 11-0)

M56-21

## M57-21

Committee Action: Disapproved

Committee Reason: The proposal was disapproved because the committee felt that materials need to be tested as is, whether pipe form or fitting form. (Vote: 11-0)

M57-21

## M58-21

Committee Action: Disapproved

Committee Reason: As proposed presents several unintended consequences. Conditions currently in the code, notably 3, 4, & 5 need to remain. (Vote: 11-0)

M58-21

# M59-21

Committee Action: Disapproved

Committee Reason: The committee felt that not having drywall option for air shafts (ducts) would increase cost. (Vote: 11-0)

M59-21

# M60-21

Committee Action: As Modified

**Committee Modification:** 

#### Revise as follows:

604.3Coverings and linings.

Duct coverings <u>and linings</u>, including adhesives where used, shall have a flame spread index not more than 25 and a smoke-developed index not more than 450 <u>50</u>, when tested in accordance with ASTM E84 or UL 723, using the specimen preparation and mounting procedures of ASTM E2231. <u>Duct coverings and linings shall not flame, glow, smolder or smoke when tested in accordance with ASTM C411 at the temperature to which they are exposed in service. The test temperature shall not fall below 250°F (121°C). Coverings and linings <u>Linings</u> shall be listed and labeled.</u>

Duct linings, including adhesives where used, shall have a flame spread index not more than 25 and a smoke-developed index not more than 50, when tested in accordance with ASTM E84 or UL 723, using the specimen preparation and mounting procedures of ASTM E2231. Duct coverings and linings shall not flame, glow, smolder or smoke when tested in accordance with ASTM G411 at the temperature to which they are exposed in service. The test temperature shall not fall below 250°F (121°C). Linings shall be listed and labeled.

#### **Exceptions:**

- 1. Polyurethane foam insulation that is spray applied to the exterior of ducts in attics and crawl spaces shall be subject to all of the following requirements:
  - 1. The foam plastic insulation shall have a flame spread index not greater than 25 and a smoke-developed index not greater than 450, when tested in accordance with ASTM E84 or UL 723, using the specimen preparation and mounting procedures of ASTM E2231.
  - 2. The foam plastic insulation shall not flame, glow, smolder or smoke when tested in accordance with ASTM C411 at the temperature to which they are exposed in service. The test temperature shall not fall below 250°F (121°C).
  - 3. The foam plastic insulation complies with the requirements of Section 2603 of the International Building Code.
  - 4. The foam plastic insulation is protected against ignition in accordance with the requirements of Section 2603.4.1.6 of the International Building Code.
- 2. Ductwork <u>Duct</u> coverings <u>added to the outside of ducts and not contained in plenums</u> and <u>linings</u>, including adhesives where used, <u>located in a plenum rated cavity</u>, shall have a flame spread index not more than 25 and a smoke-developed index not more than 450 50, when tested in accordance with ASTM E84 or UL 723, using the specimen preparation and mounting procedures of ASTM E2231. Duct coverings and <u>linings</u> shall not flame, glow, smolder or smoke when tested in accordance with ASTM C411 at the temperature to which they are exposed in service. The test temperature shall not fall below 250°F (121°C). Coverings and <u>linings</u> shall be <u>listed</u> and <u>labeled</u>.

**Committee Reason:** This is necessary for fire safety in duct coverings, linings and plenums. Coverings that are not plenums are treated like other building materials. The modification appropriately places the allowance for the higher smoke development (450) in the exception and the lower smoke development (50) in the base requirement. (Vote: 10-1)

M60-21

### M61-21

Committee Action: As Submitted

**Committee Reason:** This proposal was passed as submitted because it references appropriate standards and electrical components. (Vote: 10-0)

M61-21

# M62-21

Committee Action: As Submitted

**Committee Reason:** This proposal was approved as submitted because it adds an appropriate definition for steam bath equipment and the appropriate UL standard for equipment being referenced. (Vote: 10-0)

#### M63-21

Committee Action: As Submitted

Committee Reason: This proposal was passed as submitted because the reference to pressure vessel requirements in Chapter 9 of the code is appropriate. (Vote: 10-0)

M63-21

#### M64-21

Committee Action: As Modified

#### **Committee Modification:**

#### Revise as follows:

1002.4Water heater pan required.

Where a storage type water heater or a hot water storage tank is installed in a location where water leakage from the tank will cause damage, the tank shall be installed in a pan constructed by one of the following:

- 1. Galvanized steel or aluminum of not less than 0.0236 inch (0.6010 mm) in thickness.
- 2. Plastic of not less than 0,036 inch (0.9 mm) in thickness <u>constructed of material having a flame spread index of 25 or less and a smoked developed index of 450 or less when tested in accordance with ASTM E-84 or UL-723</u>
- Other approved materials.
- 4. A plastic pan installed beneath a water heater shall be constructed of material having a flame spread index of 25 or less and a smoked developed index of 450 or less when tested in accordance with ASTM E-84 or UL-723

**Committee Reason:** Good change on water heater pan, aligning what exists currently in IPC Section 504.7. The modification appropriately combines 2 requirements into 1 for simplification. (Vote: 11-0)

M64-21

# M65-21

Committee Action: As Modified

#### **Committee Modification:**

1006.6Safety and relief valve discharge.

Safety and relief valve discharge pipes shall be of rigid pipe that is

approved for the temperature of the system. High-pressure-steam safety valves shall be vented to the outside of the structure. The discharge piping serving pressure relief valves, temperature relief valves and combinations of such valves shall:

- 1. Not be directly connected to the drainage system.
- 2. Discharge through an air break located in the same room as the appliance.
- 3. Not be smaller than the diameter of the outlet of the valve served and shall discharge full size to the air break.
- 4. Serve a single relief device and shall not connect to piping serving any other relief device or equipment.
- 5. Discharge to the floor, to the pan serving the boiler or storage tank, to a waste receptor or to the outdoors.
- 6. Discharge in a manner that does not cause personal injury or structural damage.

- 7. Discharge to a termination point that is readily <u>visible and</u> observable by the building occupants. <u>If the discharge termination point is not readily visible and observable, a device for leak detection monitoring with alarm notification (and not automatic shut-off) is required.</u>
- 8. Not be trapped.
- Be installed so as to flow by gravity.
- 10. Not terminate more than 6 inches (152 mm) above the floor or waste receptor.
- 11. Not have a threaded connection at the end of such piping.
- 12. Not have valves or tee fittings.
- 13. Be constructed of those materials listed in Section 605.4 of the *International Plumbing Code* or materials tested, rated and approved for such use in accordance with ASME A112.4.1.

**Committee Reason:** The committee agreed that this proposal provides clarity to the requirements for safety and relief valves. The modification further clarifies that language. (Vote:11-0)

M65-21

### M66-21 Part I

Committee Action: As Modified

#### **Committee Modification:**

1006.6Safety and relief valve discharge.

Safety and relief valve discharge pipes shall be of rigid pipe that is

approved for the temperature of the system. High-pressure-steam safety valves shall be vented to the outside of the structure. The discharge piping serving pressure relief valves, temperature relief valves and combinations of such valves shall:

- 1. Not be directly connected to the drainage system.
- 2. Discharge through an air break located in the same room as the appliance.
- 3. Not be smaller than the diameter of the outlet of the valve served and shall discharge full size to the air break.
- 4. Serve a single relief device and shall not connect to piping serving any other relief device or equipment.
- 5. Discharge to the floor, to the pan serving the boiler or storage tank, to a waste receptor or to the outdoors.
- 6. Discharge in a manner that does not cause personal injury or structural damage.
- 7. Discharge to a termination point that is readily observable by the building occupants.
- Not be trapped.
- 9. Be installed so as to flow by gravity.
- 10. Terminate not more than 6 inches (152 mm) and not less than two times the discharge pipe diameter above the floor or flood level rim of the waste receptor.
- 11. Not have a threaded connection at the end of such piping.
- 12. Not have valves or tee fittings.
- 13. Be constructed of those materials listed in Section 605.4 of the *International Plumbing Code* or materials tested, rated and approved for such use in accordance with ASME A112.4.1.

Committee Reason: The committee agreed that the text for the requirements for a discharge pipe from any pressure (or temperature) relief valve should be identical between all the codes that have such requirements. It doesn't matter what the relief valve is protecting. Uniformity across the codes on these requirements will improve compliance. The modification further clarifies acceptable industry practices. (Vote: 11-0)

M66-21 Part I

#### M66-21 Part II

Committee Action: Disapproved

Committee Reason: The air gap verses the air break is confusing. It doesn't make sense that the boiler relief valve discharges to a water heater pan. (10-1)

M66-21 Part II

### M67-21

Committee Action: As Submitted

Committee Reason: This proposal was passed as submitted because it will appropriately allow use of black pipe for hydronic equipment. (Vote: 11-0)

M67-21

### M68-21

Committee Action: As Submitted

Committee Reason: This proposal was passed as submitted because the definition is no longer needed based on previous committee actions. (Vote: 11-0)

M68-21

## M69-21

Committee Action: As Modified

#### **Committee Modification:**

1101.1.1Refrigerants other than ammonia.

Refrigerant piping design and installation for systems containing a refrigerant other than ammonia, including pressure vessels and pressure relief devices, shall comply with this chapter and ASHRAE 15. Refrigeration systems containing carbon dioxide as the refrigerant shall also comply with BSR/IIAR CO2.

ANSIBSR/IIAR CO2-2021 Safety Standard for Closed-Circuit Carbon Dioxide Refrigeration Systems

**Committee Reason:** The committee agreed that the proposal appropriately adds a new standard that governs refrigeration and based on the proponent reason statement. The modification simply clarifies the acronym of the new standard. (Vote: 11-0)

M69-21

# M70-21

Committee Action: As Submitted

**Committee Reason:** This proposal was passed as submitted because by adopting this standard it allows for evaluation of older systems and makes sure all components have been looked at. (Vote: 11-0)

### M71-21

Committee Action: As Submitted

**Committee Reason:** This proposal has passed as submitted because it corrects UL standards removed from table for fittings as they currently exist, and are more appropriate in Section 1107. Further, the applicable portions of UL107 are now contained in UL207 that is referenced in Section 1107.5. (Vote: 11-0)

M71-21

### M72-21

Committee Action: As Submitted

Committee Reason: The proposal was passed as submitted based on the proponents reason statement. By adding a requirement for A2L, A2, A3, and B1 to comply with UL 484, UL/CSA 60335-2-40 or UL/CSA 60335-2-89, the code will clarify for the user what safety standards should be used for equipment with these refrigerants. The proposed update of referenced standard UL 484, UL/CSA 60335-2-40 to the 2019 version provides new safety measures for equipment using the A2L refrigerant class, which were not separately addressed in earlier versions of the standard. These changes are especially important in the case of A2L refrigerants, which are expected to increase in use as a substitute for hydrofluorocarbon (HFC) refrigerants. HFCs are extremely potent greenhouse gases and in December 2020 the U.S. Congress passed a new law that will require an 85% economy-wide phasedown of HFC refrigerants over the next 15 years. The phasedown is expected to avoid HFC emissions of 900 million metric tons of CO2-equivalent by 2035. In addition, 9 states - 8 of which adopt the ICC codes - have already prohibited the use of HFC refrigerants in several high volume applications.1 Human comfort systems account for more HFC use than any other end-use application in the U.S., so a large portion of the HFC reductions are expected to come from them. A2L refrigerants have significantly lower global warming potential than A1-class HFCs, so A2L use is a key part of the HFC reduction plan. These restrictions on the supply of HFC refrigerant will drive up consumption of A2L substitutes. Permitting use of alternative refrigerants, including A2L refrigerants, in high probability systems for human comfort will enable states and local jurisdictions to meet their heating and cooling needs while also complying with applicable HFC regulations. Without this change, jurisdictions adopting the code will be forced to enact their own amendments to the code in order to support their HFC reduction goals. (Vote: 10-0)

M72-21

## M73-21

Committee Action: As Submitted

**Committee Reason:** This proposal was passed as submitted because it provides clear criteria of what will be required in changing of refrigerants in this code and ASHRAE15 to be used. (Vote: 10-1)

M73-21

# M74-21

Committee Action: As Modified

#### **Committee Modification:**

TABLE 1103.1 REFRIGERANT CLASSIFICATION, AMOUNT AND OEL **Portions of table not shown remain unchanged.** 

			REFRIGERANT	AMOUNT OF REFRIGERANT PER OCCUPIED SPACE							
CHEMICAL REFRIGERANT	FORMULA	CHEMICAL NAME OF BLEND	SAFETY GROUP	RCL		LFL			OELd	[F] DEGREES OF HAZARD <sup>a</sup>	
				lb/MCf	ppm	g/m³	lb/MCf	ppm	g/m³	ppm	
<del>R-717</del>	NH <sub>3</sub>	<del>ammonia</del>	<del>B2L</del>	0.014	320	0.22	<del>7.2</del>	167,000	<del>116</del>	<del>25</del>	3-3-0°

**Committee Reason:** This proposal has passed as it appropriately updates the Table to match SSPC-34 2019 requirements. The modification recognizes that this chapter does not cover ammonia by removing it from the Table. (Vote: 11-0)

M74-21

### M75-21

This proposal includes published errata

https://cdn-web.iccsafe.org/wp-content/uploads/2021-GROUP-A-CONSOLIDATED-MONOGRAPH-UPDATES-Updated-4-02-2021-complete.pdf

Committee Action: As Modified

#### **Committee Modification:**

1104.3.1Air conditioning for human comfort.

High probability systems used for human comfort shall use Group A1 or A2L refrigerant.

#### **Exceptions:**

- 1. Listed e Equipment listed for and used in residential occupancies containing a maximum of 6.6 pounds (3 kg) of refrigerant.
- 2. Listed e Equipment listed for and used in commercial occupancies containing a maximum of 22 pounds (10 kg) of refrigerant.
- 3. Industrial occupancies.

1104.3.2Group A2, A3, B2 and B3 refrigerants.

Group A2 and B2 refrigerants shall not be used in high-probability systems. Group A3 and B3 refrigerants shall not be used except where approved.

**Exceptions:** This section does not apply to:

- 1. Laboratories where the floor area per occupant is not less than 100 square feet (9.3 m2).
- 2. Listed self contained systems having a maximum of 0.331 pounds (150 g) of Group A3 refrigerant.
- 3. Industrial occupancies.
- 4. Equipment listed for and used in residential occupancies containing a maximum of 6.6 pounds (3 kg) of Group A2 or B2 refrigerant.
- 5. Equipment listed for and used in commercial occupancies containing a maximum of 22 pounds (10 kg) of Group A2 or B2 refrigerant.

Committee Reason: This proposal has been approved as modified because it clarifies and matches up with change made in ASHRAE15 group A3 and B3 requirements. (Vote: 10-0)

M75-21

## M76-21

Committee Action: Disapproved

Committee Reason: The proposal has been disapproved based on previous actions on last three proposals. (Vote: 11-0)

M76-21

## M77-21 Part I

Committee Action: As Submitted

**Committee Reason:** The proposal has passed as submitted because it cleans up the language based on revisions to ASHRAE 15 and the 2021 IMC with respect to the hazardous location requirements in NFPA70. (Vote: 11-0)

M77-21 Part I

### M77-21 Part II

This proposal includes published errata

https://cdn-web.iccsafe.org/wp-content/uploads/2021-GROUP-A-CONSOLIDATED-MONOGRAPH-UPDATES-Updated-4-02-2021-complete.pdf

Committee Action: As Submitted

Committee Reason: The proposal passed as submitted because exception 608.17, limited flammability refrigeration, is no longer necessary. (Vote: 11-0)

M77-21 Part II

## M78-21 Part I

Committee Action: As Submitted

Committee Reason: The proposal has passed as submitted because it aligns IMC with ASHRAE regarding temperature controls in refrigerator rooms based upon detection levels. (Vote: 10-1)

M78-21 Part I

# M78-21 Part II

Committee Action: As Submitted

**Committee Reason:** This proposal better aligns the IMC with ASHRAE 15. ASHRAE 15 already requires supervision of ventilation detection, signaling and control circuits and does not need to also be addressed in the IMC. (Vote: 14-0)

M78-21 Part II

### M79-21

Committee Action: As Modified

**Committee Modification:** 

#### SECTION1102 REFRIGERATION SYSTEM REQUIREMENTS

1102.1General.

The

<u>refrigeration</u> system classification, allowable refrigerants, maximum quantity, enclosure requirements, location limitations, and field pressure test requirements shall be determined as follows:

- 1. Determine the refrigeration system's classification, in accordance with Section 1103.3.
- 2. Determine the refrigerant classification in accordance with Section 1103.1.
- 3. Determine the maximum allowable quantity of refrigerant in accordance with Section 1104, based on type of refrigerant, <u>refrigeration</u> system classification and *occupancy*.
- 4. Determine the refrigeration system enclosure requirements in accordance with Section 1104.
- 5. Refrigeration equipment and appliance location and installation shall be subject to the limitations of Chapter 3.
- 6. Nonfactory-tested, field-erected equipment and appliances shall be pressure tested in accordance with Section 1108.

