

IADMIN

2019 GROUP B PUBLIC COMMENT AGENDA

OCTOBER 23 - 30, 2019 RIO HOTEL AND CONVENTION CENTER LAS VEGAS, NV



2019 Public Comment Agenda

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International Code Council, Inc.

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PRINTED IN THE USA

ADM1-19 Part I

IEBC®: [A] 202 (New)

Proposed Change as Submitted

Proponents: Ed Kulik, representing ICC Building Code Action Committee (bcac@iccsafe.org); David Collins, representing SEHPCAC (sehpcac@iccsafe.org)

THIS IS A 2 PART CODE CHANGE. PART I WILL BE HEARD BY THE ADMINISTRATIVE CODE COMMITTEE. PART II WILL BE HEARD BY THE IECC-COMMERCIAL CODE COMMITTEE. SEE THE TENTATIVE HEARING ORDER FOR THESE COMMITTEES.

2018 International Existing Building Code

Revise as follows:

[A] CHANGE OF OCCUPANCY. A change in the use of a building or a portion of a building that results in any of the following:

- 1. A change of occupancy classification.
- 2. A change from one group to another group within an occupancy classification.
- 3. Any change in use within a group for which there is a change in application of the requirements of this code. the International Building Code.

Reason: The IBC establishes occupancies, thus the IBC and not "this code" should be referenced for a change in use. The IEBC and IECC do not include occupancy classifications. ADM 9-16 Part 1 was a BCAC revised to this definition for consistency between codes. A floor modification changed "specific occupancy classification" to "change in application of the requirements of this code". A public comment changed this definition to a list. The question that has been raised is in the IEBC is this should reference IBC or IEBC/IECC.

This proposal is submitted by the ICC Building Code Action Committee (BCAC) and the ICC Sustainable, Energy and High Performance Code Action Committee (SEHPCAC).

BCAC was established by the ICC Board of Directors in July 2011 to pursue opportunities to improve and enhance assigned International Codes or portions thereof. Since 2017 the BCAC has held 6 open meetings. In addition, there were numerous Working Group meetings and conference calls for the current code development cycle, which included members of the committee as well as any interested party to discuss and debate the proposed changes. Related documentation and reports are posted on the BCAC website at: https://www.iccsafe.org/codes-tech-support/codes/codedevelopment-process/building-code-actioncommittee-bcac.

This proposal is submitted by the ICC Building Code Action Committee (BCAC) and the ICC Sustainable, Energy and High Performance Code Action Committee (SEHPCAC).

BCAC was established by the ICC Board of Directors in July 2011 to pursue opportunities to improve and enhance assigned International Codes or portions thereof. Since 2017 the BCAC has held 6 open meetings. In addition, there were numerous Working Group meetings and conference calls for the current code development cycle, which included members of the committee as well as any interested party to discuss and debate the proposed changes. Related documentation and reports are posted on the BCAC website at: https://www.iccsafe.org/codes-tech-support/codes/codedevelopment-process/building-code-actioncommittee-bcac.

The SEHPCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance International Codes with regard to sustainability, energy and high performance as it relates to the built environment included, but not limited to, how these criteria relate to the International Green Construction Code (IgCC) and the International Energy Conservation Code (IECC). In 2018-2019, the SEHPCAC has held five two- or three-day open meetings and numerous workgroup calls, to discuss and debate proposed changes and public comments. Attendees at the meetings and calls included members of the SEHPCAC as well as any interested parties. Related documentation and reports are posted on the SEHPCAC website at http://www.iccsafe.org/cs/SEHPCAC/Pages/default.aspx

Cost Impact: The code change proposal will not increase or decrease the cost of construction This is an editorial item.

ADM1-19 Part I

Public Hearing Results

Errata: This proposal includes published errata Added proponent to the code change.

Committee Action: As Modified

Committee Modification: [A] CHANGE OF OCCUPANCY. A change in the use of a building or a portion of a building that results in any of the following:

- 1. A change of occupancy classification.
- 2. A change from one group to another group within an occupancy classification.
- 3. Any change in use within a group for which there is a change in application of the requirements the *International Building Code* code requirements.

Committee Reason: The committee stated that the proposal as modified cleans up the language and makes the intent of the definition clear to industry. Additionally it was stated that it works better within the code body by capturing all the code provisions. (Vote: 13-0)

Assembly Action: None

Staff Analysis: ADM3-19 Part I deletes item 3 from the definition list that is revised in ADM1-19 Part I.

ADM1-19 Part I

Individual Consideration Agenda

Public Comment 1:

IEBC®: [A] 202 (New), [A] 202 (New)

Proponents:

Emma Gonzalez-Laders, RA, LEED AP, New York State Department of State, representing NYS Department of State (emma.gonzalez-laders@dos.ny.gov); Kevin Duerr-Clark, representing NYS Department of State (kevin.duerr-clark@dos.ny.gov)

requests As Modified by Public Comment

Modify as follows:

2018 International Existing Building Code

[A] CHANGE OF OCCUPANCY. A change in the use of a building or a portion of a building that results in any Any of the following shall be considered a change of occupancy where the code requires a greater degree of safety, accessibility, structural strength, fire protection, means of egress, ventilation, or sanitation than is existing in the current building or structure:

- 1. A change of occupancy classification.
- 2. A change from one group to another group within an occupancy classification.
- 3. Any change in of use within a group for which there is a change in application of the code requirements.

[A] CHANGE OF USE. A change in the use of a building or a portion of a building, within the same group classification, for which there is a change in application of code requirements.

Commenter's Reason: ADM1-19 should be Approved as Modified by This Public Comment because it does not address all the problems with the definition for a Change of Occupancy. This Public Comment adds a definition for a Change of Use.

Per testimony in opposition to ADM2-19, guidance was needed in the form of one unified proposal that includes <u>all</u> the proposed changes. For the purpose of providing that guidance, this public comment modification also brings into ADM1-19 the changes that were approved in ADM3-19.

Most importantly, this proposal adds a definition for the term Change of Use. The need for clarity in the definition for a Change of Occupancy is evidenced by the number of proposals heard on this topic: ADM1-19, ADM2-19, and ADM 3-19. While ADM1-19 was approved as modified, it does not address the confusion that exists between a "change of use" and a "change of occupancy," which was the chief concern that ADM2-19 sought to address. Sections 1001.2.1 and 1001.2.2 of the Existing Building Code stipulate a distinct set of requirements to be met when a **Change of Use** takes place, and an additional set of requirements for when a **Change of Occupancy** takes place. However, the combined definition for Change of Use and Change of Occupancy does not support that distinction. Providing a separate definition for a Change of Use, which draws from the language of the third bullet in the definition for a Change of Occupancy, would provide clarity and simplify enforcement.

Cost Impact: The net effect of the public comment and code change proposal will not increase or decrease the cost of construction. This proposed change is made to provide clarity on an existing code provision and does not increase or decrease the cost of construction.

NOTE: ADM1-19 PART II DID NOT RECEIVE A PUBLIC COMMENT AND IS REPRODUCED FOR INFORMATIONAL PURPOSES ONLY

ADM1-19 Part II

IECC®: 202 (New)

Proposed Change as Submitted

Proponents: Ed Kulik, representing ICC Building Code Action Committee (bcac@iccsafe.org); David Collins, representing SEHPCAC (sehpcac@iccsafe.org)

2018 International Energy Conservation Code

Revise as follows:

CHANGE OF OCCUPANCY. A change in the use of a building or a portion of a building that results in any of the following:

- 1. A change of occupancy classification.
- 2. A change from one group to another group within an occupancy classification.
- 3. Any change in use within a group for which there is a change in the application of the requirements of this code: the International Building Code.

Reason: The IBC establishes occupancies, thus the IBC and not "this code" should be referenced for a change in use. The IEBC and IECC do not include occupancy classifications. ADM 9-16 Part 1 was a BCAC revised to this definition for consistency between codes. A floor modification changed "specific occupancy classification" to "change in application of the requirements of this code". A public comment changed this definition to a list. The question that has been raised is in the IEBC is this should reference IBC or IEBC/IECC.

This proposal is submitted by the ICC Building Code Action Committee (BCAC) and the ICC Sustainable, Energy and High Performance Code Action Committee (SEHPCAC).

BCAC was established by the ICC Board of Directors in July 2011 to pursue opportunities to improve and enhance assigned International Codes or portions thereof. Since 2017 the BCAC has held 6 open meetings. In addition, there were numerous Working Group meetings and conference calls for the current code development cycle, which included members of the committee as well as any interested party to discuss and debate the proposed changes. Related documentation and reports are posted on the BCAC website at: https://www.iccsafe.org/codes-tech-support/codes/codedevelopment-process/building-code-actioncommittee-bcac.

This proposal is submitted by the ICC Building Code Action Committee (BCAC) and the ICC Sustainable, Energy and High Performance Code Action Committee (SEHPCAC).

BCAC was established by the ICC Board of Directors in July 2011 to pursue opportunities to improve and enhance assigned International Codes or portions thereof. Since 2017 the BCAC has held 6 open meetings. In addition, there were numerous Working Group meetings and conference calls for the current code development cycle, which included members of the committee as well as any interested party to discuss and debate the proposed changes. Related documentation and reports are posted on the BCAC website at: https://www.iccsafe.org/codes-tech-support/codes/codedevelopment-process/building-code-actioncommittee-bcac.

The SEHPCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance International Codes with regard to sustainability, energy and high performance as it relates to the built environment included, but not limited to, how these criteria relate to the International Green Construction Code (IgCC) and the International Energy Conservation Code (IECC). In 2018-2019, the SEHPCAC has held five two- or three-day open meetings and numerous workgroup calls, to discuss and debate proposed changes and public comments. Attendees at the meetings and calls included members of the SEHPCAC as well as any interested parties. Related documentation and reports are posted on the SEHPCAC website at http://www.iccsafe.org/cs/SEHPCAC/Pages/default.aspx

Cost Impact: The code change proposal will not increase or decrease the cost of construction This is an editorial item.

ADM1-19 Part II

Public Hearing Results

Committee Action: Disapproved

Committee Reason: This change would break the IECC-C. The intent of the IECC-C change of occupancy definition is to address different levels of stringency in the Energy Code. Changing this code to an IBC reference loses the ability to address changes in lighting between an office and a town hall, for example. (Vote: 14-1)

Assembly Action: None

ADM1-19 Part II

ADM3-19 Part I

IEBC®: [A] 202; IBC®: [A] 202; IFC®: [A] 202; IRC®: [RB] 202

Proposed Change as Submitted

Proponents: Allison Cook, Arlington County, VA, representing VBCOA; Kenney Payne, Moseley Architects, representing AIA Virginia (kpayne@moseleyarchitects.com); Ronald Clements Jr, representing Chesterfield County (clementsro@chesterfield.gov); Bob Orr, representing VBCOA (borr@culpepercounty.gov); Charles Vernon, representing VBCOA (cvernon@arlingtonva.us); Shaina Abney (shaina.abney@fairfaxcounty.gov); David Collins, The American Institute of Architects, representing The American Institute of Architects (dcollins@preview-group.com); Michael Williams, representing Virginia Building and Code Officials Association (VBCOA) (mike.williams@harrisonburgva.gov); Christina Jackson, representing City of Norfolk / WICED of VA (christina.reynolds@norfolk.gov)

THIS IS A 2 PART CODE CHANGE. PART I WILL BE HEARD BY THE ADMINISTRATIVE CODE COMMITTEE. PART II WILL BE HEARD BY THE IECC-COMMERCIAL CODE COMMITTEE. SEE THE TENTATIVE HEARING ORDER FOR THESE COMMITTEES.