#### 1102.2.1 Mixing.

Refrigerants, including refrigerant blends, with different designations in ASHRAE 34 shall not be mixed in a <u>refrigeration</u> system.

**Exception:** Addition of a second refrigerant is allowed where permitted by the *equipment* or *appliance* manufacturer to improve oil return at low temperatures. The refrigerant and amount added shall be in accordance with the manufacturer's instructions.

#### SECTION1104 REFRIGERATION SYSTEM APPLICATION REQUIREMENTS

1104.2Machinery room.

Except as provided in Sections 1104.2.1 and 1104.2.2, all components containing the refrigerant shall be located either outdoors or in a *machinery room* where the quantity of refrigerant in an independent circuit of a <u>refrigeration</u> system exceeds the amounts shown in Table 1103.1. For refrigerant blends not listed in Table 1103.1, the same requirement shall apply where the amount for any blend component exceeds that indicated in Table 1103.1 for that component. This requirement shall also apply where the combined amount of the blend components exceeds a limit of 69,100 parts per million (ppm) by volume. *Machinery rooms* required by this section shall be constructed and maintained in accordance with Section 1105 for Group A1 and B1 refrigerants and in accordance with Sections 1105 and 1106 for Group A2, B2, A3 and B3 refrigerants.

#### **Exceptions:**

- 1. Machinery rooms are not required for listed equipment and appliances containing not more than 6.6 pounds (3 kg) of refrigerant, regardless of the refrigerant's safety classification, where installed in accordance with the equipment's or appliance's listing and the equipment or appliance manufacturer's installation instructions.
- 2. Piping in compliance with Section 1107 is allowed in other locations to connect components installed in a *machinery room* with those installed outdoors.

#### 1104.2.2Industrial occupancies and refrigerated rooms.

This section applies only to rooms and spaces that: are within industrial occupancies; contain a refrigerant evaporator; are maintained at temperatures below 68°F (20°C); and are used for manufacturing, food and beverage preparation, meat cutting, other processes and storage. Where a

machinery room would otherwise be required by Section 1104.2, a machinery room shall not be required where all of the following conditions are met:

- 1. The space containing the machinery is separated from other occupancies by tight construction with tight-fitting doors.
- 2. Access is restricted to authorized personnel.
- 3. Refrigerant detectors are installed as required for *machinery rooms* in accordance with Section 1105.3.

**Exception:** Refrigerant detectors are not required in unoccupied areas that contain only continuous piping that does not include valves, valve assemblies, *equipment* or *equipment* connections.

- 4. Surfaces having temperatures exceeding 800°F (427°C) and open flames are not present where any Group A2, B2, A3 or B3 refrigerant is used (see Section 1104.3.4).
- 5. All electrical *equipment* and appliances conform to Class I, Division 2, *hazardous location* classification requirements of NFPA 70 where the quantity of any Group A2, B2, A3 or B3 refrigerant in a single independent circuit would exceed 25 percent of the lower flammability limit (LFL) upon release to the space.
- All refrigerant-containing parts in <u>refrigeration</u> systems with a total connected compressor power exceeding 100 horsepower (hp) (74.6 kW)
   —except evaporators used for refrigeration or dehumidification, condensers used for heating, control and pressure relief valves for either,

low-probability pumps and connecting piping—are located either outdoors or in a machinery room.

1106.3Flammable refrigerants.

Where refrigerants of Groups A2, A3, B2 and B3 are used, the

machinery room shall conform to the Class I, Division 2, hazardous location classification requirements of NFPA 70.

**Exception:** *Machinery rooms* for <u>refrigeration</u> systems containing Group A2L *refrigerants* that are provided with ventilation in accordance with Section 1106.4.

1106.4Special requirements for Group A2L refrigerant machinery rooms.

Machinery rooms

with <u>refrigeration</u> systems containing Group A2L <u>refrigerants</u> that do not conform to the Class I, Division 2, hazardous location electrical requirements of NFPA 70, as permitted by the exception to Section 1106.3, shall comply with Sections 1106.4.1 through 1106.4.3.

**Exception:** *Machinery rooms* conforming to the Class I, Division 2, hazardous location classification requirements of NFPA 70 are not required to comply with Sections 1106.4.1 and 1106.4.2.

1107.1Piping.

Refrigerant piping material for other than R-717 (ammonia) <u>refrigeration</u> systems shall conform to the requirements in this section. Piping material and installations for R-717 (ammonia) refrigeration systems shall comply with IIAR 2.

1107.6Valves

Valves shall be of materials that are compatible with the type of piping material, refrigerants and oils in the <u>refrigeration</u> system. Valves shall be

*listed* and *labeled* and rated for the temperatures and pressures of the refrigeration systems in which the valves are installed. 1109.2.5Refrigerant pipe shafts.

Refrigerant piping that penetrates two or more floor/ceiling assemblies shall be enclosed in a fire-resistance-rated shaft enclosure. The fire-resistance-rated shaft enclosure shall comply with Section 713 of the *International Building Code*.

#### **Exceptions:**

- 1. Refrigeration S systems using R-718 refrigerant (water).
- 2. Piping in a direct <u>refrigeration</u> system using Group A1 refrigerant where the refrigerant quantity does not exceed the limits of Table 1103.1 for the smallest occupied space through which the piping passes.
- 3. Piping located on the exterior of the building where vented to the outdoors.

1109.8.2Refrigeration systems containing more than 100 pounds (45 kg) of refrigerant.

In addition to stop valves required by Section 1109.8.1,

refrigeration systems containing more than 100 pounds (45 kg) of refrigerant shall have stop valves installed in the following locations:

- 1. Each inlet of each liquid receiver.
- 2. Each inlet and each outlet of each condenser where more than one condenser is used in parallel.

#### Exceptions:

- 1. Stop valves shall not be required at the inlet of a receiver in a condensing unit nor at the inlet of a receiver that is an integral part of the condenser.
- 2.  $\underline{\text{Refrigeration } \$} \text{ systems utilizing nonpositive displacement compressors.}$

1110.6Booster compressor.

Where a compressor protected by a pressure relief device is used as a booster to obtain an intermediate pressure, and such compressor discharges into the suction side of another compressor, the booster compressor shall be considered to be a part of the low-pressure side of the refrigeration system.

1110.7Centrifugal/nonpositive displacement compressors.

Where testing <u>refrigeration</u> systems using centrifugal or other nonpositive displacement compressors, the entire system shall be considered to be the low-pressure side for test purposes.

1110.8Contractor or engineer declaration.

The installing contractor or

registered design professional of record shall issue a certificate of test to the code official for all <u>refrigeration</u> systems containing 55 pounds (25 kg) or more of refrigerant. The certificate shall give the test date, name of the refrigerant, test medium and the field test pressure applied to the high-

pressure side and the low-pressure side of the <u>refrigeration</u> system. The certification of test shall be signed by the installing contractor or <u>registered</u> design professional and shall be made part of the public record.

**Committee Reason:** The proposal has been passed as modified because the published reason correlates with actions on M10-21. This proposed change cleans up the language added during the last cycle. ASHRAE 15 has used refrigerant systems and refrigeration systems interchangeably for many years. ASHRAE SSPC 15 has voted to convert all of the text in the standard to "refrigeration systems." This change will keep the Mechanical Code consistent with ASHRAE 15.(Vote: 11-0)

M79-21

### M80-21

Committee Action: As Submitted

**Committee Reason:** There was some concern about the use of the word "may" as it is permissive and subjective. However, the proposal has passed as submitted because composite aluminum piping is approved under ASTM standards and is an appropriate option for refrigerant piping. (Vote: 7-4)

M80-21

### M81-21

Committee Action: As Submitted

Committee Reason: The proposal was passed as submitted because it appropriately deletes Section 1108.5 dealing with Brass Pipe, as brass is simply one of several copper alloys. Section 1108.6 covers it. (Vote: 11-0)

M81-21

# M82-21

Committee Action: As Submitted

**Committee Reason:** The proposal was passed as submitted because it is editorial and cleans up language based on actions in previous years, with respect to copper alloys.

(Vote: 11-0)

M82-21

# M83-21

Committee Action: As Submitted

#### **Committee Modification:**

Committee Reason: The proposal has been passed as submitted. The language clarifies refrigerant series already approved. (Vote: 11-0)

M83-21

#### M84-21

Committee Action: As Submitted

Committee Reason: The proposal was passed as submitted because it aligns with ASHRAE15-2019. (Vote: 11-0)

M84-21

### M85-21

Committee Action: As Submitted

**Committee Reason:** The proposal has been passed as submitted based on the published reason statement of the proponent. The hydronic applications known as radiant heating & cooling and snow & ice melting are currently listed within Ch. 12 in Section 1209 Embedded Piping, but are missing from the Scope. Therefore, these types of hydronic systems should be listed within the Scope. (Vote: 11-0)

M85-21

### M86-21

Committee Action: As Submitted

**Committee Reason:** The proposal has passed as submitted because standards (FS WW-P-325B) and materials (lead) reference in this application are no longer used or manufactured. (Vote: 11-0)

M86-21

## M87-21

Committee Action: As Modified

**Committee Modification:** 

TABLE 1202.4 HYDRONIC PIPE

MATERIAL	STANDARD (see Chapter 15)					
Acrylonitrile butadiene styrene (ABS) plastic pipe	ASTM D1527; ASTM F2806					
Chlorinated polyvinyl chloride (CPVC) plastic pipe	ASTM D2846; ASTM F441; ASTM F442					
Chlorinated polyvinyl chloride/aluminum/chlorinated polyvinyl chloride (CPVC/AL/CPVC)	ASTM F2855					
Copper or copper-alloy pipe	ASTM B42; ASTM B43; ASTM B302					
Copper or copper-alloy tube (Type K, L or M)	ASTM B75; ASTM B88; ASTM B135; ASTM B251					
Cross-linked polyethylene/aluminum/cross-linked polyethylene (PEX-AL-PEX) pressure pipe	ASTM F1281; CSA CAN/CSA-B-137.10					
Cross-linked polyethylene (PEX) tubing	ASTM F876; ASTM F3253; CSA B137.5					
Ductile iron pipe	AWWA C115/A21.15; AWWA C151/A21.51					
Lead pipe	FS WW-P-325B					
Polyethylene/aluminum/polyethylene (PE-AL-PE) pressure pipe	ASTM F1282; CSA B137.9					
Polypropylene (PP) plastic pipe	ASTM F2389					
Polyvinyl chloride (PVC) plastic pipe	ASTM D1785; ASTM D2241					
Raised temperature polyethylene (PE-RT)	ASTM F2623; ASTM F2769; CSA B137.18					
Steel pipe	ASTM A53; ASTM A106;					
Steel tubing	ASTM A254					
Stainless Steel pipe	ASTM A269; ASTM A312; <del>ASTM A554;</del> ASTM A778					
Stainless Steel tubing	ASTM A269; ASTM A312; ASTM A554; ASTM A778					

Committee Reason: The proposal has been approved based on the addition of stainless steel pipe and stainless steel tubing with hydronic systems along with the proponent reason statement. Stainless steel material is proposed to be added for hydronic applications where stainless steel pipe, tubing and fittings are necessary for corrosion resistance. The proposed stainless steel standards are also referenced in other nationally recognized codes and are commonly used for potable water distribution and hydronic applications. The modification removes reference to ASTM 554 and language is consistent with previous actions in the IPC. (Vote: 11-0)

M87-21

## M88-21

Committee Action: As Modified

**Committee Modification:** 

TABLE 1202.5 HYDRONIC PIPE FITTINGS

MATERIAL	STANDARD (see Chapter 15)					
Copper and copper alloys	ASME B16.15; ASME B16.18; ASME B16.22; ASME B16.24; ASME B16.26; ASME B16.51; ASSE 1061; ASTM F1974; ASTM F3226					
CPVC	ASSE 1061; ASTM D2846; ASTM F438; ASTM F439					
Ductile iron and gray iron	ANSI/AWWA C110/A21.10; ASTM A395; ASTM A536; ASTM F1476; ASTM F1548; AWWA C153/A21.53					
Ductile iron	ANSI/AWWA C153/A21.53					
Gray iron	ASTM A126					
Malleable iron	ASME B16.3					
PE-RT fittings	ASSE 1061; ASTM D3261; ASTM F1807; ASTM F2098; ASTM F2159; ASTM F2735; ASTM F2769; CSA B137.1; CSA B137.18					
PEX fittings	ASSE 1061; ASTM F877; ASTM F1807; ASTM F1960; ASTM F2080; ASTM F2159; ASTM F3253					
Plastic	ASTM D2466; ASTM D2467; ASTM D2846; ASTM F877; ASTM F2389; ASTM F2735					
Steel	ASME B16.5; ASME B16.9; ASME B16.11; ASME B16.28; ASTM A53; ASTM A106; ASTM A234; ASTM A395; ASTM A420; ASTM A536; ASTM F1476; ASTM F1548; ASTM F3226					
Stainless Steel	ASTM A269; ASTM A312; <del>ASTM A554;</del> ASTM A778; ASTM F3226					

**Committee Reason:** The committee agreed that stainless steel pipe, tubing and fittings, and their associated reference standards are appropriate for hydronic pipe fittings. The modification matches past actions in the IPC and what was done by previous committee in M87-21. (Vote: 11-0)

M88-21

## M89-21

Committee Action: As Submitted

Committee Reason: The proposal has passed as submitted because it adds different type color for allowed glue, which is better for inspection, and is consistent with IRC and IPC actions. (Vote: 11-0)

M89-21

# M90-21

Committee Action: As Submitted

Committee Reason: The proposal has passed as submitted because the material is no longer manufactured. (Vote: 11-0)

M90-21

# M91-21

Committee Action: As Submitted

**Committee Reason:** The proposal has passed as submitted based on proponents statement indicating that the addition of stainless steel pipe and tubing for hydronic applications is appropriate and gives the designer additional options. (Vote: 11-0)

M91-21

#### M92-21

Committee Action: As Submitted

Committee Reason: The proposal was passed as submitted because it adds clarification. If you have a valve, you would want to have access to it. (Vote: 11-0)

M92-21

### M93-21

Committee Action: As Submitted

**Committee Reason:** The committee approved this proposal because it adds ASTM F3253 titled, "Standard Specification for *Crosslinked Polyethylene (PEX) Tubing* with Oxygen Barrier for Hot- and Cold-Water Hydronic Distribution Systems" and contains information for PEX systems for hydronic applications where an oxygen barrier is used by Boiler/ Hydronic manufacturer to prevent rusting inside. (Vote: 11-0)

M93-21

### M94-21

Committee Action: Disapproved

**Committee Reason:** The proposal was disapproved for several reasons. Smaller circulation pumps are supported by adjacent pipe. Further, the pump should be installed in accordance to instructions provided by the manufacturer. Lastly, the committee was unclear as to why the pump would need to be secured to the building structure.

(Vote: 11-0)

M94-21

# M95-21

Committee Action: As Submitted

Committee Reason: The proposal has passed as submitted based on previous actions regarding materials no longer being used. (Vote: 11-0)

M95-21

## M96-21

Committee Action: As Submitted

Committee Reason: The proposal has passed as submitted because the language removes product that no longer is being used and is consistent with previous actions. (Vote: 11-0)

M96-21

#### M97-21

Committee Action: As Submitted

**Committee Reason:** Although there were some concerns over the clarity of the language, the content of the design report and the need for design documents, the committee approved the proposal because most times systems are designed with maximum lengths depending on the square footage of a room. (Vote: 6-5)

M97-21

## M98-21

Committee Action: As Submitted

Committee Reason: The proposal has passed as submitted because heating lengths will be different depending on systems and locations. +/- 10% will not affect the performance of the system. (Vote: 8-3)

M98-21

### M99-21 Part I

Committee Action: As Submitted

Committee Reason: The proposal was passed as submitted based on the proponent reason statement. ASTM F3347 is titled, "Standard Specification for Metal Press Insert Fittings with Factory Assembled Stainless Steel Press Sleeve for SDR9 Cross-linked Polyethylene (PEX) Tubing and SDR9 Polyethylene of Raised Temperature (PE-RT) Tubing" and contains information for metallic fittings for both PEX and PERT systems intended for use in residential and commercial, hot and cold, potable water distribution systems as well as sealed central heating, including underfloor heating/cooling systems, and residential fire sprinkler systems. (Vote: 11-0)

M99-21 Part I

# M99-21 Part II

Committee Action: As Submitted

Committee Reason: This new standard provides another option for hydronic piping. (11-0)

M99-21 Part II

# M100-21 Part I

Committee Action: As Submitted

Committee Reason: The proposal has passed as submitted because it appropriately adds an additional standard for materials that can be used. (Vote: 11-0)

M100-21 Part I

# M100-21 Part II

Committee Action: As Submitted

Committee Reason: The Committee agreed with the published reason statement. (11-0)

M100-21 Part II

# M101-21

Committee Action: As Submitted

**Committee Reason:** The proposal has been approved as submitted because it clears up confusion of what is an approved type of joint used underground and whether the authority having jurisdiction needs to approve the joint. (Vote: 11-0)

M101-21

# **International Plumbing Code**

2021 Group A - Report of the Committee Action Hearing Results

P1-21

Committee Action: Disapproved

Committee Reason: The Committee was not opposed to the principle and concept. However, the presentation and format leaves a lot to be desired. No one is going to know how to use the right column of the new table because it refers to the system that seems to be addressing building sewer, building drains and stacks. This is a new concept that is not intuitive and code users are not going to understand it. A number of other problems such as 1) the definition half-bath has a misplaced phrase "including or excluding a bidet," (should be after "group of fixtures" 2) new table refers to greater than 1.6 gpf water closets ( 1.6 gpf exceeds code limitation), 3) the entire new table depends 100% on a footnote in the table, 4) the first sentence of the footnote addresses "guest rooms, patient rooms, and single user bathrooms in other buildings" in the context of individual dwelling units (confusing applications) 4) the table title of the right column speaks to 3 or greater water closets (does the table not apply dwelling units with 2 water closets?) and the last sentence of the footnote indicates that the values apply to the system (no definition of what that means). The resultant effect of this table will be some reduction of the size of piping and that might have unknown consequences to overall system venting. (8-6)

P1-21

P2-21

Committee Action: Disapproved

**Committee Reason:** The Committee is not opposed to the proposal in principle. However, the definition should say that a body spray is not a showerhead or a hand held shower. The Table can be read that a body spray at 2.5gpm and a showerhead at 2.5 gpm can be flowing simultaneously. The proponent is encouraged to bring it back in public comment with some of these items cleaned up. (12-2)

P2-21

P3-21

Committee Action: As Submitted

Committee Reason: This definition needs to be aligned with what is in the ISPSC. (13-1)

P3-21

P4-21

Committee Action: As Modified

**Committee Modification:** 

SERVICE SINK. A general pupose sink exclusively intended to be used for facilitating the cleaning of a building or tenant space.

Committee Reason: For the Modification: The term "general purpose" was removed as it is much too broad, allowing nearly any "sink" to serve as a service sink. That is not the intent.

For the proposal As Modified: This subject has been an issue in the code for a long time and needs addressed. Note that definition indicates exclusively intended (not exclusively "used" which would limit a service sink from being used to also capture A/C condensate as a secondary function.) (1-3)

P4-21

### P5-21 Part I

Committee Action: As Modified

#### **Committee Modification:**

FAMILY OR ASSISTED-USE TOILET FACILITY. A room separate from other toilet facilities intended to be used by either all persons regardless of sex, families and those needing assisted care having; an independent entrance,not more less than one adult-height water closet, not more than one adult-height lavatory, and is permitted to have no more than one urinal, one child height water closet and one child height lavatory.

FAMILY OR ASSISTED-USE BATHING ROOM. A room separate from other bathing rooms intended to be used by either all persons regardless of sex, families and those needing assisted care having; an independent entrance, no less not more than one shower or bathtub, not more than one adult-height water closet and one adult-height lavatory, and is permitted to have no more than one urinal, one child height water closet and one child height lavatory.

**Committee Reason:** For the modification: Provides more clarity and makes the terminology more consistent with other code callouts. (12-2) For the proposal As Modified: The Committee agrees with the published reason statement. (8-6)

P5-21 Part I

### P5-21 Part II

Committee Action: Disapproved

**Committee Reason:** The requirements for plumbing fixtures are in the IPC and the family/assisted use toilet and bathing rooms in IBC Section 1109, so this information does not need to be in a definition. (Vote: 13-1)

P5-21 Part II

# P6-21 Part I

Committee Action: As Submitted

Committee Reason: The Committee agreed with the published reason statement. (14-0)

P6-21 Part I

# P6-21 Part II

Committee Action: As Modified

#### **Committee Modification:**

P2603.2.1 Protection against physical damage.

In concealed locations, where piping, other than cast-iron or galvanized steel, is installed through holes or notches in studs, joists, rafters or similar

members less than 1

<sup>1</sup>/<sub>4</sub> inches (31.8 mm) from the nearest edge of the member, the pipe shall be protected by steel shield plates. Such shield plates shall have a thickness of not less than 0.0575 inch (1.463 mm) (No. 16 Gage). Such plates shall cover the area of the pipe where the member is notched or bored, and shall extend not less than 2 inches (51 mm) above sole plates and below top plates.

**Committee Reason:** For the modification: This eliminates a redundancy in the proposal. For the proposal as modified: This change is to provide consistency in all the codes. (10-1)

P6-21 Part II

### P6-21 Part III

Committee Action: As Modified

**Committee Modification:** 

# 1109.3.1 Protection against physical damage,.

In addition to the requirements of Section 305.5, aluminum, copper and steel tube used for Group A2L A2, A3, B2, and B2L B3 refrigerants and located in concealed locations where tubing is installed in studs, joists, rafters or similar member spaces, and located less than 1 1/4 inches (32 mm) from the nearest edge of the member, shall be continuously protected by shield plates. Protective steel shield plates hshall cover the area of the tube plus the area extending not less than 2 inches (51 mm) beyond both sides of the tube.

**Committee Reason:** The proposal has passed because the committee agreed that the proposal brought consistency between the IMC and the NEC, with respect to shield plate requirements. The modification brings in language that is consistent with other proposals dealing with revisions to refrigerant groups. (Vote: 10-0, 1 abstained)

P6-21 Part III

### P6-21 Part IV

Committee Action: Disapproved

**Committee Reason:** There are safety concerns and there was not technical justification for the change. Gas piping is different from water piping. (8-3)

P6-21 Part IV

### P7-21

Committee Action: Withdrawn

P7-21

# P8-21

Committee Action: As Modified

Committee Modification:

305.8 Expansive Soil.

Where expansive soil is identified <u>under buildings in accordance with Section 1803.5.3 of the International Building Code</u>, but not removed <del>under foundations in accordance with Section 1808.6.3 of the International Building Code</del>, plumbing shall be protected in accordance with Section 305.8.1 or 305.8.2.

305.8.22 Isolated Foundations.

Under foundations with a slab or framing that structurally spans over an under-floor space which isolates the slab <u>or framing</u> from the effects of expansive soil swelling and shrinking <u>in accordance with Section 1808.6.1 of the International Building Code</u>, the plumbing shall be suspended so that plumbing, hangers and supports are isolated, by <u>a adequate</u> voidspace, from the effects of expansive soil swelling and shrinking.

Exception: It shall be permitted for plumbing to be buried if the plumbing provides drainage of an under-floor space.

To protect the voidspace, soil shall be sloped, benched or retained in accordance with an approved design methodology. It shall not be permitted for the plumbing, hangers and supports below the slab or below the framing to be in contact with soil or any assemblage of materials that is in contact with soil within the active zone. It shall not be permitted for a slab and plumbing to be lifted as an assembly to create the voidspace unless the under-floor space is a crawlspace with access to allow inspection of plumbing after lifting.

Exception: It shall be permitted for the piping, fittings, hangers, and supports below the slab or below the framing to be in contact with structural elements of the foundation that are designed to resist the effects of expansive soil swelling and shrinking in accordance with Section 1808.6.1 of the International Building Code.

Organic Mmaterials subject to decay shall not be used for hangers, supports and soil retention systems. Materials subject to corrosion shall not be used for hangers, supports and soil retention systems unless protected in an approved manner.

Where plumbing transitions to a buried condition beyond the perimeter of the foundation, an adequately flexible expansion joint shall be provided in the plumbing system to accommodate the effects of expansive soil swelling and shrinking.

**Committee Reason:** For the Modification: The Committee approved the modification as it cleans up some subjective terms and the exceptions make it clear about what was meant by plumbing underground. (10-4)

For the Proposal As Modified: This is an important topic that the code needs to address. (10-4)

P8-21

### P9-21

Committee Action: As Submitted

**Committee Reason:** The Committee believes this is an enhancement for safety at minimal expense. There have been many instances of gas lines being cross-bored through through plastic sewer lines. Subsequent clearing of a blockage in the sewer can result in a disaster. (9-5)

P9-21

### P10-21

Committee Action: As Submitted

Committee Reason: The Committee agreed with the published reason statement. (13-1)

P10-21

# P11-21

Committee Action: Disapproved

Committee Reason: The language proposed to be removed is important to retain in the code. (14-0)

### P12-21

Committee Action: Disapproved

Committee Reason: This proposal limits options, points to a proprietary standard, is not specific to a type of piping and will increase the cost of construction. (14-0)

P12-21

### P13-21

Committee Action: As Modified

#### **Committee Modification:**

**311.1 General.** Toilet facilities shall be provided for construction workers and such facilities shall be maintained in a sanitary condition. Construction worker toilet facilities of the nonsewer ed type shall conform to PSAI Z4.3 or to IAPMO/ISO 30500.

Committee Reason: For the Modification: Corrects a typographical error to match the standard's title. (14-0)

For the proposal As Modified: Offers another option for construction worker toilet facilities. (14-0)

P13-21

### P14-21

Committee Action: As Submitted

Committee Reason: The Committee agreed with the published reason statement. (12-2)

P14-21

### P15-21

Committee Action: Disapproved

**Committee Reason:** This would require personnel already certified by local or state requirements to obtain additional certification. This is onerous . The codes don't decide who can do what work. (12-2)

P15-21

# P16-21

Committee Action: Disapproved

Committee Reason: The category is too broad. What is a training program if not academic? There is no substantiation for the fixture ratio. (12-2)

### P17-21 Part I

Committee Action: As Submitted

Committee Reason: This is a needed clarification for the coverage of indoor pools. (14-0)

P17-21 Part I

### P17-21 Part II

Committee Action: As Modified

#### **Committee Modification:**

**609.2.1 Water area less than 7500 square feet.** Facilities that have less than 7500 gross square feet (697 m²) of water area available for bather access shall have dressing facilities and not less than one cleansing shower for males and one cleansing shower for females.

#### Exception:

This requirement shall not apply to Class C semi-public pools associated with hotels or motels.

Committee Reason: For the modification: This clarification is needed for all smaller pools.

For the proposal as modified: This is a needed allowance for semi-public pools. (8-3)

P17-21 Part II

### P18-21

Committee Action: Disapproved

Committee Reason: There is no substantiation for deleting this requirement. Children can be messy. A shower or tub is needed. (8-6)

P18-21

# P19-21

Committee Action: Disapproved

**Committee Reason:** This is an overly broad applicability of apartment houses. Footnotes in tables are not the place for putting in requirements. (14-0)

P19-21

# P20-21

Committee Action: Disapproved

Committee Reason: The code already takes into account these spaces. (13-1)

# P21-21

Committee Action: As Modified

**Committee Modification:** 

TABLE 403.1 MINIMUM NUMBER OF REQUIRED PLUMBING FIXTURES<sup>a</sup> (See Sections 403.1.1 and 403.2)

NO.	CLASSIFICATION		DESCRIPTION	(URINA	CLOSETS LS: SEE N 424.2)	LAVA	TORIES	BATHTUBS/ SHOWERS	DRINKING FOUNTAIN (SEE	OTHER
				MALE	FEMALE	MALE	FEMALE		SECTION 410)	
			Theaters and other buildings for the performing arts and motion pictures <sup>d</sup>	1 per 125	1 per 65	1 p	er 200	_	1 per 500	1 service sink
			Nightclubs, bars, taverns, dance halls and buildings for similar purposes <sup>d</sup>	1 per 40	1 per 40	1 p	er 75	_	1 per 500	1 service sink
			Restaurants, banquet halls and food courts <sup>d</sup>	1 per 75	1 per 75	1 p	er 200	_	1 per 500	1 service sink
			Casino gaming areas	400 and 1	1 per 50 for the first 400 and 1 per 150 for the remainder exceeding 400	first 7 per 50 rem	50 for the 50 and 1 00 for the ainder ding 750	_	1 per 1,000	1 service sink
	1	Assembly	Auditoriums without permanent seating, art galleries, exhibition halls, museums, lecture halls, libraries, arcades and gymnasiums <sup>d</sup>	1 per 125	1 per 65	1 p	er 200	_	1 per 500	1 service sink
			Passenger terminals and transportation facilities <sup>d</sup>	1 per 500	1 per 500	1 p	er 750	_	1 per 1,000	1 service sink
			Places of worship and other religious services <sup>d</sup>	1 per 150	1 per 75	1 p	er 200	_	1 per 1,000	1 service sink
			Coliseums, arenas, skating rinks, pools and tennis courts for indoor sporting events and activities	1,500 and 1 per 120 for the	1 per 40 for the first 1,520 and 1 per 60 for the remainder exceeding 1,520	1 per 200	1 per 150	_	1 per 1,000	1 service sink
			Stadiums, amusement parks, bleachers and grandstands for outdoor sporting events and activities <sup>f</sup>		1 per 40 for the first 1,520 and 1 per 60 for the remainder exceeding 1,520	1 per 200	1 per 150	_	1 per 1,000	1 service sink
			Buildings for the transaction of business, non-medical professional services, other services involving merchandise, office buildings, banks, light industrial and similar uses	and 1 per remainder	the first 50 50 for the exceeding 0	first 8 per 8 rem	40 for the 80 and 1 0 for the ainder eding 80	-	1 per 100	1 service sink <sup>e</sup>
2	Business		Ambulatory care facilities and	50 and 1	1 per 25 for the first 50 and 1 per 50 for	1 1	per 50		1 per 100	1 service sink per

NO.	CLASSIFICATION	Outpatient clinics		WATER CLOSETS rengended Learneseder ex Section New 2002 ing 50 50		LAV	ATORIES	BATHTUBS/ SHOWERS	DRINKING FOUNTAIN (SEE SECTION	floor
_	F			MALE		1	FEMALE		410) 1 per 100	1 service
3—	Educational	Educational facili	ties	1 pe	er 50	1	per 50	<u> </u>	1 per 100	sink
4	Factory and industrial	Structures in wh occupants are e work fabricating, or processing of materials	ngaged in assembly	1 per 100		1 per 100		_	1 per 400	1 service sink
		Alcohol and drug	ı centers <sup>b</sup>							
		Congregate care	e facilities <sup>b</sup>			1 '				
		Group homes <sup>b</sup> Halfway houses <sup>l</sup>	b		10 care bients			1 per 8 care recipients		
		Social rehabilitat								
		Foster care facil	ities <sup>b</sup>							
		Assisted living	Sleeping units for care recipients <sup>c</sup>	1 per 2 sle	eping units		2 sleeping units	1 per 8 sleeping units		
		and residential board and care facilities with care recipients	Dwelling units for care recipients	1 per dw	elling unit	ng unit 1 per dwellir unit		1 per dwelling unit		1 kitchen sink per dwelling unit
		who receive Custodial care	Employee facilities	1 -	are recipient nits	nient 1 per 60 c			1 per 100	1 service sink per floor
			Visitor facilities	1 -	are recipient its.		r 75 care ient units.			
			Sleeping units for care recipients		re recipient ng units	re	er 2 care cipient oing units	1 per 8 care recipient sleeping units		
		Nursing homes	Employee facilities	I -	are recipient nits	re	r 60 care cipient oing units		1 per 100	1 service sink per floor
			Visitor facilities	1 -	are recipient its.	re	r 75 care cipient ing rooms			
5	Institutional		Sleeping units for care recipients	1 -	e recipient ng unit	re	er care cipient ping unit	1 per 100 care recipient sleeping unit		
			Care recipient treatment areas	1 -	are recipient nt rooms	re	r 50 care cipient nent rooms		1 per 100	
		<u>Hospitals<sup>b</sup></u> <del>Footnote b</del>	Employee facilities	1 per 25 care recipient sleeping units or	1 per 35 25 care recipient sleeping units or	re	r 50 care cipient ng units or		1 per 100	1 service sink per floor