2018 International Existing Building Code

Revise as follows:

[A] CHANGE OF OCCUPANCY. A change in the use of a building or a portion of a building that results in any of the following Either of the following shall be considered as a change of occupancy where the current IBC requires a greater degree of accessibility, structural strength, fire protection, means of egress, ventilation or sanitation than is existing in the current building or structure:

- 1. Any change in the occupancy classification of a building or structure.
- 2. Any change in the purpose of, or a change in the level of activity within, a building or structure.
- 1. A change of occupancy classification.
- 2. A change from one group to another group within an occupancy classification.
- 3. Any change in use within a group for which there is a change in application of the requirements of this code.

2018 International Building Code

Revise as follows:

[A] CHANGE OF OCCUPANCY. A change in the use of a building or a portion a building which results in one of the following Either of the following shall be considered as a change of occupancy where this code requires a greater degree of accessibility, structural strength, fire protection, means of egress, ventilation or sanitation than is existing in the current building or structure:

- 1. Any change in the occupancy classification of a building or structure.
- 2. Any change in the purpose of, or a change in the level of activity within, a building or structure.
- 1. A change of occupancy classification.
- 2. A change from one group to another group within an occupancy classification.
- 3. Any change in use within a group for which there is a change in application of the requirements of this code.

2018 International Fire Code

Revise as follows:

[A] CHANGE OF OCCUPANCY. A change in the use of a building or a portion of a building that results in any of the following Either of the following shall be considered as a change of occupancy where the International Building Code requires a greater degree of accessibility, structural strength, fire protection, means of egress, ventilation or sanitation than is existing in the current building or structure:

- 1. Any change in the occupancy classification of a building or structure.
- 2. Any change in the purpose of, or a change in the level of activity within, a building or structure.
- 1. A change of occupancy classification.
- 2. A change from one group to another group within an occupancy classification.
- 3. Any change in use within a group for which there is a change in the application of the requirements of this code.

2018 International Residential Code

[RB] CHANGE OF OCCUPANCY. A change in the use of a building or portion of a building that involves a change in the application of the

requirements of this code.

Reason: The proposed change keeps the language add to the 2018 code regarding change of occupancy classification and change of occupancy within the same classification. By adding the "greater degree" it ensures that businesses are not made to "retro-fit" existing tenant spaces that do not present a risk to the welfare or life safety of the tenants. Any renovations would still need to meet the requirements for alterations of the Existing Building Code.

For example, if a nail salon is change to an office space (assuming the same occupant load), why should the office be required to provide additional electrical outlets (section 1007.4) or new lighting (section 1010.1). There was already a tenant in the space with those conditions. Any life safety issues (such as a need for increased exits or sprinklers) are caught by the "greater degree" language.

The purpose of the Existing Building code should be to allow existing buildings to be renovated and occupied while maintaining the level of safety. It should not be to retrofit the tenant space or building to meet today's code.

Cost Impact: The code change proposal will decrease the cost of construction

This should reduce the cost for business owners/tenants by only applying the change of occupancy requirements of the Existing Building Code if the International Building Code requires a greater degree of any one of the six elements listed.

ADM3-19 Part I

Public Hearing Results

Committee Action: As Modified

Committee Modification: 2018 International Existing Building Code

[A] CHANGE OF OCCUPANCY. Either of the following shall be considered as a change of occupancy where the current *International Building Code* requires a greater degree of <u>safety</u>, accessibility, structural strength, fire protection, means of egress, ventilation or sanitation than is existing in the current building or structure:

- 1. Any change in the occupancy classification of a building or structure.
- 2. Any change in the purpose of, or a change in the level of activity within, a building or structure.

2018 International Building Code

[A] CHANGE OF OCCUPANCY. Either of the following shall be considered as a change of occupancy where this code requires a greater degree of <u>safety</u>, accessibility, structural strength, fire protection, means of egress, ventilation or sanitation than is existing in the current building or structure:

- 1. Any change in the occupancy classification of a building or structure.
- 2. Any change in the purpose of, or a change in the level of activity within, a building or structure.

2018 International Fire Code

[A] CHANGE OF OCCUPANCY. Either of the following shall be considered as a change of occupancy where the *International Building Code* or this Code requires a greater degree of safety, accessibility, structural strength, fire protection, means of egress, ventilation or sanitation than is existing in the current building or structure:

- 1. Any change in the occupancy classification of a building or structure.
- 2. Any change in the purpose of, or a change in the level of activity within, a building or structure.

Committee Reason: The committee stated that the modification addition of "safety" clarifies to a greater extent what the definition includes. The approval of the proposal was based on the revised language clarifying when a change of occupancy occurs based on when the code requirements that are required for the change in the categories listed are greater than the existing conditions. (Vote: 13-0)

Assembly Action: None

Staff Analysis: ADM3-19 Part I deletes item 3 from the definition list that is revised in ADM1-19 Part I.

Individual Consideration Agenda

Public Comment 1:

IEBC®: [A] 202, [A] 202 (New)

Proponents:

Emma Gonzalez-Laders, RA, LEED AP, New York State Department of State, representing NYS Department of State (emma.gonzalez-laders@dos.ny.gov); Kevin Duerr-Clark, representing NYS Department of State (kevin.duerr-clark@dos.ny.gov)

requests As Modified by Public Comment

Modify as follows:

2018 International Existing Building Code

[A] CHANGE OF OCCUPANCY. Any of the following shall be considered as a change of occupancy where the current IBC requires a greater degree of safety, accessibility, structural strength, fire protection, means of egress, ventilation or sanitation than is existing in the current building or structure:

- 1. Any change in the occupancy classification of a building or structure.
- 2. Any change in the purpose of, or a change in the level of activity within, a building or structure.
- 3. A change of use.

[A] CHANGE OF USE. A change in the use of a building or a portion of a building, within the same group classification, for which there is a change in application of code requirements.

Commenter's Reason: ADM3-19 should be Approved as Modified by This Public Comment because it does not address the confusion that exists between a "change of use" and a "change of occupancy."

Sections 1001.2.1 and 1001.2.2 of the Existing Building Code stipulate a distinct set of requirements to be met when a **Change of Use** takes place, and an additional set of requirements for when a **Change of Occupancy** takes place. Removing the third bullet point from the definition, which references a Change of Use, leaves code users without any guidance in the applicability of Section 1001.2.1. Providing a separate definition for a Change of Use, which draws from the language of the third bullet in the current definition for a Change of Occupancy in the Existing Building Code, would provide clarity and simplify enforcement.

Cost Impact: The net effect of the public comment and code change proposal will not increase or decrease the cost of construction This is a clarification of existing code provisions.

NOTE: ADM3-19 PART II DID NOT RECEIVE A PUBLIC COMMENT AND IS REPRODUCED FOR INFORMATIONAL PURPOSES ONLY

ADM3-19 Part II

IECC®: 202

Proposed Change as Submitted

Proponents: Allison Cook, Arlington County, VA, representing VBCOA; Kenney Payne, Moseley Architects, representing AIA Virginia (kpayne@moseleyarchitects.com); Ronald Clements Jr, representing Chesterfield County (clementsro@chesterfield.gov); Bob Orr, representing VBCOA (borr@culpepercounty.gov); Charles Vernon, representing VBCOA (cvernon@arlingtonva.us); Shaina Abney (shaina.abney@fairfaxcounty.gov); David Collins, The American Institute of Architects, representing The American Institute of Architects (dcollins@preview-group.com); Michael Williams, representing Virginia Building and Code Officials Association (VBCOA) (mike.williams@harrisonburgva.gov); Christina Jackson, representing City of Norfolk / WICED of VA (christina.reynolds@norfolk.gov)

2018 International Energy Conservation Code

Revise as follows:

CHANGE OF OCCUPANCY. A change in the use of a building or a portion of a building that results in any of the following Either of the following shall be considered as a change of occupancy where the International Building Code requires a greater degree of accessibility, structural strength, fire protection, means of egress, ventilation or sanitation than is existing in the current building or structure:

- 1. A change of occupancy classification.
- 2. A change from one group to another group within an occupancy classification.
- 3. Any change in use within a group for which there is a change in the application of the requirements of this code.
 - 1. Any change in the occupancy classification of a building or structure.
 - 2. Any change in the purpose of, or a change in the level of activity within, a building or structure.

Reason: The proposed change keeps the language add to the 2018 code regarding change of occupancy classification and change of occupancy within the same classification. By adding the "greater degree" it ensures that businesses are not made to "retro-fit" existing tenant spaces that do not present a risk to the welfare or life safety of the tenants. Any renovations would still need to meet the requirements for alterations of the Existing Building Code.

For example, if a nail salon is change to an office space (assuming the same occupant load), why should the office be required to provide additional electrical outlets (section 1007.4) or new lighting (section 1010.1). There was already a tenant in the space with those conditions. Any life safety issues (such as a need for increased exits or sprinklers) are caught by the "greater degree" language.

The purpose of the Existing Building code should be to allow existing buildings to be renovated and occupied while maintaining the level of safety. It should not be to retrofit the tenant space or building to meet today's code.

Cost Impact: The code change proposal will decrease the cost of construction

This should reduce the cost for business owners/tenants by only applying the change of occupancy requirements of the Existing Building Code if the International Building Code requires a greater degree of any one of the six elements listed.

ADM3-19 Part II

Public Hearing Results

Committee Action: Disapproved

Committee Reason: The proposal does consider change in energy efficiency requirements to be considered to trigger a change of occupancy. (Vote: 11-4)

Assembly Action: None

ADM3-19 Part II

ADM4-19

IBC®: [A] 202; IEBC®: [A] 202

Proposed Change as Submitted

Proponents: David Bonowitz, David Bonowitz, S.E., representing Self (dbonowitz@att.net)

2018 International Building Code

Revise as follows:

[A] REPAIR. The reconstruction, replacement or renewal of any part of an existing building for the purpose of its maintenance or to correct damage. correcting damage or restoring the predamage condition.

2018 International Existing Building Code

Revise as follows:

[A] REPAIR. The reconstruction, replacement or renewal of any part of an existing building for the purpose of its maintenance or to correct damage. correcting damage or restoring the predamage condition.

Reason: This proposal completes an edit from the last cycle to distinguish repair from maintenance. There is already consensus support for this proposal. The 2018 IEBC definition of ROOF REPAIR already has the wording shown here.

In the last cycle, Group A proposal EB26-15 was approved to clarify distinctions in the IEBC between maintenance and repair. Corresponding changes to the definitions of REPAIR and ROOF REPAIR in the IBC and IEBC would be made in Group B with proposal ADM27-16. Here is what happened:

ICC split the proposal, assigning Part I for REPAIR to the Admin Committee and Part II for ROOF REPAIR to the IBC-S Committee.

IBC-S approved its portion, so Part II was done. But because of a snafu in testimony, the Admin Committee became confused and Disapproved Part I. But that was ok, because ...

At the Public Comment Hearing, Part I was easily Approved as Submitted by a show of hands. All good, until ...

OGV voters supported Part I As Submitted, but only with 55% approval. Since the PCH show-of-hands votes could not be added to the OGV votes, the OGV tally did not reach 2/3, so the consensus on Part I could not be approved, leaving the two codes and the two definitions out of coordination. This proposal corrects that snafu.

Cost Impact: The code change proposal will not increase or decrease the cost of construction The change is editorial, for coordination with changes already approved last cycle.

Staff Analysis: There is an errata in the first printing of the 2018 IBC regarding the definition of roof repair. The definition was revised in the run up to the 2018 code. It should read:

ROOF REPAIR. Reconstruction or renewal of any part of an existing roof for the purpose of correcting damage or restoring the predamage condition.

ADM4-19

Public Hearing Results

Committee Action: Disapproved

Committee Reason: The committee stated that the disapproval was based on the amount of confusion and debate regarding the scope and extent of maintenance and repair and the additional need for clarification about what extent of work is included with the proposed language addition. (Vote: 13-0)

Assembly Action: None

ADM4-19

Individual Consideration Agenda

Public Comment 1:

Proponents:

David Bonowitz, representing Self (dbonowitz@att.net)

requests As Submitted

Commenter's Reason: At the hearing, opponents managed to confuse Admin committee members by forgetting work done in the previous cycle (EB26-15), where the substantive issues were already decided. The committee's reason for Disapproval acknowledges this. In the confusion, ADM 4 -- which is nothing but a clean-up that was basically already approved last cycle -- was disapproved.

At the hearing, opponents argued that removing the word "maintenance" from the definition of "repair" would mean that 1) "repair" only applies when there's damage, 2) simple replacement of worn-out items would now have to be called repairs, and 3) the codes would be left without a definition of maintenance.

On point 1, they are correct! That is the point, as was already decided in the last cycle (EB26-15): Maintenance, covered primarily by the IPMC, preserves an acceptable condition, while repair, covered primarily by the IEBC, corrects an UNacceptable condition.

On point 2, the IEBC already provides for that: Sec 105.2 acknowledges that repairs and maintenance are different and explicitly waives any permit requirement for basic repairs that are traditionally thought of as maintenance, including, for mechanical systems, the "replacement of any part that does not alter its approval or make it unsafe."

On point 3, they are obviously INcorrect, as we have an entire code, the IPMC, for maintenance, and it is already referenced from IEBC 302.3.

Cost Impact: The net effect of the public comment and code change proposal will not increase or decrease the cost of construction The proposal is editorial, completing work that was already done and approved last cycle.

ADM5-19 Part II

IRC®: [RB] 202, 202 (New), R302.2.1, R302.2.2, R302.2.3, R302.2.4, R302.2.6, R310.1

Proposed Change as Submitted

Proponents: Jeffrey Shapiro, P.E., International Code Consultants, representing Self (jeff.shapiro@intlcodeconsultants.com)

2018 International Residential Code

Revise as follows:

[RB] BUILDING. Any one- or two-family dwelling or <u>townhouse</u>, or portion thereof, including *townhouses*, used or intended to be used for human habitation, for living, sleeping, cooking or eating purposes, or any combination thereof, or any *accessory structure*. For the definition applicable in Chapter 11, see Section N1101.6.

[RB] TOWNHOUSE. A single-family dwelling unit constructed in a group of building that contains three or more attached townhouse units in which each unit extends from foundation to roof and with a yard or public way on not less than two sides, constructed in a group, and used, intended, or designed to be built, used, rented, leased, let or hired out to be occupied, or that are occupied for living purposes.

Add new definition as follows:

TOWNHOUSE UNIT. A single-family *dwelling unit* in a *townhouse* that extends from foundation to roof and that has a yard or public way on not less than two sides.

Revise as follows:

R302.2.1 Double walls. Each *townhouse <u>unit</u>* shall be separated <u>from other *townhouse units*</u> by two 1-hour fire-resistance-rated wall assemblies tested in accordance with ASTM E119, UL 263 or Section 703.3 of the International Building Code.

R302.2.2 Common walls. Common walls separating tewnhouses townhouse units shall be assigned a fire-resistance rating in accordance with ltem 1 or 2. The common wall shared by two townhouses townhouse units shall be constructed without plumbing or mechanical equipment, ducts or vents in the cavity of the common wall. The wall shall be rated for fire exposure from both sides and shall extend to and be tight against exterior walls and the underside of the roof sheathing. Electrical installations shall be in accordance with Chapters 34 through 43. Penetrations of the membrane of common walls for electrical outlet boxes shall be in accordance with Section R302.4.

- 1. Where a fire sprinkler system in accordance with Section P2904 is provided, the common wall shall be not less than a 1-hour fire-resistance-rated wall assembly tested in accordance with ASTM E119, UL 263 or Section 703.3 of the International Building Code.
- Where a fire sprinkler system in accordance with Section P2904 is not provided, the common wall shall be not less than a 2-hour fireresistance-rated wall assembly tested in accordance with ASTM E119, UL 263 or Section 703.3 of the International Building Code.

R302.2.3 Continuity. The fire-resistance-rated wall or assembly separating *townhouses townhouse units* shall be continuous from the foundation to the underside of the roof sheathing, deck or slab. The fire-resistance rating shall extend the full length of the wall or assembly, including wall extensions through and separating attached enclosed *accessory structures*.

R302.2.4 Parapets for townhouses. Parapets constructed in accordance with Section R302.2.5 shall be constructed for *townhouses* as an extension of exterior walls or common walls <u>separating *townhouse units*</u> in accordance with the following:

- 1. Where roof surfaces adjacent to the wall or walls are at the same elevation, the parapet shall extend not less than 30 inches (762 mm) above the roof surfaces.
- 2. Where roof surfaces adjacent to the wall or walls are at different elevations and the higher roof is not more than 30 inches (762 mm) above the lower roof, the parapet shall extend not less than 30 inches (762 mm) above the lower roof surface.
 - **Exception:** A parapet is not required in the preceding two cases where the roof covering complies with a minimum Class C rating as tested in accordance with ASTM E108 or UL 790 and the roof decking or sheathing is of noncombustible materials or fire-retardant-treated wood for a distance of 4 feet (1219 mm) on each side of the wall or walls, or one layer of $^{5}/_{8}$ -inch (15.9 mm) Type X gypsum board is installed directly beneath the roof decking or sheathing, supported by not less than nominal 2-inch (51 mm) ledgers attached to the sides of the roof framing members, for a distance of not less than 4 feet (1219 mm) on each side of the wall or walls and any openings or penetrations in the roof are not within 4 feet (1219 mm) of the common walls. Fire-retardant-treated wood shall meet the requirements of Sections R802.1.5 and R803.2.1.2.
- 3. A parapet is not required where roof surfaces adjacent to the wall or walls are at different elevations and the higher roof is more than 30 inches (762 mm) above the lower roof. The common wall construction from the lower roof to the underside of the higher roof deck shall have not less than a 1-hour fire-resistance rating. The wall shall be rated for exposure from both sides.

R302.2.6 Structural independence. Each individual townhouse unit shall be structurally independent.

Exceptions:

- 1. Foundations supporting exterior walls or common walls.
- 2. Structural roof and wall sheathing from each unit fastened to the common wall framing.
- 3. Nonstructural wall and roof coverings.
- 4. Flashing at termination of roof covering over common wall.
- 5. Townhouses-Townhouse units separated by a common wall as provided in Section R302.2.2, Item 1 or 2.

R310.1 Emergency escape and rescue opening required. Basements, habitable attics and every sleeping room shall have not less than one operable emergency escape and rescue opening. Where basements contain one or more sleeping rooms, an emergency escape and rescue opening shall be required in each sleeping room. Emergency escape and rescue openings shall open directly into a public way, or to a *yard* or court that opens to a public way.

Exceptions:

- 1. Storm shelters and basements used only to house mechanical equipment not exceeding a total floor area of 200 square feet (18.58 m²).
- 2. Where the dwelling unit or townhouse unit is equipped with an automatic sprinkler system installed in accordance with Section P2904, sleeping rooms in basements shall not be required to have emergency escape and rescue openings provided that the basement has one of the following:
 - 2.1. One means of egress complying with Section R311 and one emergency escape and rescue opening.
 - 2.2. Two means of egress complying with Section R311.

Reason: Correlation with proposed changes to the IRC to clarify use of the term "townhouse" in both codes. In the IBC, there are currently eight uses of the term "townhouse," including three in the preamble. If this change is approved, it will be necessary to editorially revise only one of those current occurrences, the one in Section 2308.1, which will need to be revised as follows to use the term "townhouse unit." ... Detached one-and two-family dwellings and townhouse units not more than three stories above grade plane in height with a separate means of egress and their accessory structures shall comply with the International Residential Code.

From the IRC proposal reason statement:

The IRC currently contains the terms "townhouse" and "townhouse unit," but only "townhouse" is defined. Here are examples of a few of the locations where the term "townhouse unit" is currently used:

- Preamble "Effective Use of the International Residential Code," which states: The International Residential Code (IRC) was created to serve
 as a complete, comprehensive code regulating the construction of single-family houses, twofamily houses (duplexes) and buildings consisting
 of three or more townhouse units."
- Section R302.2 states: Townhouses. Walls separating townhouse units shall be constructed in accordance with Section R302.2.1 or R302.2.2.
- Appendix K uses the term "townhouse units" throughout to describe individual dwelling units within a townhouse. The term "townhouse" is currently used interchangeably as referencing either a single dwelling unit or as a structure with three or more such units, even though the current definition does not accommodate the latter. Literally, the current definition of "townhouse" is a "townhouse unit," yet previously approved code changes that introduced the term "townhouse unit" clearly demonstrate the confusion. I've also experienced this confusion when attempting to teach townhouse requirements to students in code classes.

This proposal will clarify the term "townhouse" as applying to structures that contain three or more dwelling units. This is consistent with how the IRC uses the term "dwelling" to reference a building with one or two dwelling units. Some of the text in the "dwelling" definition has been reproduced in the proposed "townhouse" definition, even though it's arguably poorly written. My objective was consistency, not fixing existing problems with the "dwelling" definition. It should be noted that, while the term "dwelling" currently captures buildings with up to two dwelling units, there is no term that currently defines a structure with more than two dwelling units. The updated definition of "townhouse" fills that hole.

To accommodate the need for a term that applies to individual dwelling units in a townhouse building, the proposal adds a new definition of "townhouse unit." The new definition is correlated with and uses the term "dwelling unit." For reference, the current IRC definitions of "dwelling" and "dwelling unit" are provided below, along with clean versions of the proposed "townhouse" and "townhouse unit" definitions for comparison:

- [RB] DWELLING. Any building that contains one or two dwelling units used, intended, or designed to be built, used, rented, leased, let or hired out to be occupied, or that are occupied for living purposes.
- [RB] DWELLING UNIT. A single unit providing complete independent living facilities for one or more persons, including permanent provisions for living, sleeping, eating, cooking and sanitation. For the definition applicable in Chapter 11, see Section N1101.6.
- [RB] TOWNHOUSE. A building that contains three or more attached townhouse units constructed in a group, and used, intended, or designed

to be built, used, rented, leased, let or hired out to be occupied, or that are occupied for living purposes.

• [RB] TOWNHOUSE UNIT. A single-family dwelling unit in a townhouse that extends from foundation to roof and with a yard or public way on not less than two sides.