				(QAMINA	LS: 'SETE	treatment room LAVATORIES	BATHTUBS/	DRINKING FOUNTAIN (SEE SECTION 410)	OTHER
NO.	CLASSIFICATION	DESCRIP		care MALE recipient	75 care FEMALE recipient	MARE FENEXEE	SHOWERS		OTHER
			Visitor facilities	sleeping room or treatment room	sleeping room or treatment room	redipient sleeping room or treatment room		1 per 500	_
		Employees in hornursing homes <sup>b</sup>	spitals and	1 pe	er 25	1 per 35	_	1 per 100	_
		Visitors in hospital nursing homes	als and	1 pe	er 75	1 per 100	_	1 per 500	_
		Prisons <sup>b</sup>		1 pe	er cell	1 per cell	1 per 15	1 per 100	1 service sink
		Reformatories,	Cells	1 per-	<del>15</del> cell	1 per <del>15</del> cell	1 per 15	1 per 100	1 service sink
		detention centers, and correctional centers <sup>b</sup>	Congregate Living Facilities	<u>1 pe</u>	er 1 <u>5</u>	<u>1 per 15</u>	1 per 15	1 per 100	1 service sink
			Employees	1 pe	er 25	1 per 35	_	1 per 100	_
		Adult day care an	nd child day	1 pe	er 15	1 per 15	1	1 per 100	1 service sink
6	Mercantile	Retail stores, set stations, shops, markets and sho centers	salesrooms,	1 pe	r 500	1 per 750	_	1 per 1,000	1 service sink <sup>e</sup>
		Hotels, motels, b houses (transien	_	1 per sle	eping unit	1 per sleeping unit	1 per sleeping unit	_	1 service sink
		Dormitories, frate sororities and bo houses (not trans	arding	1 pe	er 10	1 per 10	1 per 8	1 per 100	1 service sink
		Apartment house	,	1 per dw	relling unit	1 per dwelling unit	1 per dwelling unit	_	1 kitchen sink per dwelling unit; 1 automatic clothes washer connection per 20 dwelling units
7	Residential	Congregate living with 16 or fewer recipients receiving	care		10 care Dients	1 per 10 care recipients	1 per 8 care recipients		1 kitchen sink
		One- and two-far dwellings and lod with five or fewer guestrooms	ging houses	1 per dw	relling unit	1 per dwelling unit	1 per dwelling unit	_	1 kitchen sink per dwelling unit; 1 automatic clothes washer connection per dwelling unit

NO	CLASSIFICATION	Congregate living facilities with 16 or fewer persons  Structu <b>DESSCRIPT SON</b> age of	(URINA	LØSETS LS: SEE N 424.2)	per 10 ATORIES	1 per 8  BATHTUBS/ SHOWERS	DRINKING FOUNTAIN (SEE	1 service sink OTHER
8	Storage	goods, warehouses, storehouse and freight	MALE 1 pe	FEMALE r 100	FEMALE per 100		SECTION 410) 1 per 1,000	1 service
		depots. Low and Moderate Hazard.						SIIK

Committee Reason: For the modification: The term "hospitals" was inadvertently left out and the fixture ratios for males and females needed to be the same as these facilities are typically provided as single user toilet room configuration. A congregate living facility row was added to the reformatories/detention centers row because most facilities do not have cells for individuals but have rooms for small to medium size groups of individuals.

For the proposal as modified: The Committee agreed with the published reason statement. (14-0)

P21-21

### P22-21

Committee Action: Disapproved

**Committee Reason:** The concept is well-supported however, there needs to be a residential row added for this to be in, add the term "homeless" to shelter, and change "bottled-supplied water dispenser" to "bottle filling station". This is not a temporary shelter because everything in Table 403.1 is permanent. (14-0)

P22-21

### P23-21

Committee Action: Disapproved

**Committee Reason:** Who determines the actual student capacity? As the building code is used for occupant load, this method of determining capacity is not based in the code and will be difficult to enforce. The last sentence of the footnote seems to conflict with the first sentence of the footnote. (14-0)

P23-21

# P24-21 Part I

This proposal includes published errata

https://cdn-web.iccsafe.org/wp-content/uploads/2021-GROUP-A-CONSOLIDATED-MONOGRAPH-UPDATES-Updated-4-02-2021-complete.pdf

Committee Action: As Modified

#### **Committee Modification:**

403.2 Separate facilities.

Where plumbing fixtures are required, separate facilities shall be provided for each sex.

**Exceptions:** 

- 1. Separate facilities shall not be required for dwelling units and sleeping units.
- 2. Separate facilities shall not be required in structures or tenant spaces with a total occupant load, including both employees and customers, of 15 or fewer.
- 3. Separate facilities shall not be required in mercantile occupancies in which the maximum occupant load is 100 or fewer.
- 4. Separate facilities shall not be required in business occupancies in which the maximum occupant load is 25 or fewer.
- 5. Separate facilities shall not be required to be designated by sex where single-user toilet rooms are provided in accordance with Section 403.1.2.
- Separate facilities shall not be required where rooms having both water closets and lavatory fixtures are designed for use by all persons
  regardless of sex and privacy is provided for water closets and urinals in accordance with Section 405.3.4 and for urinals in
  accordance with Section 405.3.5.

**Committee Reason:** For the modification: The correction section number for urinals needed to be included. (14-0) For the proposal As Modified: The Committee agreed with the published reason statement. (14-0)

P24-21 Part I

### P24-21 Part II

Committee Action: As Submitted

Committee Reason: This proposal consolidates the requirement and reduces words in the code. (14-0)

P24-21 Part II

### P25-21

This proposal includes unpublished errata

In the Committee Action Hearing version of the proposal, in Section 403.1.2, the reference to IBC Section 1109.2.1 was corrected to Section 1110.2.1.

Committee Action: As Modified

#### Committee Modification:

403.1.2Single-user toilet and bathing room fixtures. The plumbing fixtures located in single-user toilet or single-user and bathing rooms, including family or assisted-use toilet and bathing rooms, shall contribute toward the total number of required plumbing fixtures for a building or tenant space, and. The number of fixtures in single-user toilets, single-user bathing fixtures and family or assisted-use toilets shall be deducted proportionately from the required gender ratios of Table 403.1. Single-user toilet and bathing rooms, and family or assisted-use toilet rooms and bathing rooms shall be identified as being available for use by all persons regardless of sex.

The total number of fixtures shall be permitted to be based on the required number of separate facilities or based on the aggregate of any combination of single-user or male and female designated multi-user facilities.

**Committee Reason:** For the modification: The clarifies the section to make sure that requirement covers all facilities. (14-0) For the proposal As Modified: Exception No. 3 was always out of place. There has always been a problem with how to count the fixtures. This clears up the confusion. (14-0)

P25-21

# P26-21

Committee Reason: The proposal makes it more difficult to understand what fixture ratio must be applied. (13-1)

P26-21

### P27-21

This proposal includes unpublished errata

In Section 403.1.2, the reference to IBC Section 1109.2.1 was corrected to Section 1110.2.1.

Committee Action: Disapproved

Committee Reason: The Committee was uncertain about what this proposal is attempting to accomplish. The discussions resulted in more confusion. (13-1)

P27-21

### P28-21

This proposal includes unpublished errata

In Section 403.1.2, the reference to IBC Section 1109.2.1 was corrected to Section 1110.2.1.

Committee Action: As Submitted

Committee Reason: This is a good cleanup of out-of-date terminology. (14-0)

P28-21

### P29-21

Committee Action: Disapproved

Committee Reason: The wording of items 5 and 6 does not fit with the same format of Items 1 through 4. (10-4)

P29-21

### P30-21

Committee Action: Disapproved

**Committee Reason:** A "nondwelling" unit is an unknown. Parts of these buildings that are not dwelling units are covered by other use descriptions. (14-0)

P30-21

# P31-21

Committee Action: Withdrawn

P31-21

#### P32-21

Committee Action: As Submitted

Committee Reason: The Committee agreed with the published reason statement. (14-0)

P32-21

### P33-21

Committee Action: Disapproved

Committee Reason: It is unreasonable for someone to need to ride an elevator for multiple floors to access toilet facilities as it could take a long time. (14-0)

P33-21

### P34-21

Committee Action: Disapproved

Committee Reason: What are ancillary uses? There is no limit for the number of stories below the level of exit discharge. It is unreasonable for someone to ride an elevator for multiple stories to use the toilet facilities as it may require waiting for a long period of time. (14-0)

P34-21

# P35-21

Committee Action: Disapproved

**Committee Reason:** The proposal seems to be all over the map. For example, how can be required for key locking from the inside of the door where the door must be unlockable from the inside of the door without the use of a key? (12-2)

P35-21

# P36-21

Committee Action: As Submitted

Committee Reason: This is a simple editorial fix. There is no new requirement. (14-0)

P36-21

# P37-21 Part I

**Committee Reason:** This is a good proposal in principle. However, installing a floor drain in an existing building might be very difficult thus leading to a decision to not install the adult changing table. The exception for allowing hand sanitizer instead of a lavatory is not appropriate for this application. The Committee encourages the proponent to bring this back in a Public Comment. (13-1)

P37-21 Part I

### P37-21 Part II

Committee Action: Disapproved

Committee Reason: The part about "within 2 feet" doesn't indicate which direction. Is it horiontally? (8-6)

P37-21 Part II

### P38-21

Committee Action: Disapproved

Committee Reason: Section 404.2 appears clumsily worded. Exception 1 refers to "specific exceptions in A117.1". This is an open reference where a reader is not going to know which exceptions in A117.1 apply. Exception 3 is unclear about "one room for each use." What use? (13-1)

P38-21

### P39-21 Part I

Committee Action: Disapproved

Committee Reason: The new standard is not yet complete. (14-0)

P39-21 Part I

# **P39-21 Part II**

Committee Action: Disapproved

Committee Reason: The new standard is not yet complete. The Committee encourages the proponent to bring back in Public Comment (if the standard is completed) and change "all gender toilet rooms" to "toilet rooms for all persons regardless of sex". (11-3)

P39-21 Part II

# P40-21

Committee Action: As Submitted

**Committee Reason:** There can be a lot of different shapes for overflows. This is a manufacturer's decision. The code doesn't require an overflow. (9-5)

#### P41-21

Committee Action: As Modified

#### **Committee Modification:**

**410.1Approval.** Drinking fountains, *water coolers* and *water dispensers* shall conform to NSF 61, Section 9. Drinking fountains shall also conform to ASME A112.19.1/CSA B45.2, or ASME A112.19.2/CSA B45.1 or ASME A112.19.3/CSA B45.4. Electrically operated, refrigerated drinking *water coolers* and *water dispensers* shall be listed and labeled in accordance with UL 399.

**Committee Reason:** For the modification: The A112 standard was inadvertently struck out and is needed. (14-0) For the proposal As Modified: ASHRAE 18 is no longer a valid standard.(12-2)

P41-21

### P42-21

Committee Action: Disapproved

Committee Reason: There is no supporting data for lessening occupants access to drinking water. (13-1)

P42-21

### P43-21

Committee Action: Disapproved

**Committee Reason:** The proposed language complicates the requirement. The code already requires a maximum distance to drinking fountains. (13-1)

P43-21

### P44-21

Committee Action: Disapproved

Committee Reason: Most convenience stores fall under the 15 persons occupant load. The language is too broad for other applications. This could be abused in large stores. (14-0)

P44-21

# P45-21 Part I

Committee Action: Disapproved

Committee Reason: There is no need to call this out as this is covered in Section 102.3. There is no need to single out this fixture. (14-0)

### P45-21 Part II

Committee Action: Disapproved

Committee Reason: Section 504.1 in the IPMC already covers. (14-0)

P45-21 Part II

### P46-21

Committee Action: As Modified

#### **Committee Modification:**

**412.10 Head shampoo sink faucets.** Head shampoo sink faucets shall be supplied with hot water that is limited to not more than 120°F (49°C). Each faucet shall have integral check valves to prevent crossover flow between the hot and cold water supply connections. The means for regulating the maximum temperature shall be one of the following:

- 1. A limiting device conforming to ASSE 1070/ASME A112.1070/CSA B125.70.
- 2. A water heater conforming to ASSE 1082 or 1084.
- 3. A temperature-actuated, flow-reduction device conforming to ASSE 1062.

**Committee Reason:** For the modification: An ASSE 1082 water heater is not limited to serving multiple shampoo sinks. (14-0) For the proposal As Modified: Both types of water heaters are acceptable for the application. (14-0)

P46-21

# P47-21

Committee Action: As Submitted

Committee Reason: ASSE 1014 is the correct standard for a backflow device for a hand-held shower. (14-0)

P47-21

### P48-21

Committee Action: Disapproved

Committee Reason: An ASSE 1082 water heater is appropriate for the application. Also, based on action of P46-21. (14-0)

P48-21

# P49-21

Committee Action: As Modified

#### **Committee Modification:**

419.6 Soap dispenser. Soap dispensers shall be provided for public lavatories. Each public lavatory shall have an accompanying soap dispenser.

Committee Reason: For the modification: This is better/more concise language. There isn't a need to have a dispenser for each lavatory but only a soap dispenser be available at a public lavatory or public lavatories. (10-4)

For the proposal As Modified: This is necessary for good hygiene after using the toilet facilities. (13-1)

P49-21

### P50-21

Committee Action: As Modified

#### **Committee Modification:**

**423.3 Footbaths and pedicure baths.** The water supplied to specialty plumbing fixtures, such as pedicure chairs having an integral foot bathtub and footbaths, shall be limited to not greater than 120°F (49°C) by a water-temperature-limiting device that conforms to ASSE 1070/ASME A112.1070/CSA B125.70 or by a water heater complying with ASSE 1082 or 1084.

**Committee Reason:** For the modification: An ASSE 1082 water heater can serve multiple pedicure baths. (12-2) For the proposal As Modified: Action is consistent with actions on P46-21 and P48-21. (12-2)

P50-21

### P51-21

Committee Action: As Modified

#### **Committee Modification:**

423.4- 412.12 Electrically heated or cooled water dispensers. All potable water dispensers directly connected to the plumbing system shall comply with one of the following:

- 1. Beverage faucets shall comply with ASME A112.18.1/CSA B125.1
- 2. Dispensers that supply Eelectrically heated or cooled water dispensers shall comply with ASSE 1023.
- 3. Electronic devices that heat water shall comply with UL 499

Chapter 15, UL

499-2014: Standard for Electric Heating Appliances with revisions through February 23, 2017

Committee Reason: For the modification: Clarified that UL 499 and ASME A112. 18.1/CSA B125.1 are not needed as both are referenced in the ASSE 1023 standard. (14-0)

For the proposal As Modified: The Committee agreed with the published reason statement. (14-0)

P51-21

# P52-21

Committee Action: As Submitted

Committee Reason: There is a need to know how to do substitution of water closets with urinals where the toilet facility serves all persons regardless of sex. (12-2)

P52-21

### P53-21 Part I

Committee Action: Withdrawn

P53-21 Part I

### P53-21 Part II

Committee Action: Withdrawn

P53-21 Part II

### P54-21 Part I

Committee Action: As Modified

#### **Committee Modification:**

**501.9 Lead Content.** Water heaters <u>that are part of the potable water distribution system</u> shall comply with NSF 372 and shall have a weighted average lead content of 0.25% or less.

**Committee Reason:** For the modification: Clarification is needed to allow for water heaters that are not used for potable water distribution. (10-4) For the proposal As Modified: This aligns the code with the USEPA final rule on reduced lead (0.25%) for components that contact drinking water. A water heater is considered to supply drinking water. (12-2)

P54-21 Part I

# P54-21 Part II

Committee Action: As Submitted

**Committee Reason:** The final rules from the USEPA concerning the reduced lead level for components in drinking water systems states that a water heater does supply drinking water as the water could be used for drinking, especially from a lavatory faucet. (11-0)

P54-21 Part II

# P55-21

Committee Action: As Modified

#### **Committee Modification:**

504.7 Required pan. Where a storage tank-type water heater or a hot water storage tank is installed in a location where water leakage from the

tank will cause damage, the tank shall be installed in a pan constructed of one of the following:

- 1. Galvanized steel or aluminum of not less than 0.0236 inch (0.6010 mm) in thickness.
- 2. Plastic not less than 0.036 inch (0.9 mm) in thickness.
- 3. Other approved materials.
- 4. A plastic pan installed beneath a gas fired water heater shall be constructed of material having a flame spread index of 25 or less and a smoked developed index of 450 or less when tested in accordance with ASTM E84 or UL 723.
- 5. Water heaters installed in pans shall comply with Section 314.2.3.2

A plastic pan installed beneath a gas-fired water heater shall be constructed of material having a flame spread index of 25 or less and a smoke developed index of 450 or less when tested in accordance with ASTM E84 or UL 723.

Water heaters installed in pans shall comply with Section 314.2.3.2.