Cost Impact: The code change proposal will not increase or decrease the cost of construction Clarifies current code provisions with no intended technical change.

ADM5-19 Part II

Public Hearing Results

Committee Action: Disapproved

Committee Reason: Although this is a good start, the committee disapproved this proposal so that the proponent could further develop it. (Vote: 11-0)

Assembly Action: None

ADM5-19 Part II

Individual Consideration Agenda

Public Comment 1:

IRC®: [RB] 202

Proponents:

Micah Chappell, representing Washington Association of Building Officials (micah.chappell@seattle.gov)

requests As Modified by Public Comment

Modify as follows:

2018 International Residential Code

[RB] TOWNHOUSE. A building that contains three or more attached townhouse units. constructed in a group, and used, intended, or designed to be built, used, rented, leased, let or hired out to be occupied, or that are occupied for living purposes.

Commenter's Reason: We support the proponent's changes to the townhouse requirements outlined in this proposal. However, the second phrase of the proposed *townhouse* definition can be eliminated because the *townhouse* definition is now a "container" for townhouse units, not the actual units themselves. This information could be relocated to the definition of *townhouse unit*, but it is not necessary. A *townhouse unit* is considered a *dwelling unit* and *dwelling unit* is included in the definition of *dwelling*, which already includes the language in question.

Cost Impact: The net effect of the public comment and code change proposal will not increase or decrease the cost of construction. The public comment change clarifies the relationship between the new definitions created by the proponent. It has no monetary impact.

NOTE: ADM5-19 PART I DID NOT RECEIVE A PUBLIC COMMENT AND IS REPRODUCED FOR INFORMATIONAL PURPOSES ONLY

ADM5-19 Part I

IBC®: [A] 202, 202 (New); IFC®: [A], (New)

Proposed Change as Submitted

Proponents: Jeffrey Shapiro, P.E., representing Self (jeff.shapiro@intlcodeconsultants.com)

THIS IS A 3 PART CODE CHANGE. PART I WILL BE HEARD BY THE ADMINISTRATIVE CODE COMMITTEE. PART II WILL BE HEARD BY THE IRC-BUILDING CODE COMMITTEE. PART III WILL BE HEARD BY THE IECC-RESIDENTIAL CODE COMMITTEE. SEE THE TENTATIVE HEARING ORDER FOR THESE COMMITTEES.

2018 International Building Code

Revise as follows:

[A] TOWNHOUSE. A single-family dwelling unit constructed in a group of <u>building</u> that contains three or more attached <u>townhouse</u> units in which each unit extends from the foundation to roof and with open space on at least two sides. constructed in a group, and used, intended, or designed to be built, used, rented, leased, let or hired out to be occupied, or that are occupied for living purposes.

Add new definition as follows:

TOWNHOUSE UNIT. A single-family *dwelling unit* in a *townhouse* that extends from foundation to roof and with a yard or public way on not less than two sides.

2018 International Fire Code

[A] TOWNHOUSE. A single-family dwelling unit constructed in a group of building that contains three or more attached townhouse units in which each unit extends from the foundation to roof and with open space on not less than two sides. constructed in a group, and used, intended, or designed to be built, used, rented, leased, let or hired out to be occupied, or that are occupied for living purposes.

Add new definition as follows:

TOWNHOUSE UNIT. A single-family dwelling unit in a townhouse that extends from foundation to roof and with a yard or public way on not less than two sides.

Reason: Correlation with proposed changes to the IRC to clarify use of the term "townhouse" in both codes. In the IBC, there are currently eight uses of the term "townhouse," including three in the preamble. If this change is approved, it will be necessary to editorially revise only one of those current occurrences, the one in Section 2308.1, which will need to be revised as follows to use the term "townhouse unit." ... Detached one-and two-family dwellings and townhouse units not more than three stories above grade plane in height with a separate means of egress and their accessory structures shall comply with the International Residential Code.

From the IRC proposal reason statement:

The IRC currently contains the terms "townhouse" and "townhouse unit," but only "townhouse" is defined. Here are examples of a few of the locations where the term "townhouse unit" is currently used:

- Preamble "Effective Use of the International Residential Code," which states: The International Residential Code (IRC) was created to serve as a complete, comprehensive code regulating the construction of single-family houses, twofamily houses (duplexes) and buildings consisting of three or more townhouse units."
- Section R302.2 states: Townhouses. Walls separating townhouse units shall be constructed in accordance with Section R302.2.1 or R302.2.2.
- Appendix K uses the term "townhouse units" throughout to describe individual dwelling units within a townhouse. The term "townhouse" is currently used interchangeably as referencing either a single dwelling unit or as a structure with three or more such units, even though the current definition does not accommodate the latter. Literally, the current definition of "townhouse" is a "townhouse unit," yet previously approved code changes that introduced the term "townhouse unit" clearly demonstrate the confusion. I've also experienced this confusion when attempting to teach townhouse requirements to students in code classes.

This proposal will clarify the term "townhouse" as applying to structures that contain three or more dwelling units. This is consistent with how the

IRC uses the term "dwelling" to reference a building with one or two dwelling units. Some of the text in the "dwelling" definition has been reproduced in the proposed "townhouse" definition, even though it's arguably poorly written. My objective was consistency, not fixing existing problems with the "dwelling" definition. It should be noted that, while the term "dwelling" currently captures buildings with up to two dwelling units, there is no term that currently defines a structure with more than two dwelling units. The updated definition of "townhouse" fills that hole.

To accommodate the need for a term that applies to individual dwelling units in a townhouse building, the proposal adds a new definition of "townhouse unit." The new definition is correlated with and uses the term "dwelling unit." For reference, the current IRC definitions of "dwelling" and "dwelling unit" are provided below, along with clean versions of the proposed "townhouse" and "townhouse unit" definitions for comparison:

- [RB] DWELLING. Any building that contains one or two dwelling units used, intended, or designed to be built, used, rented, leased, let or hired out to be occupied, or that are occupied for living purposes.
- [RB] DWELLING UNIT. A single unit providing complete independent living facilities for one or more persons, including permanent provisions for living, sleeping, eating, cooking and sanitation. For the definition applicable in Chapter 11, see Section N1101.6.
- [RB] TOWNHOUSE. A building that contains three or more attached townhouse units constructed in a group, and used, intended, or designed to be built, used, rented, leased, let or hired out to be occupied, or that are occupied for living purposes.
- [RB] TOWNHOUSE UNIT. A single-family dwelling unit in a townhouse that extends from foundation to roof and with a yard or public way on not less than two sides.

Cost Impact: The code change proposal will not increase or decrease the cost of construction Clarifies current code provisions with no intended technical change.

ADM5-19 Part I

Public Hearing Results

Committee Action: Disapproved

Committee Reason: The committee stated that the disapproval was based on the need for more work to improve the language and the issue of the comparison to the existing definition of dwelling unit to the newly proposed definition of townhouse unit. (Vote: 13-0)

Assembly Action: None

ADM5-19 Part I

NOTE: ADM5-19 PART III DID NOT RECEIVE A PUBLIC COMMENT AND IS REPRODUCED FOR INFORMATIONAL PURPOSES ONLY

ADM5-19 Part III

IECC: R202 (IRC N1101.6), TABLE R405.5.2(1) [IRC N1105.5.2(1)]

Proposed Change as Submitted

Proponents: Jeffrey Shapiro, P.E., International Code Consultants, representing Self (jeff.shapiro@intlcodeconsultants.com)

2018 International Energy Conservation Code

SECTION R202 (IRC N1101.6) GENERAL DEFINITIONS

Add new definition as follows:

TOWNHOUSE UNIT. A single-family dwelling unit in a townhouse that extends from foundation to roof and with a yard or public way on not less than two sides.

Revise as follows:

TABLE R405.5.2(1) [IRC N1105.5.2(1)] SPECIFICATIONS FOR THE STANDARD REFERENCE AND PROPOSED DESIGNS

Portions of table not shown remain unchanged.

BUILDING COMPONENT STANDARD REFERENCE DESIGN PROPOSED DESIGN

h. For residences with conditioned basements, R-2 and R-4 residences, and fortownhouses townhouse units, the following formula shall be used to determine glazing area:

 $AF = A \times FA \times F$

where:

AF = Total glazing area.

 A_s = Standard reference design total glazing area.

FA = (Above-grade thermal boundary gross wall area)/(above-grade boundary wall area + 0.5 × below-grade boundary wall area).

F = (above-grade thermal boundary wall area)/(above-grade thermal boundary wall area + common wall area) or 0.56, whichever is greater.

and where:

Thermal boundary wall is any wall that separates conditioned space from unconditioned space or ambient conditions.

Above-grade thermal boundary wall is any thermal boundary wall component not in contact with soil.

Below-grade boundary wall is any thermal boundary wall in soil contact.

Common wall area is the area of walls shared with an adjoining dwelling unit.

L and CFA are in the same units.

Reason: Correlation with proposed changes to the IRC to clarify use of the term "townhouse" in both codes. In the IBC, there are currently eight uses of the term "townhouse," including three in the preamble. If this change is approved, it will be necessary to editorially revise only one of those current occurrences, the one in Section 2308.1, which will need to be revised as follows to use the term "townhouse unit." ... Detached one-and two-family dwellings and townhouse units not more than three stories above grade plane in height with a separate means of egress and their accessory structures shall comply with the International Residential Code.

From the IRC proposal reason statement:

The IRC currently contains the terms "townhouse" and "townhouse unit," but only "townhouse" is defined. Here are examples of a few of the locations where the term "townhouse unit" is currently used:

- Preamble "Effective Use of the International Residential Code," which states: The International Residential Code (IRC) was created to serve
 as a complete, comprehensive code regulating the construction of single-family houses, twofamily houses (duplexes) and buildings consisting
 of three or more townhouse units."
- Section R302.2 states: Townhouses. Walls separating townhouse units shall be constructed in accordance with Section R302.2.1 or R302.2.2.
- Appendix K uses the term "townhouse units" throughout to describe individual dwelling units within a townhouse. The term "townhouse" is
 currently used interchangeably as referencing either a single dwelling unit or as a structure with three or more such units, even though the
 current definition does not accommodate the latter. Literally, the current definition of "townhouse" is a "townhouse unit," yet previously
 approved code changes that introduced the term "townhouse unit" clearly demonstrate the confusion. I've also experienced this confusion
 when attempting to teach townhouse requirements to students in code classes.

This proposal will clarify the term "townhouse" as applying to structures that contain three or more dwelling units. This is consistent with how the IRC uses the term "dwelling" to reference a building with one or two dwelling units. Some of the text in the "dwelling" definition has been reproduced in the proposed "townhouse" definition, even though it's arguably poorly written. My objective was consistency, not fixing existing problems with the "dwelling" definition. It should be noted that, while the term "dwelling" currently captures buildings with up to two dwelling units, there is no term that currently defines a structure with more than two dwelling units. The updated definition of "townhouse" fills that hole.