Committee Reason: For the modification: The correction is to place Item 4 and Item 5 in the main paragraph where they make more sense. (12-2)

For the proposal As Modified: The Committee agreed with the published reason statement. (11-3)

P55-21

### P56-21

Committee Action: Withdrawn

P56-21

### P57-21

Committee Action: Disapproved

**Committee Reason:** The safety pan should be able to handle the hot water temperature so the drain piping should also be able to handle the hot water. The T&P relief valve is allowed to discharge to the pan and that creates the possibility that water greater than 140F can be in the pan. Therefore, the pan drain piping needs to be able to handle this higher temperature (greater than 140F) water. (9-5)

P57-21

# P58-21

Committee Action: Disapproved

**Committee Reason:** Section 602.3.1 indicates in accordance with the "building code". What building code? Section 602.3.6 indicates that those items need to be supported in accordance with the IBC. The IBC doesn't have anything specific with respect to these items.

All three new definitions have requirements. Definitions should not contain requirements. Section 608.18.7.1 by itself would have been a good proposal. (13-1)

P58-21

# P59-21

**Committee Reason:** The reason statement didn't indicate why a regulator larger than 1-1/2 inches isn't required to have a strainer. The beginning of the last sentence repeats what the original section is requiring and is therefore, redundant. The last part of the last sentence appears to allow the code official to override the requirements of the section but offers no advice for the code official to make that decision. There are 4 inch pressure regulators available so this proposal might eliminate some products that are currently available. (14-0)

P59-21

### P60-21

Committee Action: Disapproved

Committee Reason: This proposal offers nothing substantive that would improve the code requirements. (14-0)

P60-21

### P61-21 Part I

Committee Action: As Submitted

Committee Reason: Stainless steel tubing is indicated in several product standards. (13-0)

P61-21 Part I

### P61-21 Part II

Committee Action: Disapproved

Committee Reason: The Committee doesn't see the need for this mechanical tubing for water service applications. (7-4)

P61-21 Part II

# P62-21 Part I

Committee Action: As Submitted

Committee Reason: The addition will provide more options available to the designer. (13-0)

P62-21 Part I

# P62-21 Part II

Committee Action: As Modified

**Committee Modification:** 

TABLE P2906.5 WATER DISTRIBUTION PIPE	
Stainless steel (Type 304/304L) pipe	ASTM A269; ASTM A312; <del>ASTM A554;</del> ASTM A778
Stainless steel (Type 316/316L) pipe	ASTM A269; ASTM A312; <del>ASTM A554;</del> ASTM A778
Stainless steel (Type 304/304L) tubing	ASTM A269; ASTM A312; <del>ASTM A554;</del> ASTM A778
Stainless steel (Type 316/316L) tubing	ASTM A269; ASTM A312; <del>ASTM A554;</del> ASTM A778

**Committee Reason:** For the modification: The standard is not appropriate for water distribution piping material. For the proposal as modified: This proposal adds another option for water distribution piping. (11-0)

P62-21 Part II

## P63-21 Part I

Committee Action: Disapproved

**Committee Reason:** The proposed standard ASTM A554 is for "ornamental and structural and exhaust applications". This is inappropriate for plumbing piping. (11-2)

P63-21 Part I

# **P63-21 Part II**

Committee Action: As Modified

**Committee Modification:** 

TABLE P2906.6 PIPE FITTINGS	
Stainless steel (Type 304/304L) pipe	ASTM A269; ASTM A312; <del>ASTM A554;</del> ASTM A778; ASTM F3226
Stainless steel (Type 316/316L) pipe	ASTM A269; ASTM A312; <del>ASTM A554;</del> ASTM A778; ASTM F3226

**Committee Reason:** For the modification: The standard is not appropriate for water distribution piping material.

For the proposal as modified: This adds another option for water distribution piping. (11-0)

P63-21 Part II

### P64-21 Part I

Committee Action: As Submitted

Committee Reason: The Committee agreed with the published reason statement. (13-0)

P64-21 Part I

### P64-21 Part II

Committee Action: As Submitted

Committee Reason: This adds another option for piping material. (11-0)

P64-21 Part II

## P65-21 Part I

Committee Action: As Submitted

Committee Reason: This is needed to cover press connect fittings that are available. (13-0)

P65-21 Part I

# P65-21 Part II

Committee Action: As Submitted

Committee Reason: This adds another option for piping material. (11-0)

P65-21 Part II

# P66-21

Committee Action: Disapproved

Committee Reason: These products are not pipe fittings but connectors. These do not belong in the pipe fitting table. They are not suitable for use on plastic piping. (14-0)

### P67-21

Committee Action: As Submitted

Committee Reason: This proposal is consistent with changes in terminology that were approved in the past few code cycles. (14-0)

P67-21

## P68-21 Part I

Committee Action: As Submitted

Committee Reason: The Committee agreed with the published reason statement. (14-0)

P68-21 Part I

## P68-21 Part II

Committee Action: As Submitted

Committee Reason: The Committee agreed with the published reason statement. (11-0)

P68-21 Part II

# P69-21

Committee Action: Disapproved

Committee Reason: The very first sentence of the section doesn't make sense. (14-0)

P69-21

# P70-21

Committee Action: Disapproved

**Committee Reason:** The published proposal did not have any legislative markup. NSF 61 should not be included in the section. The standard contains non-mandatory language. (14-0)

P70-21

# P71-21

Committee Reason: The committee believed that the way the text is written, all mechanical joints would need to comply with the new standard and that isn't correct. (14-0)

P71-21

### P72-21

Committee Action: Disapproved

**Committee Reason:** The section originally was for joints for grooved end pipe. The new text expands the section to cover joints for all other pipe ends. This is much to broad and is not appropriate. (14-0)

P72-21

### P73-21

Committee Action: Disapproved

**Committee Reason:** The new language is very subjective and is mostly nonsense. Specifying the use of a calibrated torque wrench is not something to put into the code as this is a topic that should be covered by a manufacturer's instructions. (14-0)

P73-21

### P74-21 Part I

Committee Action: As Submitted

Committee Reason: The standard for the procedure for making these type of joints is required. (13-0)

P74-21 Part I

# P74-21 Part II

Committee Action: As Submitted

Committee Reason: This adds an option to use a one step cement for PVC and provides a standard for assembling these types of joints. (7-4)

P74-21 Part II

# P75-21 Part I

Committee Action: As Submitted

Committee Reason: This adds an option to help with field inspection. (14-0)

P75-21 Part I

### P75-21 Part II

Committee Action: As Submitted

Committee Reason: The Committee agreed with the published reason statement. (11-0)

P75-21 Part II

### P76-21 Part I

Committee Action: As Submitted

Committee Reason: The Committee agreed with the published reason statement. (13-0)

P76-21 Part I

### P76-21 Part II

Committee Action: As Submitted

Committee Reason: This provides more updated standards for assembling solvent weld joints. (9-2)

P76-21 Part II

### P77-21

Committee Action: Disapproved

Committee Reason: This is essentially the same as proposal P72 and the committee's comment on P72 applies. (14-0)

P77-21

# P78-21

Committee Action: Disapproved

**Committee Reason:** The first sentence makes no sense. The code should not be requiring a calibrated torque wrench as this should be covered by the manufacturer's installation instructions. The use of "should" is nonmandatory language. (14-0)

P78-21

# P79-21

Committee Action: Disapproved

**Committee Reason:** The committee believe this proposal is similar to previous proposal (P78) and therefore, the same reasons for disapproval apply. (14-0)

P80-21

Committee Action: Disapproved

Committee Reason: This proposal involves the same issues as P72 and P77 that were disapproved. (14-0)

P80-21

P81-21

Committee Action: Disapproved

Committee Reason: The committee believed this is similar to P80 which was disapproved. (14-0)

P81-21

P82-21

Committee Action: Disapproved

Committee Reason: The reference to NSF 61 is redundant as this is already covered elsewhere in the code. (14-0)

P82-21

P83-21

Committee Action: Disapproved

Committee Reason: The Committee did not understand what a stepped mechanical coupling is. This text seems like a proprietary product is being specified. The text for "calibrated torque wrench" is not appropriate for the code. (14-0)

P83-21

P84-21

Committee Action: Disapproved

Committee Reason: The new text seems to be requiring that all mechanical joints comply with the new standard. (14-0)

P84-21

P85-21

**Committee Reason:** The choice of 3 stories appears to be arbitrary. There isn't any indication that this exception was originally about strip malls. The committee believes that each tenant space should have a shutoff valve. (11-3)

P85-21

## P86-21

Committee Action: Disapproved

**Committee Reason:** Stop valve-equipped tub/shower valves is a insignificant cost over plain tub/shower valves. In a multi-family building, not having stop valves at each fixture puts too much faith in the main shut off valve not leaking when closed. (12-2)

P86-21

## P87-21 Part I

Committee Action: As Modified

#### **Committee Modification:**

TABLE 604.4 MAXIMUM FLOW RATES AND CONSUMPTION FOR PLUMBING FIXTURES AND FIXTURE FITTINGS

PLUMBING FIXTURE OR FIXTURE FITTING	MAXIMUM FLOW RATE OR QUANTITY <sup>b</sup>
Shower head <sup>a,c</sup>	2.0 gpm at 80 psi

For SI: 1 gallon = 3.785 L, 1 gallon per minute = 3.785 L/m, 1 pound per square inch = 6.895 kPa.

- a. A hand-held shower spray is a shower head.
- b. Consumption tolerances shall be determined from referenced standards.
- c. Shower heads shall comply with <u>all requirements for high-efficiency showerheads in ASME A112.18.1/CSA B125.1</u> USEPA WaterSense Specification for Showerheads.

#### **USEPA**

WaterSense Specification for Showerheads Version 1.1, July 26, 2018

**Committee Reason:** For the modification: Referencing the Water Sense standard would be a mistake as that non-consensus standard is likely to ratchet down to lower flow rates. It is better to refer to the requirements for high-efficiency showerheads that are already addressed in the current (consensus) ASME product standard. (8-6)

For the proposal As Modified: The Committee agreed with the published reason statement. (8-7)

P87-21 Part I

### P87-21 Part II

Committee Action: Disapproved

**Committee Reason:** Saving water is a regional issue. Any potential water savings is likely offset by the user taking a longer shower. The IRC is not a water savings code. The green code is the appropriate place for this. The plumbing community continues to be concerned about lowering the flow of water in both distribution systems and drainage systems without some definitive studies being completed to understand the health impacts and drainage system issues. (11-0)

P87-21 Part II

### P88-21

Committee Action: Disapproved

**Committee Reason:** The proposed text is placed under the incorrect section (606.5 water pressure booster systems) and should be located at 608.12.1. The standard only addresses tanks up to a certain size therefore, the proposed text should reflect that limitation. (14-0)

P88-21

# P89-21

Committee Action: As Submitted

Committee Reason: The Committee agreed with the published reason statement. (13-1)

P89-21

#### P90-21

Committee Action: Disapproved

**Committee Reason:** There is no data to support that a real problem exists. The markings on faucets are in accordance with the product standards. (14-0)

P90-21

### P91-21

Committee Action: Disapproved

**Committee Reason:** Table 608.1 doesn't establish a requirement; the table is only informational. Specific requirements should be placed under 608.17.1. These devices would be appropriate for non-carbonated beverage dispensers. (14-0)

P91-21

### P92-21

Committee Action: As Submitted

Committee Reason: This is a simple update on the sizes that are available for backflow preventers. (14-0)

P92-21

# P93-21

Committee Action: Disapproved

**Committee Reason:** Table 608.1 is provided more as a convenience and is not code text. Note in last column is an inappropriate location. A dual check valve for high hazard application is not acceptable. Section 608.16.4.2 requires a vacuum breaker for this application. (14-0)

P93-21

# P94-21

Committee Action: Disapproved

Committee Reason: Reasons identical to that given for disapproval of P93-21. (14-0)

P94-21

# P95-21

**Committee Reason:** The entry is not under the correct sub-heading row of the table. The note in the right hand column is absurd and should not be in the table. This is already covered in 608.14.8. (14-0)

P95-21

### P96-21 Part I

Committee Action: Disapproved

Committee Reason: The proposed language doesn't need the text after "access" as it doesn't matter why access is needed. The manufacturer installation instructions should always be followed. This doesn't add anything much to the code. (12-2)

P96-21 Part I

### **P96-21 Part II**

Committee Action: Disapproved

**Committee Reason:** This proposal is trying to fix a problem that isn't an issue. The requirements could directly conflict with manufacturer's requirements. The Committee believes there will be a cost impact. (10-0)

P96-21 Part II

### P97-21

Committee Action: Disapproved

Committee Reason: The proposal really doesn't do anything as you still have to add heat or insulation, (or both), or the item has to be removed to a warm space. (14-0)

P97-21

# P98-21

Committee Action: Disapproved

Committee Reason: The plumbing engineer can design around the issue of not large enough standard sizes of waste receptors. A system that automatically shuts off the water supply could result in significant damage to what is being supplied with water such as a chiller. The use of ambiguous terms of "excessive" "feasible" and "properly sized" doesn't help the code official approve an installation. Simply, you can't substitute technology to carry away water from backflow preventer that discharges water by design to protect the potable water system. (11-3)

P98-21

# P99-21

Committee Action: As Submitted

Committee Reason: The current title of the standard (and the scope of the standard is for "carbonated" beverage dispensers. This might create

confusion in a code section addressing only non-carbonated dispensers. The standard needs to be changed before proposing this to the code. (14-0)

P99-21

### P100-21

Committee Action: Disapproved

**Committee Reason:** The committee did not want to delete the struck language as ASSE 1047 is still an active standard for fire specification reduced pressure principle backflow prevention assemblies. (14-0)

P100-21

### P101-21

Committee Action: Disapproved

Committee Reason: The Committee was troubled by the use of the phrase "point of source." The Committee believes the current text adequately conveys the intent of the requirement. (14-0)

P101-21

### P102-21

Committee Action: Disapproved

Committee Reason: Water colder than tempered water is as cold as the incoming water supply temperature. The Committee cannot see how such a requirement could apply in every region where the code is used. In some areas, winter time incoming cold water is much too cold to hold one's hands under for needed 20 seconds for proper handwashing. The CDC recommends range of 68-75 degrees F if cold water only is to be used for handwashing. Although the intent of reducing Legionella is understood, where is the actual data to show that there are a significant number of cases coming from handwashing stations? (14-0)

P102-21

# P103-21

Committee Action: Disapproved

Committee Reason: This additional requirement would only duplicate what is already required by this code section. This isn't any definition for the term "commercial." (14-0)

P103-21

# P104-21

Committee Reason: This standard is not appropriate for inclusion in the table. Mechanical couplings are not pipe fittings. (14-0)

P104-21

## P105-21

Committee Action: Disapproved

Committee Reason: This proposal is the same issue as P84 which was disapproved. Couplings are not pipe fittings. (14-0)

P105-21

## P106-21

Committee Action: As Submitted

**Committee Reason:** The Committee agreed with the published reason statement. The code should not reference standards that are no longer valid. (14-0)

P106-21

### P107-21

Committee Action: As Submitted

Committee Reason: This is a valid standard to include in the code to provide another option for building sewer piping. (14-0)

P107-21

# P108-21

Committee Action: As Submitted

Committee Reason: The Committee agreed with the published reason statement. (14-0)

P108-21

## P109-21

Committee Action: Disapproved

Committee Reason: This proposal is the same issue as P84 and P104 which were disapproved. Couplings are not pipe fittings. (14-0)

P109-21

# P110-21

Committee Action: Disapproved

Committee Reason: This proposal is the same issue as P109 which was disapproved. Couplings are not pipe fittings. (14-0)

P110-21

# P111-21

Committee Action: As Modified

#### **Committee Modification:**

TABLE 702.6 CHEMICAL WASTE DRAINAGE SYSTEM PIPE AND FITTINGS

MATERIAL	STANDARD
Chlorinated polyvinyl chloride (CPVC)	ASTM F2618
Borosilicate glass	ASTM C1053
High silicon iron	ASTM A518/A518M
Polypropylene (PP) Polyolefin	ASTM F1412 <u>, CSA B181.3</u>
Polyvinylidene fluoride (PVDF)	ASTM F1673, CSA B181.3

**Committee Reason:** For the modification: The CSA standard (already in the reference standards chapter) is also applicable to these products. Polyolefin is a broader term for these products.

For the proposal as modified: The Committee agreed that this a needed addition to the code to help the code official approve piping waste piping. However, the Committee requests that the proponent bring this back back in public comment to change the phrase "resistant to temperature" to "suitable for the temperature of the waste." (14-0)

P111-21

### P112-21

Committee Action: Disapproved

Committee Reason: The published reason statement doesn't provide any basis to approve the couplings. (14-0)

P112-21

### P113-21

Committee Action: Disapproved

Committee Reason: Removing the requirement for a center stop for couplings for this application is not appropriate. (14-0)

P113-21

### P114-21

Committee Action: Disapproved

Committee Reason: The revisions are too limiting for copper DWV couplings. (14-0)

P114-21

# P115-21

Committee Action: Disapproved

Committee Reason: This section is for galvanized piping and the new language is for stainless steel. This is not proposed in the correct section of the code. (14-0)

P115-21

#### P116-21

Committee Action: Disapproved

Committee Reason: The requirement for compliance to NSF 61 is not appropriate for these applications. The manufacturer's instructions would cover installation requirements thus there is no need for the code to require a calibrated torque wrench. (14-0)

P116-21

### P117-21 Part I

Committee Action: As Submitted

Committee Reason: The Committee agreed with the published reason statement. (13-0)

P117-21 Part I

### P117-21 Part II

Committee Action: As Submitted

Committee Reason: These instructions are necessary to properly make the joint. (6-5)

P117-21 Part II

# P118-21

Committee Action: Disapproved

Committee Reason: The legislative format of the proposal was incorrect. There is no need for compliance to NSF 61 in this application. (14-0)

P118-21

# P119-21

Committee Action: Disapproved

**Committee Reason:** There is no need for compliance to NSF 61 in this application. The manufacturer's instructions cover installation. The code does not need to require a calibrated torque wrench. (14-0)

P119-21

# P120-21 Part I

Committee Action: As Submitted

Committee Reason: The Committee agreed with the published reason statement. (14-0)

## P120-21 Part II

Committee Action: As Submitted

Committee Reason: This adds another option for piping material for these applications. (11-0)

P120-21 Part II

## P121-21

Committee Action: Disapproved

**Committee Reason:** Permissive language ("can") is not appropriate in code text. Standard ASTM F1476 is not appropriate. The manufacturer's instructions cover installation. The code does not need to require a calibrated torque wrench. (14-0)

P121-21

### P122-21

Committee Action: Disapproved

**Committee Reason:** Permissive language ("can") is not appropriate in code text. Standard ASTM F1476 is not appropriate. The manufacturer's instructions cover installation. The code does not need to require a calibrated torque wrench. (14-0)

P122-21

## P123-21

Committee Action: Disapproved

Committee Reason: Requiring compliance to NSF 61 is not appropriate for the application. Permissive language ("can") is not appropriate for the code. 14-0

P123-21

## P124-21

Committee Action: As Submitted

Committee Reason: The Committee agreed with the published reason statement. (14-0)

P124-21

## P125-21

Committee Action: Disapproved

Committee Reason: This appears to require a proprietary product. (14-0)

P125-21

## P126-21

Committee Action: Disapproved

**Committee Reason:** There isn't a definition for stepped coupling. The manufacture's instructions provide installation requirements. The code doesn't need to require use of a calibrated torque wrench. (14-0)

P126-21

### P127-21

Committee Action: Disapproved

Committee Reason: There isn't a definition for stepped coupling. (14-0)

P127-21

### P128-21

Committee Action: Disapproved

Committee Reason: There isn't a definition for a stepped coupling. (14-0)

P128-21

## P129-21 Part I

Committee Action: Disapproved

Committee Reason: The proposed new standard contains a significant amount of permissive language. The new definition is confusing. (14-0)

P129-21 Part I

## P129-21 Part II

Committee Action: Disapproved

**Committee Reason:** The ASTM F1216 standard has permissive language. The requirements leave the decision as to whether the application is a good candidate for the method, to the code official but offers no criteria to make that determination. Although this is a great solution that is needed, there doesn't seem to be much actual support to local code officials from manufacturers of the products. There is an incorrect code section reference: Section P2609.3 should be P2609.4. (11-0)

### P130-21

Committee Action: Disapproved

**Committee Reason:** The industry standards currently in the code are specific to grease interceptors. "Grease" is an all-inclusive term. The new language is a big over-reach for the code to require approvals beyond the local code official. (14-0)

P130-21

#### P131-21

Committee Action: Disapproved

**Committee Reason:** This proposal would cause an unsurping of the code official's authority. Including mop sink discharge into the flow going to a grease interceptor could cause operational problems because of emulsifiers that are often used in cleaning solutions. The code already covers FOG in the broad term "grease". (14-0)

P131-21

## P132-21

Committee Action: Withdrawn

P132-21

## P133-21 Part I

Committee Action: Disapproved

**Committee Reason:** The Committee is not necessarily against this technology used in certain applications. The proposed definition doesn't describe what the device is. Use of the term "foul air" doesn't seem to be necessary or understandable by everyone. The text is proposed to be located in an inappropriate section of the code. (14-0)

P133-21 Part I

## P133-21 Part II

Committee Action: Disapproved

**Committee Reason:** There are some parts of the proposal that are not written in code language format. This seems to violate sections that require venting and liquid-filled traps. The Committee believes this could be a device to install in addition to a liquid-filled trap. Testimony was given indicating that most failures of these devices are caused by installation issues. (11-0)

P133-21 Part II

#### P134-21

Committee Action: Disapproved

Committee Reason: This proposal would cause an usurping of the code official's authority. Code officials are not responsible to to make sure that a grease interceptor is cleaned at specific intervals. The proposal puts back language (for a solids interceptor) that was previously removed. (14-0)

P134-21

## P135-21

Committee Action: As Submitted

Committee Reason: The Committee agreed with the published reason statement. (14-0)

P135-21

### P136-21

Committee Action: As Submitted

Committee Reason: The Committee agreed with the published reason statement. (14-0)

P136-21

## P137-21

Committee Action: Disapproved

Committee Reason: A mechanical coupling is not a pipe fitting and as such, including the standard in the table is inappropriate. (14-0)

P137-21

## P138-21

Committee Action: As Submitted

Committee Reason: The Committee agreed with the published reason statement. (14-0)

P138-21

## P139-21

Committee Action: As Submitted

Committee Reason: The Committee agreed with the published reason statement. (14-0)

### P140-21 Part I

Committee Action: As Submitted

**Committee Reason:** ASTM F405 has been withdrawn from the standards review process. The code should not reference withdrawn standards. (14-0)

P140-21 Part I

## P140-21 Part II

Committee Action: As Submitted

Committee Reason: The Committee agreed with the published reason statement. (11-0)

P140-21 Part II

## P141-21

Committee Action: Disapproved

Committee Reason: A mechanical coupling is not a pipe fitting and as such, including the standard in the table is inappropriate. (14-0)

P141-21

## P142-21

Committee Action: As Submitted

Committee Reason: The Committee agreed with the published reason statement. (14-0)

P142-21

## P143-21 Part I

Committee Action: As Submitted

Committee Reason: The Committee agreed with the published reason statement. (14-0)

P143-21 Part I

## P143-21 Part II

Committee Action: As Submitted

Committee Reason: The Committee agreed with the published reason statement. (11-0)

P143-21 Part II

#### P144-21

Committee Action: As Submitted

Committee Reason: The Committee agreed with the published reason statement. (14-0)

P144-21

#### P145-21

Committee Action: Disapproved

Committee Reason: This proposal was disapproved as it appears as written it would require a risk analysis each time there is a modification or testing which is onerous. (Vote: 10-4)

P145-21

### P146-21

Committee Action: Disapproved

Committee Reason: Allowing the collection of wastewater (containing black water) in systems that produce recycled water to be used inside buildings is a local jurisdiction decision, not a national code decision. There are a number of missing requirements that are needed to ensure safety of the recycled water. (14-0)

P146-21

## P147-21 Part I

Committee Action: Disapproved

Committee Reason: In Section G103.6, the exception appears to allow combustion appliances that are nonvented to not comply with the other I-Codes that cover combustion appliances. That doesn't make sense and is not safe. The language in Section G103.7 makes no logical sense. (8-6)

P147-21 Part I

## P147-21 Part II

Committee Action: As Modified

#### **Committee Modification:**

AX103.6 Systems employing combustion.

A non-sewered sanitation system employing combustion shall comply with the mechanical code.

#### Exception: A non-sewered sanitation system listed for unvented use.

AX103.7 Connection to plumbing system not required. Unless the Authority Having Jurisdiction determines otherwise, a A non-sewered sanitation system is not required to be connected to the sanitary drainage system of the building or premises.

**Committee Reason:** For the modification: Some extraneous language needed removed and the exception was found to be in conflict with the mechanical and fuel gas sections of the code.

For the proposal as modified: This is a good addition to the appendix of the code as there are some remote areas where septic systems are not possible. The language provides guidance to the code official to be able to work with the local health authority for using this method. (11-0)

P147-21 Part II

# **International Private Sewage Disposal Code**

2021 Group A - Report of the Committee Action Hearing Results

## **PSD1-21**

Committee Action: As Submitted

**Committee Reason:** This is adding another option to the code for sewage treatment. Given that units conforming to NSF 41 are approved as option, this new standard is just another option for sewage treatment. (11-2)

PSD1-21

## **International Property Maintenance Code**

2021 Group A - Report of the Committee Action Hearing Results

#### PM1-21

Committee Action: As Modified

#### **Committee Modification:**

**102.6 Structural analysis.** Where structural analysis is used to determine if a dangerous an unsafe structural condition exists, the analysis shall be permitted to use nominal strengths, nominal loads, load effects, required strengths and limit states in accordance with the requirements under which the structure was constructed or in accordance with any subsequent requirement.

**Committee Reason:** The committee agreed that the proposal appropriately aligns the terms "unsafe" and "dangerous" with the IEBC and IBC. The modification returns the text of 102.6 back to its original verbiage as the term unsafe in this case is more appropriate than dangerous. (Vote: 11-0)

PM1-21

#### **PM2-21**

Committee Action: As Modified

#### **Committee Modification:**

**301.2 Responsibility.** The *owner* of the *premises* shall maintain the structures and *exterior property* in compliance with these requirements and the code under which the building was constructed, except as otherwise provided for in this code. The *owner* or owner's agent shall be responsible to <u>ensure know</u> that any <u>repairs, additions, or</u> alterations or <u>modifications</u> to the building or portion thereof, <u>exterior or interior, are altered or modified are performed or constructed</u> in accordance with the *International Building Code*, <u>International Residential Code</u>, or <u>International Existing Building Code</u>. A person shall not occupy as <u>owner-occupant</u> or permit another person to occupy <u>premises</u> that are not in a sanitary and safe condition and that do not comply with the requirements of this chapter. *Occupants* of a <u>dwelling unit</u>, <u>rooming unit</u> or <u>housekeeping unit</u> are responsible for keeping in a clean, sanitary and safe condition that part of the <u>dwelling unit</u>, <u>rooming unit</u>, <u>housekeeping unit</u> or <u>premises</u> they occupy and control.

**Committee Reason:** The committee agreed that the owner is ultimately responsible for any work done on the structure to be in compliance with applicable codes. The modification appropriately replaces "know" with "ensure" as this term requires an action by the owner. Further, the modification appropriately replaces "modifications" with "repairs and alterations" to be consistent with terminology with other I-codes. (Vote: 11-0)

PM2-21

## **PM3-21**

Committee Action: As Submitted

**Committee Reason:** The committee agreed that this proposal harmonizes the requirements of pool enclosures between the *International Property Maintenance Code* and the *International Swimming Pool and Spa Code*. Further, providing the definitions of power safety cover and safety cover identical to those found in the *International Swimming Pool and Spa Code* is appropriate. (Vote: 11-0)

PM3-21

#### PM4-21

Committee Action: Disapproved

**Committee Reason:** The committee disapproved this proposal as the proposed standard was not yet completed and therefore may technically change. Further, the committee felt the proposed standard was not appropriate for the IPMC because property maintenance inspectors typically do not inspect pools as this is normally done by the health inspector. (Vote: 11-0)

PM4-21

#### PM5-21

Committee Action: As Modified

#### **Committee Modification:**

**304.1.1 Potentially unsafe conditions.** The following conditions shall be <u>considered to be</u> <u>determined as</u> potentially unsafe, shall be assessed, and shall be addressed in compliance with the International Existing Building Code, the International Residential Code, or the International Building Code:

(no change to items 1 through 13)

#### **Exceptions:**

- 1. Where substantiated otherwise by an approved method.
- 2. Demolition of unsafe conditions shall be permitted where approved by the code official.

**305.1.1 Potentially unsafe conditions.** The following conditions shall be <u>considered to be determined as</u> potentially unsafe, shall be assessed, and shall be addressed in compliance with the International Existing Building Code, the International Residential Code, or the International Building Code:

(no change to items 1 through 6)

#### **Exceptions:**

- 1. Where substantiated otherwise by an approved method.
- 2. Demolition of unsafe conditions shall be permitted where approved by the code official.

**306.1.1 Potentially unsafe conditions.** Where any of the following conditions cause the component or system to be beyond its limit state, the component or system shall be considered to be determined as potentially unsafe, shall be assessed, and shall be addressed in compliance with the International Existing Building Code, the International Residential Code, or the International Building Code:

(no change to items 1 through 6)

#### **Exceptions:**

- 1. Where substantiated otherwise by an approved method.
- 2. Demolition of unsafe conditions shall be permitted where approved by the code official.

**Committee Reason:** The committee agreed that, as explained the the proponents reason statement, this proposal eliminates a conflict between the IPMC and the IEBC regarding unsafe conditions. The modification appropriately inserts the option for using the International Residential Code, or the International Building Code for compliance. Further, the modification puts exceptions 1 and 2 back in below Sections 304.1.1, 305.1.1 and 306.1.1 as they provide the code official more latitude in the application of requirements. (Vote: 7-4)

PM5-21

## PM6-21

Committee Action: As Submitted

Committee Reason: The committee felt that the new language requiring more of a visual assessment rather than an engineering analysis is more in line with the original intent of these provisions.(Vote: 11-0)

PM6-21

### **PM7-21**

Committee Action: Disapproved

**Committee Reason:** The committee felt that screens should be required for commercial cooking facilities, habitable rooms and even rodent protection. Further, the committee agreed that the current provisions are widely used by property maintenance inspectors when inspecting rental properties. The proponent should consider submitting a public comment addressing at least commercial cooking facilities. (Vote: 10-1)

PM7-21

## **PM8-21**

Committee Action: As Submitted

Committee Reason: The committee agreed that this proposal appropriately removes a requirement in the IPMC that exceeds the IBC and the IEBC with respect to deadbolt lock requirements. (Vote 10-1)

PM8-21

### **PM9-21**

Committee Action: As Submitted

**Committee Reason:** The committee felt that this proposal was consistent with PM1-21 and PM5-21, with respect to making an appropriate reference to the International Residential Code as a method of compliance. (Vote: 11-0)

PM9-21

## PM10-21

Committee Action: As Submitted

**Committee Reason:** The committee agreed that the IPMC should clearly state that accessible features of a facility, installed as required by the provisions of the code, are to be maintained during occupancy. (Vote: 9-2)

PM10-21

## PM11-21

Committee Action: As Submitted

Committee Reason: The committee agreed that it is critical to have maintenance requirements in the IPMC for storm shelters that have been constructed in accordance with ICC500-2020. Further, ICC500-2020 contains maintenance requirements, whereas the previous edition did not.

#### PM12-21

Committee Action: Disapproved

**Committee Reason:** The committee felt that the requirements were too far reaching by including Zone 3, which is noted for very low levels of radon. Further, the committee felt the requirements should also address allowances for historical structures and may be better placed in an appendix to allow for individual jurisdictions to adopt in applicable to their specific locations. (Vote: 10-1)

PM12-21

### PM13-21

Committee Action: As Modified

#### **Committee Modification:**

404.3 Minimum ceiling heights. Habitable space, hallways, corridors, and portions of basements containing these spaces laundry areas, bathrooms, toilet rooms and habitable basement areas shall have a minimum clear ceiling height of 7 feet (2134 mm). Bathrooms, toilet rooms and laundry rooms shall have a ceiling height of not less than 6 feet 8 inches (2032 mm).

#### **Exceptions:**

- In one- and two-family dwellings, beams or girders spaced not less than 4 feet (1219 mm) on center and projecting not greater than 6 inches (152 mm) below the required ceiling height.
- Basement rooms in one- and two-family dwellings occupied exclusively for laundry, study or recreation purposes, having a minimum
  ceiling height of 6 feet 8 inches (2033 mm) with a minimum clear height of 6 feet 4 inches (1932 mm) under beams, girders, ducts and
  similar obstructions.
- 3. In one- and two-family dwellings, rooms occupied exclusively for bathrooms, toilet rooms and laundry rooms having a minimum ceiling height of 6 feet 8 inches (2033 mm).
- 3 4. Rooms occupied exclusively for sleeping, study or similar purposes and having a sloped ceiling over all or part of the room, with a minimum clear ceiling height of 7 feet (2134 mm) over not less than one-third of the required minimum floor area. In calculating the floor area of such rooms, only those portions of the floor area with a minimum clear ceiling height of 5 feet (1524 mm) shall be included.