To accommodate the need for a term that applies to individual dwelling units in a townhouse building, the proposal adds a new definition of "townhouse unit." The new definition is correlated with and uses the term "dwelling unit." For reference, the current IRC definitions of "dwelling" and "dwelling unit" are provided below, along with clean versions of the proposed "townhouse" and "townhouse unit" definitions for comparison:

- [RB] DWELLING. Any building that contains one or two dwelling units used, intended, or designed to be built, used, rented, leased, let or hired out to be occupied, or that are occupied for living purposes.
- [RB] DWELLING UNIT. A single unit providing complete independent living facilities for one or more persons, including permanent provisions for living, sleeping, eating, cooking and sanitation. For the definition applicable in Chapter 11, see Section N1101.6.
- [RB] TOWNHOUSE. A building that contains three or more attached townhouse units constructed in a group, and used, intended, or designed to be built, used, rented, leased, let or hired out to be occupied, or that are occupied for living purposes.
- [RB] TOWNHOUSE UNIT. A single-family dwelling unit in a townhouse that extends from foundation to roof and with a yard or public way on not less than two sides.

Cost Impact: The code change proposal will not increase or decrease the cost of construction Clarifies current code provisions with no intended technical change.

ADM5-19 Part III

Public Hearing Results

Committee Action: Disapproved

Committee Reason: The committee concluded the definition is in the IRC and should remain there. The proposed definition appears to use the defined term within the definition. (Vote: 11-0)

Assembly Action: None

ADM5-19 Part III

IEBC®: [A] 101.2

Proposed Change as Submitted

Proponents: David Bonowitz, representing Self (dbonowitz@att.net)

2018 International Existing Building Code

Revise as follows:

[A] 101.2 Scope. The provisions of the this code shall apply to the repair, alteration, change of occupancy, addition to and relocation of existing buildings.

Exception: Detached Subject to the approval of the code official, detached one- and two-family dwellings and multiple single-family dwellings (townhouses) not more than three stories above grade plane in height with a separate means of egress, and their accessory structures not more than three stories above grade plane in height, shall comply with this code or the International Residential Code.

Reason: This proposal edits a new exception that was just added in the last cycle (ADM 31-16). It preserves the intent of that proposal, but it explicitly gives discretion to the code official, thus ensuring consistency within a jurisdiction.

ADM 31-16 added the exception to Section 101.2. The intent was given in the Admin committee's reason statement: "Not mixing codes on the same building will make compliance easier." This is true. By the same token, not mixing codes within a jurisdiction with many similar projects will also make compliance easier and avoid a host of problems. Unfortnately, by giving full discretion to the permit applicant, the new exception creates exactly the problems it meant to solve.

Both the IEBC and the IRC contain provisions for existing dwellings and townhouses. For years, neither code has been completely clear about which code applies in a jurisdiction that adopts both. Rather, that decision has been left to the jurisdiction and its code official. The new exception added to the 2018 IEBC overturned that local practice and removed that local discretion. This proposal restores it.

This proposal will allow jurisdictions that have been using the IEBC for existing dwellings and townhouses to continue doing so. This benefits all stakeholders. First, it supports the local code official and policy-makers who have been using the IEBC without incident. Second, it ensures owners and developers that similar projects will be handled consistently, and consistent with past local precedents. Third, it helps FEMA grant applicants (jurisdictions), and FEMA assistance applicants (owners) comply with FEMA policy, which requires consistent use of the IEBC's upgrade triggers (discussed below). Fourth, it helps insurers and their customers understand and anticipate the costs and benefits of upgrade coverage. The new exception to IEBC Section 101.2 re-opened all those questions, but they can all be answered with this proposal, by allowing jurisdictions to maintain their own precedents and practices.

The proposal is consistent with other IEBC provisions that allow code official discretion. The added words are identical to those used in the exception to IEBC Section 301.3.

Is there a significant difference between the IEBC and the IRC's provisions for existing buildings? Yes, especially with regard to townhouses. The IEBC has 18 provisions that jurisdictions rely on to enhance earthquake, wind, and snow safety in existing townhouses, and ten for existing dwellings. All of these would be lost if a permit applicant is allowed to skip them by invoking the exception to Section 101.2. That said, this does not mean the IEBC treats dwellings just like commercial buildings; on the contrary, the IEBC exempts certain existing dwellings and townhouses from ten different triggers.

Whether one likes these IEBC provisions or not, one must acknowledge that any jurisdiction that has been applying them without incident should be allowed to continue that practice, and that it cannot help consistency to allow such different regulations to apply to similar projects. In many cases, the local code official will want to continue using the IEBC; this proposal allows that. In other cases, the local code official might recognize that the IRC approach is acceptable; this proposal allows that too. But the only way to ensure consistent policy is to have that decision rest with the code official.

Finally, even those who prefer the IRC approach must acknowledge that the new exception will lead to unclear application to individual projects as well. The exception allows ANY existing dwelling or townhouse – even one without conventional framing, or one that violates the conventional framing rules, or is highly deficient, or has irregularities that would make it ineligible for the IRC, or is located in a region that would make it ineligible for the IRC, or is highly vulnerable to wind or earthquake – to use the IRC and avoid addressing those conditions. IRC Section R102.7.1 would be the only applicable provision, and it sets a VERY low bar; it prohibits only projects that would *make* the existing building unsafe. If the existing building is already highly deficient, the IRC sets no limits on alterations, additions, or repairs. By giving discretion to the local code official who best knows the local building stock, the proposal resolves these issues as well.

Cost Impact: The code change proposal will not increase or decrease the cost of construction

The proposal merely gives discretion to the jurisdiction and code official to maintain precedents and past practices.

Public Hearing Results

Committee Action: Disapproved

Committee Reason: The committee stated that the code official needs consistency in the enforcement of the code and it should not depend on the applicant to determine the requirements. Additionally it was stated that the existing code already addresses this in regards to the responsibility of the code official to determine the requirements. (Vote: 13-0)

Assembly Action: None

ADM7-19

Individual Consideration Agenda

Public Comment 1:

Proponents:

David Bonowitz, representing Self (dbonowitz@att.net)

requests As Submitted

Commenter's Reason: In disapproving ADM7-19, the Admin Committee's reason states, "[T]he code official needs consistency in the enforcement of the code and it should not depend on the applicant to determine the requirements."

With respect, this reasoning, as well as the testimony of opponents at the CAH, appears to completely misunderstand the issue in question. ADM7 would modify an existing exception to IEBC Section 101.2. This exception, added only in 2018 with no review by any technical committee (IRC, IEBC, or IBC-S), now lets the permit applicant for any addition, alteration, or repair to any dwelling or townhouse -- no matter how deficient the existing structure, and no matter how extensive the proposed project -- escape the IEBC and use the far more lenient (and mostly nonexistent) provisions of the IRC instead.

In other words, this exception in the CURRENT code does exactly what the Admin committee's reason says NOT to do: 1. It explicitly allows the permit applicant to pick the requirements, and 2. It guarantees that enforcement of existing building provisions within a jurisdiction will be INconsistent.

The current code removes all discretion from the local code official about whether and how to apply the IEBC and IRC to existing dwellings. This is discretion that jurisdictions across the country have been applying and should be allowed to continue applying, based on local precedent and based on expert knowledge of their existing housing stocks. Instead, the 2018 IEBC says the permit applicant now gets to pick the code, sidestepping the IEBC's prudent provisions for deficient structures in areas subject to severe environmental loads.

In response to this fact about the current code, opponents of ADM7 stated in their testimony that to require code official approval for this option forces the code official to make decisions he or she either cannot or does not want to make. What an insult to ICC members! Have the opponents to ADM7 not read IEBC Section 104.11, or IRC Section R104.11? Those sections explicitly vest in the code official the authority -- and the responsibility -- to review alternatives, confirm their adequacy and equivalence by a number of measures, and state their findings in writing. How can anyone argue that this is not within the code official's authority, or worse, that code officials are not up to the task? Here's something else the Admin committee said: "The existing code already addresses this in regards to the responsibility of the code official to determine the requirements." Well, that used to be true, but not anymore. Prior to the 2018 IEBC, an applicant proposing to use the IRC as an alternative to the IEBC would have been subject to this code official discretion per IEBC Sec 104.11. But now, that discretion is given to the applicant alone -- precisely what the Admin committee says it does not want. ADM7-19, as submitted, would rectify that. Quickly, effectively, with ample precedent, and with respect for local practices and expertise.

Opponents also argued that if jurisdictions are concerned about the IRC's lax existing building provisions, they can adopt IRC Appendix J. Who are they kidding? Appendix J is grossly out of date and so rarely used that hardly anyone has noticed that it now actually defers to the IEBC as a better alternative. If every jurisdiction that adopts Appendix J votes *against* ADM7, and every jurisdiction that doesn't votes *for* ADM7, ADM7 will be approved in a landslide.

Opponents also argued that if ADM7 were approved, code officials would need to make discretionary decisions for every minor project, such as a proposal to add a deck to a house. This is absurd. First, minor projects are not treated differently by the two codes, so the question would never even come up. Second, every building department I know has a set of bulletins that state common interpretations in writing, in advance, for

everyone's benefit. If ADM7 were approved, that is exactly the approach every building official would take. They would merely write down, once, those conditions -- adding a deck, say, and lots of others -- for which the IRC would be allowed, and those -- say, putting a second story on a house with an unbraced cripple wall in seismic design category D -- where the IEBC would be wisely applied instead.

Finally, opponents suggested that if jurisdictions don't like the exception to IEBC Section 101.2, they don't have to adopt it. First, that's just disingenuous given the proliferation of amendment-free adoption policies. But more important, is that really the way the supporters of the current exception want to go? They would rather have the whole thing not adopted than add a few words to rely on the wisdom of the local code official? Well, if that's what they want ..., but ADM7-19 seems like a better idea.

Cost Impact: The net effect of the public comment and code change proposal will not increase or decrease the cost of construction The proposal merely maintains existing practices.

ADM10-19 Part II

IRC®: R101.3

Proposed Change as Submitted

Proponents: Ed Kulik, representing ICC Building Code Action Committee (bcac@iccsafe.org); Pennie Feehan, representing Plumbing, Mechanical, and Fuel Gas Code Action Committee (pmgcac@iccsafe.org); David Collins (sehpcac@iccsafe.org)

2018 International Residential Code

Revise as follows:

R101.3 Intent. The purpose of this code is to establish minimum requirements to safeguard the public safety, health and general welfare through affordability, structural strength, means of egress facilities, stability, sanitation, light and ventilation, energy conservation and safety to life for providing a reasonable level of life safety and property protection from fire and other hazards attributed the hazards of fire, explosion or dangerous conditions attributed to the built environment, and to provide safety to fire fighters and emergency responders during emergency operations.

Reason: The purpose of this proposal is for consistency in language for the sections on "Intent" or "Purpose" in the family of codes. The title of the section should be revised to be consistent with the text, which is "purpose."

The IFC was used as the guidance for the phrase to use. Several of the codes included the term "property protection", but not all. It is the intent of all the codes to provide "a reasonable level of life safety and property protection". Thus, this phrase is proposed to be used consistently across codes.

The BCAC is working from the philosophy that ICC is a family of codes, so administrative requirements should be consistent across books. Most administrative and enforcement matters are the same for any code. Those matters unique for a specific code remain unchanged. This is one of a series of proposals being submitted relating to technical, editorial and organizational changes proposed for the Administrative chapters (Chapter 1) in all of the I-Codes.

While the Administrative Committee will consider each proposal independently, the proposals in this package are a correlated set of companion code change proposals."

This proposal is submitted by the ICC Building Code Action Committee (BCAC), the ICC Fire Code Action Committee (FCAC), the ICC Sustainable, Energy and High Performance Code Action Committee (SEHPCAC) and the ICC Plumbing/Mechanical/Gas Code Action Committee (PMG CAC).