**Committee Reason:** The committee agreed that by by changing IPMC Section 404.3 to allow bathrooms, toilet rooms, and laundry areas/rooms to have a minimum ceiling height of 6 feet 8 inches, consistency between the IPMC and the IRC would be achieved. The modification clarifies that the requirement is only for one and two family dwellings. (Vote: 11-1)

PM13-21

## PM14-21

Committee Action: As Submitted

Committee Reason: The committee agreed that this proposal coordinates the minimum room area requirements found in the International Property Maintenance Code (IPMC) with those found in the International Residential Code (IRC) and the International Building Code (IBC). (Vote: 9-2)

PM14-21

#### PM15-21

Committee Action: As Submitted

Committee Reason: The committee agreed that the proposal correlates the minimum clear floor area requirements for efficiency dwelling units between the IPMC to that of the IBC. (Vote 11-0)

PM15-21

#### PM16-21

Committee Action: Disapproved

**Committee Reason:** The committee felt that unvented fuel-burning space heaters could be used for supplemental heat as long as the installed heating equipment provided was capable of providing the minimum heat required. Further, they disagreed with the proponents reason statement regarding the need for code officials to track the sale and use of portable space heaters in residential and commercial buildings. (Vote: 10-1)

PM16-21

#### PM17-21

This proposal includes published errata

For published errata go to https://cdn-web.iccsafe.org/wp-content/uploads/2021-GROUP-A-CONSOLIDATED-MONOGRAPH-UPDATES-Updated-4-02-2021-complete.pdf.

Committee Action: Disapproved

**Committee Reason:** The committee felt that requiring HVAC inspections in accordance with the proposed standards would add undue cost to a building owner. Further, the standards contain unenforceable language that could cause confusion on compliance. Lastly, even though the standards provide good guidance, inspectors can not logistically handle enforcement. (Vote: 11-0)

PM17-21

### PM18-21

Committee Action: As Modified

#### **Committee Modification:**

**606.3.1General.** The design, construction, installation, alteration, repair and maintenance of elevators in private residences shall conform to Section 5.3 of ASME A17.1/CSA B44.

**Committee Reason:** The committee agreed that proper installation of the hoistway landing doors, as delineated in the proposed referenced standard, A17.3-2020, is critical to ensuring the gap between the hoistway door and the car door or gate does not exceed 4 inches, to reduce hazard to young children and slight built adolescents or adults. The modification removes proposed construction language as this is a maintenance code. (Vote 11-0)

PM18-21

## PM19-21

Committee Action: Disapproved

Committee Reason: The committee felt that operation and maintenance requirements for commercial cooking facilities did not belong in the IPMC as these are typically verified through inspections done by state or local health agencies. Further, fire code officials have the authority to do these inspections now, and having multiple agencies potentially inspecting the same thing could be confusing. (Vote 10-1)

PM19-21

#### PM20-21

Committee Action: As Submitted

Committee Reason: This proposal was approved as this allows for existing buildings that are well maintained to remain code compliant. This correlates with IEBC Section 804.2 Item 2. (Vote 9-5)

The committee recommended the following editorial revision:

[BE]702.2Aisles. The required width of aisles in accordance shall comply with the code under which the building was constructed.

PM20-21

#### PM21-21

Committee Action: Disapproved

**Committee Reason:** The committee agrees with the proponent's intent; however, the wrong sections are reference in the proposal. The committee encouraged the proponent to fix those references in the public comment phase. (Vote: 13-0)

PM21-21

### PM22-21

Committee Action: As Submitted

**Committee Reason:** The committee stated that the reason for approval was that the testing is already required and it will reveal dampers that will have to be replaced or that don't work. (Vote: 13-1)

PM22-21

#### International Residential Code - Mechanical

2021 Group A - Report of the Committee Action Hearing Results

## **RM1-21**

Committee Action: Disapproved

**Committee Reason:** Increasing cost is not justified. Would require stair access even when another access point is available at the same level of the equipment. Limits access to raise a piece of equipment into an attic or to remove a piece of equipment. The attic will be used for storage when it isn't designed as such. (11-0)

RM1-21

### **RM2-21**

Committee Action: Disapproved

**Committee Reason:** Already addressed in M1602 and R302.5.2. The G2442 reference is The code change proposal only adds more language without adding anything. (11-0)

RM2-21

## RM3-21

Committee Action: Disapproved

**Committee Reason:** The standard isn't completed. Manufacturers will provide installation information. The added language is cumbersome and overcomplicates. (11-0)

RM3-21

## RM4-21

Committee Action: As Submitted

Committee Reason: The committee agreed with the published reason statement. (11-0)

RM4-21

## RM5-21

Committee Action: As Modified

**Committee Modification:** 

M1404.1 Compliance. Refrigeration cooling equipment shall eomply be listed and labeled in accordance with UL 474, UL 484, UL 1995, or UL/CSA 60335-2-40.

UL 474-2015 Standard for Safety Dehumidifiers

**Committee Reason:** For the modification: The code should not reference a standard that has been withdrawn by the promulgator. The change of "comply," to, "listed and labeled in accordance with," make the text consistent with ICC code text format. For the proposal as modified: The proposed standards are necessary as they include the updated requirements for systems using A2L refrigerants. (11-0)

RM5-21

### **RM6-21**

Committee Action: As Submitted

**Committee Reason:** The change provides a clear directive for the safe use of the new A2L refrigerants that are beginning to be used by appliance manufacturers. The development of these requirements through the cooperation of many stakeholders provides a solid basis for accepting appliances and systems using these refrigerants. (11-0)

RM6-21

#### **RM7-21**

Committee Action: Disapproved

**Committee Reason:** The proponent commented that the standard is going to be updated and the requirements within the standard may change. The standard is not currently accurate. (11-0)

RM7-21

## **RM8-21**

Committee Action: Disapproved

Committee Reason: The language is inconsistent and confusing with the use of the term "makeup air", which is undefined in the IRC. It is not clear what is needed, make-up air or transfer air, for the appliance. The term "designated" should be changed to "intended" when referring to the closet's intended use for a dryer. (11-0)

RM8-21

## RM9-21

Committee Action: Disapproved

**Committee Reason:** The range hood is not required. Removes the option for a recirculation hood. Would be problematic for townhomes where the range hood is not typically on an exterior wall. (11-0)

## RM10-21

Committee Action: Withdrawn

RM10-21

#### RM11-21

Committee Action: Disapproved

Committee Reason: The language in RM12-21 is easier to read and understand. (9-2)

RM11-21

## RM12-21

Committee Action: As Submitted

Committee Reason: The Committee agreed with the published reason statement. (11-0)

RM12-21

## RM13-21

Committee Action: As Submitted

Committee Reason: The committee agreed with most of the published reason statement but took exception with the phrase, "exhaust from dryers." (10-1)

RM13-21

### RM14-21

Committee Action: As Modified

#### **Committee Modification:**

**M1505.3 Exhaust equipment.** Exhaust fans and whole-house mechanical ventilation fans shall be *listed* and *labeled* as providing the minimum required airflow in accordance with ANSI/AMCA 210-ANSI/ASHRAE 51 and or HVI 916.

**Committee Reason:** For the modification: The modified language clarifies the purpose of the proposal by adding, "or," and removing, "and." For the proposal as modified: It adds another way to test the equipment. (11-0)

RM14-21

## RM15-21

Committee Action: Disapproved

**Committee Reason:** The increased ventilation rates will result in excessive indoor humidity resulting in a need for dehumidification. The method uses a blower door test to establish the ventilation rate.

RM15-21

## RM16-21

Committee Action: As Submitted

Committee Reason: The committee agreed with the published reason statement. (11-0)

RM16-21

#### RM17-21

Committee Action: As Modified

**Committee Modification:** 

M1506.1 M1505.5 General Local exhaust rates. Local exhaust systems shall be designed to have the capacity to exhaust the minimum airflow rate determined in accordance with Table M1506.1 M1505.5

TABLE M1506.1 M1505.5 MINIMUM REQUIRED LOCAL EXHAUST RATES

AREA TO BE EXHAUSTED	EXHAUST RATES <sup>a</sup>
Kitchens	100 cfm intermittent or 25 cfm continuous
Bathrooms-Toilet Rooms	Mechanical exhaust capacity of 50 cfm intermittent or 20 cfm continuous

For SI: 1 cubic foot per minute = 0.0004719 m<sup>3</sup>/s, 1 inch water column = 0.2488 kPa.

a. The listed exhaust rate for bathrooms-toilet rooms shall equal or exceed the exhaust rate at a minimum static pressure of 0.25 inch water column in accordance with Section M1505.3.

M1503.5 Kitchen exhaust rates. Where domestic kitchen cooking appliances are equipped with ducted range hoods or down-draft exhaust systems, the exhaust rate shall equal or exceed the airflow required in Table M1505.5 at one or more speed settings. the minimum exhaust rate shall be in accordance with Section M1506.1

**Committee Reason:** For the modification: It clears up the language of the original proposal by applying the highest setting to the minimum requirement, which was the intent of the original proposal.

For the proposal as modified: It provides clarity for the minimum requirements. (7-4)

RM17-21

#### RM18-21

Committee Action: As Submitted

Committee Reason: The proposal provides another option to reduce moisture levels in houses and prevent mold issues.(7-4)

RM18-21

## RM19-21

Committee Action: Disapproved

**Committee Reason:** The supporting document indicated that ASHRAE needs to continue looking at the issue. The proposed language is confusing. (7-4)

RM19-21

## RM20-21

Committee Action: Disapproved

Committee Reason: The proposed language is confusing. For example, the statement about return air taken from the mechanical room shall serve only the mechanical room. There is a contradiction in Item 5. The Committee agreed with the intent of the proposal but the language needs more work. The Committee would like to see this brought back in public comment. (8-3)

RM20-21

## RM21-21

Committee Action: Disapproved

Committee Reason: The term "unvented" does not clarify the code. The current term "unconditioned" is used to indicate spaces where return air

#### RM22-21

Committee Action: As Modified

#### **Committee Modification:**

<u>R1005.9</u> <u>M1805.4</u> Factory built chimney offsets. Where <u>a fireplace manufacturer's instructions do not address</u> factory built chimney <u>assembly incorporates</u> offsets, no part of the chimney shall be at an angle of more than 30 degrees (0.52 rad.) from vertical at any point in the assembly and the chimney assembly shall not include more than 4 elbows.

**Committee Reason:** For the modification: The section number change places the new language in a more appropriate location in the code. The language revision incorporates the manufacturer's instructions so that the code doesn't override what the manufacturer's instructions might already address.

For the proposal as modified: The Committee agreed with the published reason statement. This is important guidance for factory built chimney offsets. (11-0)

RM22-21

## RM23-21

Committee Action: Withdrawn

RM23-21

#### RM24-21

Committee Action: Withdrawn

RM24-21

## RM25-21

Committee Action: Disapproved

Committee Reason: Exception 2 in Section M2005.2 is incorrect. In Section M2005.7, the term "approved barrier" is unclear. In Section M2005.6, the reference to the plumbing code is unnecessary. The term "mechanical damage" is unclear. (11-0)

RM25-21

## RM26-21

Committee Action: As Submitted

Committee Reason: The committee agreed that moving the requirement from the table footnote to the section text was a better location this

# RM27-21

Committee Action: As Submitted

Committee Reason: This addition simply provides another option for press-connect joints. (11-0)

RM27-21

# **International Residential Code - Plumbing**

2021 Group A - Report of the Committee Action Hearing Results

#### **RP1-21**

Committee Action: As Submitted

**Committee Reason:** No one on the Committee can remember anyone performing a peppermint test for many years. It is unreliable to depend on a person's sense of smell to determine if there is a leak. (11-1)

RP1-21

#### **RP2-21**

Committee Action: Disapproved

Committee Reason: The Committee felt that RP3 offers better language. (10-1)

RP2-21

## **RP3-21**

Committee Action: As Submitted

Committee Reason: The Committee agreed with the published reason statement. (11-0)

RP3-21

#### **RP4-21**

Committee Action: As Submitted

Committee Reason: The Committee agreed with the published reason statement. (11-0)

RP4-21

## **RP5-21**

Committee Action: As Modified

#### **Committee Modification:**

P2717.2 Dishwasher waste connection.

The waste connection of a dishwasher shall connect directly to a wye branch fitting on the tailpiece of the kitchen sink, directly to the dishwasher connection of a food waste disposer, or through an air break to a standpipe. The waste line of the dishwasher shall rise and be securely fastened to

the underside of the sink rim or countertop and to the top of the standpipe. Where a waste line drains into a standpipe, the waste line shall be securely fastened to the top of the standpipe.

Committee Reason: For the modification: This clears up some confusion to make sure that there are only one of three ways to make this connection.

For the proposal as modified: The Committee agreed with the published reason statement. (11-0)

RP5-21

## **RP6-21**

Committee Action: As Submitted

Committee Reason: The Committee couldn't figure out why this text was originally included in Chapter 28 (about water heaters) as the hot water requirement is already in Chapter 3. Removing this from Chapter 28 makes sense to avoid any future conflicts. (11-0)

RP6-21

#### **RP7-21**

Committee Action: As Submitted

**Committee Reason:** This same requirement is already in the mechanical and gas sections of the IRC. This section applies to water heaters. The IPC has the same requirement. (6-5)

RP7-21

## **RP8-21**

Committee Action: As Submitted

Committee Reason: This is a known issue that continues to create an electrical safety hazard. This requirement is already in the IPC. (11-0)

RP8-21

## **RP9-21**

Committee Action: Disapproved

**Committee Reason:** This change is much too restrictive for standalone systems in compliance with this section. There is no substantiation provided about why this is needed. The cost impact statement is not accurate. (11-0)

RP9-21

## **RP10-21**

Committee Action: Disapproved

**Committee Reason:** The 100 feet was just put in the code in the last cycle. Builders are having a difficult time making distances of less than 85 feet. Cost will no doubt be increased if the number is lowered to 75 feet. In a moderately-sized ranch home, a 100 foot limit is difficult to attain. (11-0)

RP10-21

**RP11-21** 

Committee Action: As Submitted

Committee Reason: This is a simple editorial correction. (11-0)

RP11-21

**RP12-21** 

Committee Action: Withdrawn

RP12-21

## International Swimming Pool and Spa Code

2021 Group A - Report of the Committee Action Hearing Results

**SP1-21** 

Committee Action: Disapproved

Committee Reason: This action is based on the action taken on SP33. (11-0)

SP1-21

**SP2-21** 

Committee Action: As Submitted

Committee Reason: The Committee agreed with the published reason statement. This aligns with industry standards. (11-0)

SP2-21

**SP3-21** 

Committee Action: As Submitted

Committee Reason: This revision aligns with industry standards. (11-0)

SP3-21

SP4-21

Committee Action: As Submitted

Committee Reason: This revision aligns with industry standards. (11-0)

SP4-21

SP5-21

Committee Action: Disapproved

Committee Reason: Although the Committee understands that the I-Codes function well with correlation with and referencing other I-codes, in this instance, removing energy requirements in this code (and forcing the reader to go to another I-Code) would not be beneficial to the pool and spa industry at this time. The pool and spa industry is just now beginning to understand how codes affect the industry. There is significant training and education underway to bring everyone up to speed with the code so now is not the time to take the focus on energy out of the ISPSC. Also, the next IECC might become much difficult than what it currently is because of changing the technical part over to standards committee. The pool and spa industry needs to have everything about pools and spa in one book to help with the education efforts currently underway. (10-1)

### **SP6-21**

Committee Action: Withdrawn

SP6-21

#### **SP7-21**

Committee Action: Withdrawn

SP7-21

## **SP8-21**

Committee Action: As Submitted

**Committee Reason:** Safety always trumps the cost to provide for safety. Requiring compliance with an industry standard increases the safety of these products. (10-1)

SP8-21

## SP9-21

Committee Action: As Submitted

**Committee Reason:** Properly designed screen enclosures are an alternative to what the code currently requires for barriers. Screened enclosures have been used in Florida for decades and are now beginning popular in many other areas. (11-0)

SP9-21

## SP10-21

Committee Action: As Submitted

Committee Reason: This aligns with other I-codes that do not allow doors and gates to swing out over stairs. (11-0)

SP10-21

## **SP11-21**

Committee Action: As Modified

**Committee Modification:** 

306.2 Slip resistant.

Decks, ramps, coping, and similar step surfaces shall be slip resistant and cleanable. Where surfaces are evaluated for slip resistance,

such surfaces shall have,

when tested wet,

a minimum pendulum slip rating classification of P4 if tested in accordance with AS4586 or a minimum Dynamic Coefficient of Friction (DCOF) of 0.42 if tested in accordance with ANSI A326.

The design professional shall determine the appropriate classification and level of slip resistance necessary based on surface type, placement environment, and pedestrian traffic. Special features in or on decks such as markers, brand insignias, and similar materials shall be slip resistant. Where surfaces are evaluated for slip resistance in accordance with AS 4586, such surfaces shall have, when tested wet, a pendulum slip rating classification of not lower than P4, a Slider 55 pendulum slip resistance value of not lower than 40 or a Slider 96 pendulum slip resistance value of not lower than 45.

**Committee Reason:** For the modification: The added language concerning design professional brings clarity for the various situations that could be encountered. The additional standard provides for more products that have already been tested for slip resistance. For the proposal as modified: The industry has been asking for additional details about slip resistant surfaces. (11-0)

SP11-21

#### SP12-21

Committee Action: Disapproved

Committee Reason: The core issue is covered by SP11. (11-0)

SP12-21

## SP13-21

Committee Action: As Submitted

Committee Reason: The Committee believes that the shorter step risers in the IRC are inherently safer than what is currently in the ISPSC. (11-0)

SP13-21

## **SP14-21**

Committee Action: Disapproved

**Committee Reason:** The maximum of a 1/2 inch per foot slope should have been addressed in the proposal. The Committee wants the stakeholders to get together to create a public comment that addresses the various types of decking currently available and to find a solution for the maximum of a 1/2 inch per foot slope. (7-4)

SP14-21

## SP15-21

Committee Action: As Submitted

SP15-21

## SP16-21

Committee Action: As Submitted

Committee Reason: The Committee agreed with the published reason statement. (11-0)

SP16-21

#### SP17-21

Committee Action: As Submitted

Committee Reason: This revision provides a better method for light finishes that is independent of color choice. (9-2)

SP17-21

#### SP18-21

Committee Action: As Modified

#### **Committee Modification:**

SHOTCRETE. Concrete, wet or dry. placed by a high velocity pneumatic projection from a nozzle.

Committee Reason: For the modification: A simple clarification that shotcrete can be either a wet or dry product.

For the proposal as modified: This is a necessary addition to the pool shell materials table. However, the proponent needs to bring this back in public comment to address the issue that ACI 318 requires the use of 4000 psi concrete and this can be problematic. Use of a lower strength material needs to be accommodated. (11-00

SP18-21

## SP19-21

Committee Action: As Submitted

Committee Reason: This language provides better direction to the design professional for designing SOFAs. (11-0)

SP19-21

## SP20-21

Committee Action: Disapproved

Committee Reason: The Committee disapproved this proposal as the proposed language was determined to errata in the 2021 ISPSC. (11-0)

Staff Analysis: During the Committee Action Hearing, a discovery was made that this proposal is a duplicate of proposal SP14-18 which was approved as submitted for the 2021 ISPSC. The proposed language was inadvertently not included in the first printing of the 2021 ISPSC. This is errata that will be posted on Errata Central and the language will be included in the next printing of the 2021 ISPSC. Therefore, this proposal (SP20-21) is redundant as the language is already in the 2021 ISPSC.

SP20-21

### **SP21-21**

Committee Action: As Modified

#### **Committee Modification:**

**319.3 Secondary disinfection systems.** Secondary disinfection systems shall be installed for the following increased risk aquatic venues in addition to the required primary disinfection system:

- 1. Wading Pools.
- 2. Interactive Water Play Features.
- 3. Therapy Pools.
- 4. Other aquatic venues designed primarily for children under the age of 5.

The secondary disinfection system shall be listed and labeled to NSF 50 and installed in accordance with the manufacturer's specifications. Where electrically-powered, such equipment shall additionally be listed and labeled in accordance with UL 1563 or UL 1081.

319.4 Supplemental Treatment Systems.

Supplemental treatment systems in public pools and spas shall be certified to NSF 50 and installed in accordance with the manufacturer's specifications.

Where electrically-powered, such equipment shall additionally be listed and labeled in accordance with UL 1563 or UL 1081.

Committee Reason: For the modification: A needed clarification that this is only required for public pools and spas. The electrical safety standards are consistent with other I-Code requirements.

For the proposal as modified: The Committee agreed with the published reason statment. The committee would appreciate a public comment to change "aquatic venue" term to be "pool or spa" to be in alignment with what the ISPSC currently uses. (11-0)

SP21-21

## SP22-21

Committee Action: As Submitted

Committee Reason: The Committee agreed with the published reason statement. (11-0)

SP22-21

## SP23-21

Committee Action: As Submitted

Committee Reason: This improves safety of the pool and aligns the code with the Model Aquatic Health Code. (11-0)

#### SP24-21

Committee Action: As Modified

#### **Committee Modification:**

**ELEVATED POOL**. Any pool, spa, cold plunge, water feature, catch basin, overflow trough, or body of water that is <u>over a habitable, occupiable, or unoccupied space that is</u> 1) inside a <u>weather thermal</u> envelope or 2) outside a <u>weather thermal</u> envelope, <u>or 3) a combination of inside and outside the thermal envelope and installed over occupied/conditioned space, or installed over occupiable space (mechanical room, crawlspace, etc.); or installed over unoccupied/non-conditioned spaces (parking garages), or installed in an above-grade with no occupied, occupiable or unoccupied space below.</u>

Committee Reason: For the modification: This better clarifies exactly what spaces are below an elevated pool.

For the proposal as modified: Pools are being built in areas where the real estate is free such as above parking garages, on roofs and other areas previously having no purpose. Standards for this type of construction are needed as iit is currently unregulated and many problems have been occurred. (11-0)

SP24-21

### **SP25-21**

Committee Action: As Submitted

Committee Reason: The Committee agreed with the published reason statement. (11-0)

SP25-21

#### SP26-21

Committee Action: Disapproved

Committee Reason: Removing Class A and B would mean that this would apply to all pools. Showers and changing rooms are not directly related to pool safety. This proposal needs more work. (8-3)

SP26-21

## SP27-21

Committee Action: Disapproved

#### **Committee Reason:**

At some point, people stop reading or paying attention to signage having too many messages. There needs to more studies with professionals who know about effective messaging before the code has more messages on signs that no one pays attention to. (11-0)

SP27-21

#### SP28-21

Committee Action: Disapproved

Committee Reason: The proponent received a large about of feedback form various stakeholders and needs more time in order to digest the input and create a Public Comment. The Committee requests that the term "Aquatic Venue" not be used. (11-0)

SP28-21

#### SP29-21

Committee Action: As Submitted

Committee Reason: The Committee agreed with the published reason statement. (11-0)

SP29-21

### **SP30-21**

Committee Action: As Modified

#### **Committee Modification:**

809.2 Entry and exit.

Pools shall have a means of entry and exit in all shallow areas where the design water depth of the shallow area at the shallowest point exceeds 24 inches (610 mm). Where a vanishing edge catch basin has a water depth exceeding 24 inches (610 mm) when the edge system is off, an exit shall be provided. Entries and exits shall consist of one or a combination of the following: steps, stairs, ladders, treads, ramps, beach entries, underwater seats, underwater benches, swimouts, and other approved designs. The means of entry and exit shall be located on the shallow side of the first slope change.

809.2.1. Catch Basins. Where a vanishing edge catch basin has a water depth exceeding 24 inches (610 mm) when the edge system is off, an exit shall be provided.

**Committee Reason:** For the modification: This is needed to provide better clarification for the catch basin application. For the proposal as modified: The Committee agreed with the published reason statement. (11-0)

SP30-21

## SP31-21

Committee Action: As Submitted

Committee Reason: This area in a beach entry pool is especially problematic as the code didn't provide any guidance. (11-0)

SP31-21

## **SP32-21**

Committee Action: As Submitted

**Committee Reason:** Water efficiency is becoming more important and the code needs to offer some guidance. The appendix is the proper location as the scope of the code doesn't cover operations. (11-0)

SP32-21

## **SP33-21**

Committee Action: As Submitted

**Committee Reason:** Water efficiency is becoming more important in the industry and the code does not provide any guidance because operations is not within the scope of the code. However, this information is useful in an appendix. (11-0)

SP33-21

### International Wildland Urban Interface Code

2021 Group A - Report of the Committee Action Hearing Results

## **WUIC1-21**

Committee Action: Disapproved

Committee Reason: The committee stated that the reasons for disapproval were based on not wanting to add requirements into the definition and opposition to the removal of the language of burning embers and small flames. (Vote: 14-0)

WUIC1-21

## **WUIC2-21**

Committee Action: Disapproved

**Committee Reason:** The committee stated that the reasons for disapproval were based on the requirements that are already in the IPC, the cost impact in colder climates, no provisions for maintenance, issues with constructability and potential conflicts with various water purveyors and public works agencies. (Vote: 14-0)

WUIC2-21

## **WUIC3-21**

Committee Action: Disapproved

**Committee Reason:** The committee stated that the reasons for disapproval were based on the proposal not addressing the problem and creating more confusion, going beyond an editorial change and the importance in maintaining the current level of technical requirements in fire safety. (Vote: 10-3)

**WUIC3-21** 

## **WUIC4-21**

Committee Action: Disapproved

Committee Reason: The committee stated that the reason for disapproval was based on the action on WUIC5-21. (Vote: 13-0)

WUIC4-21

## **WUIC5-21**

Committee Action: As Submitted

Committee Reason: The committee stated that the reason for approval was based on the proponent's reason statement. (Vote:13-0)

#### **WUIC6-21**

Committee Action: Disapproved

**Committee Reason:** The committee stated that the reasons for disapproval were that the proposal would prohibit coatings altogether and it doesn't make a differentiation between factory coated versus coated in the field and if it was only intended to be a coating on wood then that should have been more clearly defined. (Vote: 13-0)

**WUIC6-21** 

## **WUIC7-21**

Committee Action: As Modified

#### **Committee Modification:**

#### 503.2 Ignition-resistant building material.

Ignition-resistant building materials shall comply with any one of the following:

- 1. Material shall be tested on all sides with the extended ASTM E84 (UL 723) test or ASTM E2768, except panel products shall be permitted to test only the front and back faces. Panel products shall be tested with a ripped or cut longitudinal gap of <sup>1</sup>/<sub>8</sub> inch (3.2 mm). Materials that, when tested in accordance with the test procedures set forth in ASTM E84 or UL 723 for a test period of 30 minutes, or with ASTM E2768, comply with the following:
  - 1.1. Flame spread. Material shall exhibit a *flame spread index* not exceeding 25 and shall not show evidence of progressive combustion following the extended 30-minute test.
  - 1.2. Flame front. Material shall exhibit a flame front that does not progress more than 10<sup>1</sup>/<sub>2</sub> feet (3200 mm) beyond the centerline of the burner at any time during the extended 30-minute test.
  - 1.3. The material shall also maintain its performance under conditions of use by meeting performance requirements for weathering, including exposure to temperature, moisture and ultraviolet radiation, in accordance with the following:
    - 1.3.1. Ignition resistant materials shall demonstrate compliance with the requirements of 503.2 Item 1 after weathering in accordance with Method A "Test Method for Accelerated Weathering of Fire-Retardant Treated Wood for Fire Testing" in ASTM D2898.
    - 1.3.2. Wood-plastic composite materials shall <u>also</u> demonstrate acceptable fire performance after weathering by the following procedure: first testing in accordance with ASTM E1354, at an incident heat flux of 50 kW/m2 in the horizontal orientation, then weathering in accordance with ASTM D7032, and then retesting in accordance with ASTM E1354 and exhibiting an increase of no more than 10% in peak rate of heat release when compared to the peak heat release rate of the non-weathered material.
    - 1.3.3. Plastic lumber composite materials shall <u>also</u> demonstrate acceptable fire performance after weathering by the following procedure: first testing in accordance with ASTM E1354, at an incident heat flux of 50 kW/m2 in the horizontal orientation, then weathering in accordance with ASTM D6662, and then retesting in accordance with ASTM E1354 and exhibiting an increase of no more than 10% in peak rate of heat release when compared to the peak heat release rate of the non-weathered material.
  - 1.4 Identification. Materials shall bear identification showing the fire test results.

**Exception:** Materials composed of a combustible core and a noncombustible exterior covering made from either aluminum at a minimum 0.019 inch (0.48 mm) thickness or corrosion-resistant steel at a minimum 0.0149 inch (0.38 mm) thickness shall not be required to be tested with a ripped or cut longitudinal gap.

- 2. Noncombustible material. Material that complies with the requirements for noncombustible materials in Section 202.
- 3. Fire-retardant-treated wood. Fire-retardant-treated wood identified for exterior use and meeting the requirements of Section 2303.2 of the International Building Code.
- 4. Fire-retardant-treated wood *roof coverings*. *Roof assemblies* containing fire-retardant-treated wood shingles and shakes that comply with the requirements of Section 1505.6 of the International Building Code and classified as Class A *roof assemblies* as required in Section 1505.2 of the International Building Code.

**Committee Reason:** The committee stated that the reason for the approval of the modification is that without it you could read the introductory language as stated and it would be misapplied as one of the following and the modification makes it perfectly clear that it's a combination of the requirements. The stated approval of the proposal was that it clarifies the original intent of the requirement and uses a more appropriate test for the use of these materials. (Vote: 14-0)

**WUIC7-21** 

### **WUIC8-21**

This proposal includes published errata

https://cdn-web.iccsafe.org/wp-content/uploads/2021-GROUP-A-CONSOLIDATED-MONOGRAPH-UPDATES-Updated-4-02-2021-complete.pdf

Committee Action: Disapproved

Committee Reason: The committee stated that the reason for disapproval was based on the action on WUIC7-21. (Vote: 12-2)

**WUIC8-21** 

## **WUIC9-21**

Committee Action: Disapproved

**Committee Reason:** The committee stated that the reasons for disapproval were opposition to the alteration of the current requirements and the preference for the formatting to be a list instead of a paragraph. (Vote: 13-1)

WUIC9-21

## WUIC10-21

Committee Action: As Submitted

Committee Reason: The committee stated that the reason for the approval was that it provides code approval for factory manufactured coded wood panels. (Vote: 8-7)

WUIC10-21

## **WUIC11-21**

Committee Action: Disapproved

**Committee Reason:** The committee stated that the reason for disapproval was that the way that it's written it could be confusing in that it is not clear if the requirement applies to both above and below the attached decking. Additionally it was noted that the proponent specifically stated that it worked at 2 inches but they decided to go with 6 inches which would exceed as stated as a minimum code requirement. (Vote: 12-2)

WUIC11-21

## WUIC12-21

Committee Action: Disapproved

**Committee Reason:** The committee stated that the reason for disapproval was that there already is a recognized acceptable method for putting in non-perforated cap sheet and there was not any information given about any kind of testing that shows equivalency to that type of material. (Vote: 14-0)

WUIC12-21

### WUIC13-21

Committee Action: Disapproved

Committee Reason: The committee stated that the reason for disapproval was based on opposition to the changing the condition of acceptance for flame propagation to a modified flame exposure of 100kW. (Vote: 13-1)

WUIC13-21

### WUIC14-21

Committee Action: As Submitted

**Committee Reason:** The committee stated that the approval was based on addressing the identified problem with the 1/4 inch mesh and taking it down to the 1/8 inch mesh addresses the concerns for burning embers going in but also still allows the use of traditional locally sourced products. (Vote: 13-0)

WUIC14-21

## WUIC15-21

Committee Action: As Submitted

Committee Reason: The committee stated that the reasons for approval were that the vents need to be listed in both the high and extreme zones and based on the actual experience with wildland fires where homes probably more than likely could have been saved had there been better ember intrusion resistance on these vents. (Vote: 7-6)

WUIC15-21

## WUIC16-21

This proposal includes published errata

https://cdn-web.iccsafe.org/wp-content/uploads/2021-GROUP-A-CONSOLIDATED-MONOGRAPH-UPDATES-Updated-4-02-2021-complete.pdf

Committee Action: Disapproved

**Committee Reason:** The committee stated that the reasons for disapproval were the concerns about the water supply, not having a lot of test data on how exposure sprinklers perform in a WUI environment and the increase in the cost of construction without a lot of testing to show that it would be effective. (Vote: 14-0)

WUIC16-21

## WUIC17-21

Committee Action: Disapproved

**Committee Reason:** The committee stated that the reasons for disapproval were that if the intent is to get a terminology that describes the type of vegetation that resists the spread of fire that could be done however, the existing language is currently acceptable. Several examples of states and local nurseries were stated to have specific sites or could help identify fire resistant landscaping and list the different types of plants that qualify as this type of vegetation. (Vote: 13-1)

WUIC17-21

## WUIC18-21

Committee Action: Disapproved

**Committee Reason:** The committee stated that the reasons for disapproval were that the 100 feet distance is extreme even in a high fire zone and that the requirement is unenforceable. (Vote: 14-0)

WUIC18-21

# **International Zoning Code**

2021 Group A - Report of the Committee Action Hearing Results

**Z1-21** 

Committee Action: As Submitted

**Committee Reason:** The committee agreed that Accessory dwelling unit (ADU) is a term already in use across the United States and that the International Zoning Code (IZC) should provide definition and framework of requirements in an effort to create a uniform understanding of ADUs. (Vote 10-1)

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