BCAC was established by the ICC Board of Directors in July 2011 to pursue opportunities to improve and enhance assigned International Codes or portions thereof. Since 2017 the BCAC has held 6 open meetings. In addition, there were numerous Working Group meetings and conference calls for the current code development cycle, which included members of the committee as well as any interested party to discuss and debate the proposed changes. Related documentation and reports are posted on the BCAC website at: https://www.iccsafe.org/codes-tech-support/codes/codedevelopment-process/building-code-actioncommittee-bcac.

The FCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance assigned International Codes with regard to fire safety and hazardous materials in new and existing buildings and facilities and the protection of life and property in wildland urban interface areas. In 2018 the Fire-CAC has held 3 open meetings. In addition, there were numerous conference calls, Regional Work Group and Task Group meetings for the current code development cycle, which included members of the committees as well as any interested parties, to discuss and debate the proposed changes. Related documentation and reports are posted on the FCAC website at: https://www.iccsafe.org/codes-tech-support/cs/fire-code-action-committee-fcac/

The SEHPCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance International Codes with regard to sustainability, energy and high performance as it relates to the built environment included, but not limited to, how these criteria relate to the International Green Construction Code (IgCC) and the International Energy Conservation Code (IECC). In 2018-2019, the SEHPCAC has held five two- or three-day open meetings and numerous workgroup calls, to discuss and debate proposed changes and public comments. Attendees at the meetings and calls included members of the SEHPCAC as well as any interested parties. Related documentation and reports are posted on the SEHPCAC website at http://www.iccsafe.org/cs/SEHPCAC/Pages/default.aspx.

The PMGCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance the International Codes or portions thereof that were under the purview of the PMG CAC. In 2017-2018, the PMG CAC held one face-to-face meeting and 11 conference call meetings. Numerous interested parties attended the committee meetings and offered their input. Related documentation and reports are posted on the PMGCAC website at: https://www.iccsafe.org/codes-tech-support/codes/code-development-process/pmg-code-action-committee-pmgcac.

Cost Impact: The code change proposal will not increase or decrease the cost of construction This is an editorial change that provides consistency between I-codes.

ADM10-19 Part II

Public Hearing Results

Errata: This proposal includes published errata Added proponent to the code change.

Committee Action: Disapproved

Committee Reason: The committee likes the language as approved in ADM9-19 Part IV. The language in this proposal, "or dangers attributed to the built environment," seems to raise the threshold of when the code gets enforced. The IRC does not explain how to design a building for explosions. The laundry list issue is a real one, even in the intent section. It is important to address the concerns raised by this proposal, but it may be better to bring this back in the public comment period using the language "causes of explosions" and "other" dangerous conditions. (Vote: 10-1)

Assembly Action: None

ADM10-19 Part II

Individual Consideration Agenda

Public Comment 1:

IRC®: R101.3

Proponents:

Ed Kulik, representing ICC Building Code Action Committee (bcac@iccsafe.org)

requests As Modified by Public Comment

Modify as follows:

2018 International Residential Code

R101.3 Intent. The purpose of this code is to establish minimum requirements to safeguard the public safety, health and general welfare through affordability, structural strength, means of egress facilities, stability, sanitation, light and ventilation, energy conservation, and for providing a reasonable level of life safety and property protection from the hazards of fire, explosion or dangerous conditions attributed to the built environment, and to provide safety to fire fighters and emergency responders during emergency operations.

Commenter's Reason: Reason: The IRC committee said they preferred ADM9 Part 4, however, the intent of the proposal was for the ADM9 and ADM10 was to work together for all the codes. The floor modification to ADM9 Part 4 was to remove 'explosion'. This public comment is to also remove "explosion" for consistency. Below is what Section R101.3 would look like when ADM9 Part 4 and ADM10 Part 2 were combined. This would be coordinated with the twelve ICC codes revised by ADM10 Part 1 (IBC, IFC, IEBC, IPC, IMC, IPSDC, IFGC, ISPSC, IPMC, IZC, IWUICC and ICCPC)

R101.3. Purpose. The purpose of this code is to establish minimum requirements to provide a reasonable level of safety, health and general welfare through affordability, structural strength, means of egress, stability, sanitation, light and ventilation, energy conservation and for providing a reasonable level of life safety and property protection from the hazards of fire or dangerous conditions, and to provide a reasonable level of safety to fire fighters and emergency responders during emergency operations.

This public comment is submitted by the ICC Building Code Action Committee (BCAC). BCAC was established by the ICC Board of Directors in July 2011 to pursue opportunities to improve and enhance assigned International Codes or portions thereof. Since 2017 the BCAC has held 6 open meetings. In addition, there were numerous Working Group meetings and conference calls for the current code development cycle, which included members of the committee as well as any interested party to discuss and debate the proposed changes. Related documentation and reports are posted on the BCAC website at: https://www.iccsafe.org/codes-tech-support/codes/codedevelopment-process/building-code-actioncommittee-bcac.

Cost Impact: The net effect of the public comment and code change proposal will not increase or decrease the cost of construction This is an editorial change that provides consistency between I-codes.

Public Comment 2:

IRC®: R101.3

Proponents:

Randy Shackelford, representing Simpson Strong-Tie Co. (rshackelford@strongtie.com)

requests As Modified by Public Comment

Modify as follows:

2018 International Residential Code

R101.3 Intent. The purpose of this code is to establish minimum requirements to safeguard the public safety, health and general welfare through affordability, structural strength, means of egress facilities, stability, sanitation, light and ventilation, energy conservation and for providing a reasonable level of life safety and property protection from the hazards of fire, explosion or dangerous conditions or other hazards attributed to the built environment, and to provide safety to fire fighters and emergency responders during emergency operations.

Commenter's Reason: I support the BCAC's efforts to make the Administrative provisions of all the codes be similar. But they do not have to all be exactly the same since they do not all apply to the same buildings or address the same hazards.

There were objections raised during the Committee Action hearings regarding the addition of the word "explosion" so that is deleted. There was also concern raised that only listing three hazards resulted in a "laundry list" that left out other hazards that are meant to be addressed by the IRC. For example, a good bit of the framing requirements of the IRC are designed to resist the natural hazards of high wind or earthquakes, yet these are left out of the list. So keeping the words "other hazards attributed to the built environment" will include all these other hazards that the IRC is written to resist. The net result of this is that the "hazards" wording is rearranged to more closely resemble the existing 2018 IRC language, with the addition of "dangerous conditions".

Cost Impact: The net effect of the public comment and code change proposal will not increase or decrease the cost of construction There should be no cost impact. Just editorial rewrite of the original proposal. This does not contain any technical requirements, it is in the Administrative Chapter.

NOTE: ADM10-19 PART I DID NOT RECEIVE A PUBLIC COMMENT AND IS REPRODUCED FOR INFORMATIONAL PURPOSES ONLY

ADM10-19 Part I

IBC®: [A] 101.3; IEBC®: [A] 101.3; ISPSC®: [A] 101.3; IPMC®: [A] 101.3; IZC®: [A] 101.2

Proposed Change as Submitted

Proponents: Ed Kulik, representing ICC Building Code Action Committee (bcac@iccsafe.org); Pennie Feehan, representing Plumbing, Mechanical, and Fuel Gas Code Action Committee (pmgcac@iccsafe.org); David Collins (sehpcac@iccsafe.org)

THIS IS A 4 PART CODE CHANGE. PART I WILL BE HEARD BY THE ADMINISTRATIVE CODE COMMITTEE. PART II WILL BE HEARD BY THE IRC-BUILDING CODE COMMITTEE. PART III WILL BE HEARD BY THE IECC-COMMERCIAL CODE COMMITTEE. PART IV WILL BE HEARD BY THE IECC-RESIDENTIAL CODE COMMITTEE. SEE THE TENTATIVE HEARING ORDER FOR THESE COMMITTEES.

2018 International Building Code

Revise as follows:

[A] 101.3 Intent. The purpose of this code is to establish the minimum requirements to provide a reasonable level of safety, public health and general welfare through structural strength, means of egress facilities, stability, sanitation, adequate light and ventilation, energy conservation, and safety to life for providing a reasonable level of life safety and property protection from the hazards of fire, explosion and other hazards or dangerous conditions, and to provide a reasonable level of safety to fire fighters and emergency responders during emergency operations.

2018 International Existing Building Code

Revise as follows:

[A] 101.3 Intent. The intent of this code is to provide flexibility to permit the use of alternative approaches to achieve compliance with minimum requirements to safeguard the public health, safety-and-, property protection and welfare insofar as they are affected by the repair, alteration, change of occupancy, addition and relocation of existing buildings.

2018 International Swimming Pool and Spa Code

Revise as follows:

[A] 101.3 Intent. The purpose of this code is to establish minimum standards to provide a reasonable level of safety, and protection of health, property protection and public welfare by regulating and controlling the design, construction, installation, quality of materials, location and maintenance or use of pools and spas.

2018 International Property Maintenance Code

Revise as follows:

[A] 101.3 Intent. This code shall be construed to secure its expressed intent, which is to ensure public health, safety. property protection and welfare insofar as they are affected by the continued *occupancy* and maintenance of structures and *premises*. Existing structures and *premises* that do not comply with these provisions shall be altered or repaired to provide a minimum level of health and safety as required herein.

2018 International Zoning Code

Revise as follows:

[A] 101.2 Intent. The purpose of this code is to safeguard the health, property <u>protection</u> and public welfare by controlling the design, location, use or occupancy of all buildings and structures through the regulated and orderly development of land and land uses within this jurisdiction.

Reason: The purpose of this proposal is for consistency in language for the sections on "Intent" or "Purpose" in the family of codes. The title of the section should be revised to be consistent with the text, which is "purpose."

The IFC was used as the guidance for the phrase to use. Several of the codes included the term "property protection", but not all. It is the intent of all the codes to provide "a reasonable level of life safety and property protection". Thus, this phrase is proposed to be used consistently across codes.

The BCAC is working from the philosophy that ICC is a family of codes, so administrative requirements should be consistent across books. Most administrative and enforcement matters are the same for any code. Those matters unique for a specific code remain unchanged. This is one of a series of proposals being submitted relating to technical, editorial and organizational changes proposed for the Administrative chapters (Chapter 1) in all of the I-Codes.

While the Administrative Committee will consider each proposal independently, the proposals in this package are a correlated set of companion code change proposals."

This proposal is submitted by the ICC Building Code Action Committee (BCAC), the ICC Fire Code Action Committee (FCAC), the ICC Sustainable, Energy and High Performance Code Action Committee (SEHPCAC) and the ICC Plumbing/Mechanical/Gas Code Action Committee (PMG CAC).

BCAC was established by the ICC Board of Directors in July 2011 to pursue opportunities to improve and enhance assigned International Codes or portions thereof. Since 2017 the BCAC has held 6 open meetings. In addition, there were numerous Working Group meetings and conference calls for the current code development cycle, which included members of the committee as well as any interested party to discuss and debate the proposed changes. Related documentation and reports are posted on the BCAC website at: https://www.iccsafe.org/codes-tech-support/codes/codedevelopment-process/building-code-actioncommittee-bcac.

The FCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance assigned International Codes with regard to fire safety and hazardous materials in new and existing buildings and facilities and the protection of life and property in wildland urban interface areas. In 2018 the Fire-CAC has held 3 open meetings. In addition, there were numerous conference calls, Regional Work Group and Task Group meetings for the current code development cycle, which included members of the committees as well as any interested parties, to discuss and debate the proposed changes. Related documentation and reports are posted on the FCAC website at: https://www.iccsafe.org/codes-tech-support/cs/fire-code-action-committee-fcac/

The SEHPCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance International Codes with regard to sustainability, energy and high performance as it relates to the built environment included, but not limited to, how these criteria relate to the International Green Construction Code (IgCC) and the International Energy Conservation Code (IECC). In 2018-2019, the SEHPCAC has held five two- or three-day open meetings and numerous workgroup calls, to discuss and debate proposed changes and public comments. Attendees at the meetings and calls included members of the SEHPCAC as well as any interested parties. Related documentation and reports are posted on the SEHPCAC website at http://www.iccsafe.org/cs/SEHPCAC/Pages/default.aspx.

The PMGCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance the International Codes or portions thereof that were under the purview of the PMG CAC. In 2017-2018, the PMG CAC held one face-to-face meeting and 11 conference call meetings. Numerous interested parties attended the committee meetings and offered their input. Related documentation and reports are posted on the PMGCAC website at: https://www.iccsafe.org/codes-tech-support/codes/code-development-process/pmg-code-action-committee-pmgcac.

Cost Impact: The code change proposal will not increase or decrease the cost of construction This is an editorial change that provides consistency between I-codes.

ADM10-19 Part I

Public Hearing Results

Errata: This proposal includes published errata Added proponent to the code change.

Committee Action: As Submitted

Committee Reason: The committee stated that the reason for approval was that the proposal provides consistency in the code language which improves the interpretation across the I-Code family. (Vote: 13-0)

Assembly Action: None

ADM10-19 Part I

NOTE: ADM10-19 PART III DID NOT RECEIVE A PUBLIC COMMENT AND IS REPRODUCED FOR INFORMATIONAL PURPOSES ONLY

ADM10-19 Part III

IECC®: C101.3

Proposed Change as Submitted

Proponents: Ed Kulik, representing ICC Building Code Action Committee (bcac@iccsafe.org); Pennie Feehan, representing Plumbing, Mechanical, and Fuel Gas Code Action Committee (pmgcac@iccsafe.org); David Collins, representing SEHPCAC (sehpcac@iccsafe.org)

2018 International Energy Conservation Code

Revise as follows:

C101.3 Intent. This code shall regulate the design and construction. The purpose of this code is to establish minimum requirements to provide a reasonable level of health, safety, property protection and general welfare by regulating the design, construction and operation of buildings for the effective use and conservation of energy over the useful life of each building. This code is intended to provide flexibility to permit the use of innovative approaches and techniques to achieve this objective. This code is not intended to abridge safety, health or environmental requirements contained in other applicable codes or ordinances.

Reason: The purpose of this proposal is for consistency in language for the sections on "Intent" or "Purpose" in the family of codes. The title of the section should be revised to be consistent with the text, which is "purpose."

The IFC was used as the guidance for the phrase to use. Several of the codes included the term "property protection", but not all. It is the intent of all the codes to provide "a reasonable level of life safety and property protection". Thus, this phrase is proposed to be used consistently across codes.

The BCAC is working from the philosophy that ICC is a family of codes, so administrative requirements should be consistent across books. Most administrative and enforcement matters are the same for any code. Those matters unique for a specific code remain unchanged. This is one of a series of proposals being submitted relating to technical, editorial and organizational changes proposed for the Administrative chapters (Chapter 1) in all of the I-Codes.

While the Administrative Committee will consider each proposal independently, the proposals in this package are a correlated set of companion code change proposals."

This proposal is submitted by the ICC Building Code Action Committee (BCAC), the ICC Fire Code Action Committee (FCAC), the ICC Sustainable, Energy and High Performance Code Action Committee (SEHPCAC) and the ICC Plumbing/Mechanical/Gas Code Action Committee (PMG CAC).

BCAC was established by the ICC Board of Directors in July 2011 to pursue opportunities to improve and enhance assigned International Codes or portions thereof. Since 2017 the BCAC has held 6 open meetings. In addition, there were numerous Working Group meetings and conference calls for the current code development cycle, which included members of the committee as well as any interested party to discuss and debate the proposed changes. Related documentation and reports are posted on the BCAC website at: https://www.iccsafe.org/codes-tech-support/codes/codedevelopment-process/building-code-actioncommittee-bcac.

The FCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance assigned International Codes with regard to fire safety and hazardous materials in new and existing buildings and facilities and the protection of life and property in wildland urban interface areas. In 2018 the Fire-CAC has held 3 open meetings. In addition, there were numerous conference calls, Regional Work Group and Task Group meetings for the current code development cycle, which included members of the committees as well as any interested parties, to discuss and debate the proposed changes. Related documentation and reports are posted on the FCAC website at: https://www.iccsafe.org/codes-tech-support/cs/fire-code-action-committee-fcac/

The SEHPCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance International Codes with regard to sustainability, energy and high performance as it relates to the built environment included, but not limited to, how these criteria relate to the International Green Construction Code (IgCC) and the International Energy Conservation Code (IECC). In 2018-2019, the SEHPCAC has held five two- or three-day open meetings and numerous workgroup calls, to discuss and debate proposed changes and public comments. Attendees at the meetings and calls included members of the SEHPCAC as well as any interested parties. Related documentation and reports are posted on the SEHPCAC website at http://www.iccsafe.org/cs/SEHPCAC/Pages/default.aspx.

The PMGCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance the International Codes or portions thereof that were under the purview of the PMG CAC. In 2017-2018, the PMG CAC held one face-to-face meeting and 11 conference call meetings. Numerous interested parties attended the committee meetings and offered their input. Related documentation and reports are posted on the PMGCAC website at: https://www.iccsafe.org/codes-tech-support/codes/code-development-process/pmg-code-action-committee-pmgcac.

Cost Impact: The code change proposal will not increase or decrease the cost of construction This is an editorial change that provides consistency between I-codes.

ADM10-19 Part III

Public Hearing Results

Committee Action: Disapproved

Committee Reason: Consistent with action on ADM9-19, this removes the only good part of ADM9 and keeps the bad pieces. Consistent with the action on CE5. (Vote 15-0)

Assembly Action: None

ADM10-19 Part III

NOTE: ADM10-19 PART IV DID NOT RECEIVE A PUBLIC COMMENT AND IS REPRODUCED FOR INFORMATIONAL PURPOSES ONLY

ADM10-19 Part IV

IECC®: R101.3

Proposed Change as Submitted

Proponents: Ed Kulik, representing ICC Building Code Action Committee (bcac@iccsafe.org); Pennie Feehan, representing Plumbing, Mechanical, and Fuel Gas Code Action Committee (pmgcac@iccsafe.org); David Collins, representing SEHPCAC (sehpcac@iccsafe.org)

2018 International Energy Conservation Code

Revise as follows:

R101.3 Intent. This code shall regulate the design and construction The purpose of this code is to establish minimum requirements to provide a reasonable level of health, safety, property protection and general welfare by regulating the design, construction and operation of buildings for the effective use and conservation of energy over the useful life of each building. This code is intended to provide flexibility to permit the use of innovative approaches and techniques to achieve this objective. This code is not intended to abridge safety, health or environmental requirements contained in other applicable codes or ordinances.

Reason: The purpose of this proposal is for consistency in language for the sections on "Intent" or "Purpose" in the family of codes. The title of the section should be revised to be consistent with the text, which is "purpose."

The IFC was used as the guidance for the phrase to use. Several of the codes included the term "property protection", but not all. It is the intent of all the codes to provide "a reasonable level of life safety and property protection". Thus, this phrase is proposed to be used consistently across codes.

The BCAC is working from the philosophy that ICC is a family of codes, so administrative requirements should be consistent across books. Most administrative and enforcement matters are the same for any code. Those matters unique for a specific code remain unchanged. This is one of a series of proposals being submitted relating to technical, editorial and organizational changes proposed for the Administrative chapters (Chapter 1) in all of the I-Codes.

While the Administrative Committee will consider each proposal independently, the proposals in this package are a correlated set of companion code change proposals."

This proposal is submitted by the ICC Building Code Action Committee (BCAC), the ICC Fire Code Action Committee (FCAC), the ICC Sustainable, Energy and High Performance Code Action Committee (SEHPCAC) and the ICC Plumbing/Mechanical/Gas Code Action Committee (PMG CAC).

BCAC was established by the ICC Board of Directors in July 2011 to pursue opportunities to improve and enhance assigned International Codes or portions thereof. Since 2017 the BCAC has held 6 open meetings. In addition, there were numerous Working Group meetings and conference calls for the current code development cycle, which included members of the committee as well as any interested party to discuss and debate the proposed changes. Related documentation and reports are posted on the BCAC website at: https://www.iccsafe.org/codes-tech-support/codes/codedevelopment-process/building-code-actioncommittee-bcac.

The FCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance assigned International Codes with regard to fire safety and hazardous materials in new and existing buildings and facilities and the protection of life and property in wildland urban interface areas. In 2018 the Fire-CAC has held 3 open meetings. In addition, there were numerous conference calls, Regional Work Group and Task Group meetings for the current code development cycle, which included members of the committees as well as any interested parties, to discuss and debate the proposed changes. Related documentation and reports are posted on the FCAC website at: https://www.iccsafe.org/codes-tech-support/cs/fire-code-action-committee-fcac/

The SEHPCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance International Codes with regard to sustainability, energy and high performance as it relates to the built environment included, but not limited to, how these criteria relate to the International Green Construction Code (IgCC) and the International Energy Conservation Code (IECC). In 2018-2019, the SEHPCAC has held five two- or three-day open meetings and numerous workgroup calls, to discuss and debate proposed changes and public comments. Attendees at the meetings and calls included members of the SEHPCAC as well as any interested parties. Related documentation and reports are posted on the SEHPCAC website at http://www.iccsafe.org/cs/SEHPCAC/Pages/default.aspx.

The PMGCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance the International Codes or portions thereof that were under the purview of the PMG CAC. In 2017-2018, the PMG CAC held one face-to-face meeting and 11 conference call meetings. Numerous interested parties attended the committee meetings and offered their input. Related documentation and reports are posted on the PMGCAC website at: https://www.iccsafe.org/codes-tech-support/codes/code-development-process/pmg-code-action-committee-pmgcac.

Cost Impact: The code change proposal will not increase or decrease the cost of construction This is an editorial change that provides consistency between I-codes.

ADM10-19 Part IV

Public Hearing Results

Committee Action: Disapproved

Committee Reason: Consistent with reason for Disapproval of ADM9-19 - Part III. (Vote: 11-0)

Assembly Action: None

ADM10-19 Part IV

ADM12-19

IMC®: [A] 102.3 (New), ACCA Chapter 15 (New)

Proposed Change as Submitted

Proponents: David Bixby, Air Conditioning Contractors of America (ACCA), representing Air Conditioning Contractors of America (bixster1953@yahoo.com)

2018 International Mechanical Code

Revise as follows:

[A] 102.3 Maintenance. Mechanical systems, both existing and new, and parts thereof shall be maintained in proper operating condition in accordance with the original design and in a safe and sanitary condition. Devices or safeguards that are required by this code shall be maintained in compliance with the edition of the code under which they were installed. The owner or the owner's authorized agent shall be responsible for maintenance of mechanical systems. To determine compliance with this provision, the code official shall have the authority to require a mechanical system to be reinspected.

The inspection for maintenance of HVAC systems <u>not within the scope of ACCA 4 QM</u> shall be performed in accordance with ASHRAE/ACCA/ANSI Standard 180.

The inspection for maintenance of HVAC systems in one and two family dwellings and multi family dwellings of three stories or fewer above grade shall be performed in accordance with ACCA 4 QM.

Add new standard(s) as follows:

ACCA

Air Conditioning Contractors of America 2800 Shirlington Road, Suite 300 Arlington VA 22206

ANSI/ACCA 4 QM - 2013: Maintenance of Residential HVAC Systems

Reason: The proposal is to (1) clarify that the current requirement showing Standard 180 specifically covers inspection for maintenance of commercial HVAC systems, and (2) add a reference to ACCA 4 QM which covers inspection for maintenance of residential HVAC systems for one-and two-family dwellings of three stories or less. ACCA 4 QM is a consensus-based ANSI standard. A proposal to add ACCA 4 QM to Chapter 15, Referenced Standards, has also been submitted.

Cost Impact: The code change proposal will not increase or decrease the cost of construction No cost impacts since this is a clarification of maintenance requirements.

Staff Analysis: A review of the standard proposed for inclusion in the code, ANSI/ACCA 4 QM – 2013: Maintenance of Residential HVAC Systems, with regard to the ICC criteria for referenced standards (Section 3.6 of CP#28) will be posted on the ICC website on or before April 2, 2019.

ADM12-19

Public Hearing Results

Committee Action: Disapproved

Committee Reason: The committee stated that the reason for disapproval was that the scope of the IMC does not include IRC dwellings and that the proposed referenced standard addition was unnecessary. (Vote: 13-0)

Assembly Action: None

ADM12-19

Individual Consideration Agenda

Public Comment 1:

Proponents:

David Bixby, representing Air Conditioning Contractors of America (bixster1953@yahoo.com)

requests As Submitted

Commenter's Reason: ACCA requests approval of the proposal as submitted. The Committee's reason for rejection was that "the scope of the IMC does not include IRC dwellings" and that the proposed addition of ACCA 4 QM was "unnecessary." The existing requirement requires inspection for maintenance to be performed in accordance with ASHRAE/ACCA/ANSI Standard 180. This standard does not cover inspection for maintenance in one and two family dwellings and multi-family dwellings of three stories or fewer above grade. ACCA 4 QM covers such dwellings. The proposal is merely clarifying the current requirement and adding a reference to ACCA 4 QM for dwellings not covered by Standard 180. ACCA 4 QM is a consensus-based ANSI standard. If the Committee approves ACCA's proposal then a reference to ACCA 4 QM needs to be added to Chapter 15, Referenced Standards.

Cost Impact: The net effect of the public comment and code change proposal will not increase or decrease the cost of construction There will be no cost impacts since this is a clarification of maintenance requirements.

ADM16-19 Part II

IRC®: SECTION R103, R103.1, R103.2, R103.3

Proposed Change as Submitted

Proponents: Ed Kulik, representing ICC Building Code Action Committee (bcac@iccsafe.org); Michael O'Brian, representing FCAC (fcac@iccsafe.org); Pennie Feehan, representing Plumbing, Mechanical, and Fuel Gas Code Action Committee (pmgcac@iccsafe.org); David Collins (sehpcac@iccsafe.org)

2018 International Residential Code

Revise as follows:

SECTION R103 DEPARTMENT OF BUILDING SAFETY CODE COMPLIANCE AGENCY

R103.1 Creation of enforcement agency. The department of building safety [INSERT NAME OF DEPARTMENT] is hereby created and the official in charge thereof shall be known as the building official. The function of the agency shall be the implementation, administration and enforcement of the provisions of this code.

R103.2 Appointment. The building official shall be appointed by the chief appointing authority of the jurisdiction.

R103.3 Deputies. In accordance with the prescribed procedures of this jurisdiction and with the concurrence of the appointing authority, the building official shall have the authority to appoint a deputy building official, the other related technical officers, inspectors, inspectors, inspectors, inspectors and other employees. Such employees shall have powers as delegated by the building official.

Reason: There are many different names for the title of this section, but all include provisions for the creation of the code compliance agency. The department's responsibilities are more than just 'enforcement' of the code. The fill in the blank for the name allows for the agency to develop a name appropriate to their jurisdiction and responsibilities.

In some of the codes there will be a move from this section to *General Authority and responsibilities* section so that requirements for liability and legal defense will be in a consistent location.

The BCAC is working from the philosophy that ICC is a family of codes, so administrative requirements should be consistent across books. Most administrative and enforcement matters are the same for any code. Those matters unique for a specific code remain unchanged. This is one of a series of proposals being submitted relating to technical, editorial and organizational changes proposed for the Administrative chapters (Chapter 1) in all of the I-Codes.

While the Administrative Committee will consider each proposal independently, the proposals in this package are a correlated set of companion code change proposals."

The following is the template utilized to create this code change proposal. There may be some differences depending on the unique applications of each code – such as "building/fire/code official".

SECTION 103

CODE COMPLIANCE AGENCY

103.1 Creation of agency. The **[INSERT NAME OF DEPARTMENT]** is hereby created and the official in charge thereof shall be known as the *code official*/. The function of the agency shall be the implementation, administration and enforcement of the provisions of this code.

103.2 Appointment. The code official shall be appointed by the chief appointing authority of the jurisdiction.

103.3 Deputies. In accordance with the prescribed procedures of this jurisdiction and with the concurrence of the appointing authority, the *code official* shall have the authority to appoint a deputy *code official*, other related technical officers, inspectors and other employees. Such employees shall have powers as delegated by the *code official*.

This proposal is submitted by the ICC Building Code Action Committee (BCAC), the ICC Fire Code Action Committee (FCAC), the ICC Sustainable, Energy and High Performance Code Action Committee (SEHPCAC) and the ICC Plumbing/Mechanical/Gas Code Action Committee (PMG CAC).

BCAC was established by the ICC Board of Directors in July 2011 to pursue opportunities to improve and enhance assigned International Codes or portions thereof. Since 2017 the BCAC has held 6 open meetings. In addition, there were numerous Working Group meetings and conference calls for the current code development cycle, which included members of the committee as well as any interested party to discuss and debate the proposed changes. Related documentation and reports are posted on the BCAC website at: https://www.iccsafe.org/codes-tech-

support/codes/codedevelopment-process/building-code-actioncommittee-bcac.

The FCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance assigned International Codes with regard to fire safety and hazardous materials in new and existing buildings and facilities and the protection of life and property in wildland urban interface areas. In 2018 the Fire-CAC has held 3 open meetings. In addition, there were numerous conference calls, Regional Work Group and Task Group meetings for the current code development cycle, which included members of the committees as well as any interested parties, to discuss and debate the proposed changes. Related documentation and reports are posted on the FCAC website at: https://www.iccsafe.org/codes-tech-support/cs/fire-code-action-committee-fcac/

The SEHPCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance International Codes with regard to sustainability, energy and high performance as it relates to the built environment included, but not limited to, how these criteria relate to the International Green Construction Code (IgCC) and the International Energy Conservation Code (IECC). In 2018-2019, the SEHPCAC has held five two- or three-day open meetings and numerous workgroup calls, to discuss and debate proposed changes and public comments. Attendees at the meetings and calls included members of the SEHPCAC as well as any interested parties. Related documentation and reports are posted on the SEHPCAC website at http://www.iccsafe.org/cs/SEHPCAC/Pages/default.aspx.

The PMG CAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance the International Codes or portions thereof that were under the purview of the PMG CAC. In 2017-2018, the PMG CAC held one face-to-face meeting and 11 conference call meetings. Numerous interested parties attended the committee meetings and offered their input. Related documentation and reports are posted on the PMGCAC website at: https://www.iccsafe.org/codes-tech-support/codes/code-development-process/pmg-code-action-committee-pmgcac.

Cost Impact: The code change proposal will not increase or decrease the cost of construction This is an editorial change with no change to construction requirements.

ADM16-19 Part II

Public Hearing Results

Errata: This proposal includes published errata Added proponent to the code change.

Committee Action: Disapproved

Committee Reason: The committee likes the existing language, and doesn't like removing "plans examiner." We're taking a term out of the laundry list that seemed to work. The term "chief appointing authority" is confusing. We don't know who that is. If it is generic the legal authority of the state can resolve that issue. There could be a conflict with state and local laws outlying code enforcement and that could be confusing. Some jurisdictions already give this authority to other departments. (Vote: 9-2)

Assembly Action: None

ADM16-19 Part II

Individual Consideration Agenda

Public Comment 1:

Proponents

Ed Kulik, representing ICC Building Code Action Committee (bcac@iccsafe.org)

requests As Submitted

Commenter's Reason: We are a family of codes. The building department will address residential and commercial, so the administration of these codes should be consistent. This terminology is used is many of the other codes, so it is not clear to us how to revise this proposal to address the items raised by the IRC committee. Addressing the committee comments:

- The phrase "chief appointing authority" proposed to be added in R103.2 is currently used in the IBC, IFC, IPC, IMC, IFGC, IEBC, ISPSC, IPMC, IPSDC, IWUIC (10 of 14 codes).
- The "plans examiner" is an employee, so it does not need to be in a laundry list. It was inconsistently listed in the other I-Codes, so ADM16 has proposed to delete it from the IBC, IRC, IEBC and ISPSC for consistency.
- Building departments have many different names. The intent of this section is to allow for a jurisdiction to insert their chosen name. This will

reduce conflicts and confusion "for state and local laws outlining code enforcement."

This public comment is submitted by the ICC Building Code Action Committee (BCAC). BCAC was established by the ICC Board of Directors in July 2011 to pursue opportunities to improve and enhance assigned International Codes or portions thereof. Since 2017 the BCAC has held 6 open meetings. In addition, there were numerous Working Group meetings and conference calls for the current code development cycle, which included members of the committee as well as any interested party to discuss and debate the proposed changes. Related documentation and reports are posted on the BCAC website at: https://www.iccsafe.org/codes-tech-support/codes/codedevelopment-process/building-code-actioncommittee-bcac.

Cost Impact: The net effect of the public comment and code change proposal will not increase or decrease the cost of construction This is an editorial change that provides consistency between I-codes.

NOTE: ADM16-19 PART I DID NOT RECEIVE A PUBLIC COMMENT AND IS REPRODUCED FOR INFORMATIONAL PURPOSES ONLY

ADM16-19 Part I

IBC®: SECTION 103, [A] 103.1, [A] 103.2, [A] 103.3; IFC®: SECTION 103, [A] 103.1, [A] 103.2, [A] 103.3, [A] 104.7, [A] 104.7.1; IPC®: SECTION 103, 103.1, 103.2, 103.3, 104.8, 104.8.1; IMC®: SECTION 103, [A] 103.1, [A] 103.2, [A] 103.3, [A] 104.8, [A] 104.8.1; IFGC®: SECTION 103 (IFGC), [A] 103.1, [A] 103.2, [A] 103.3, [A] 104.8, [A] 104.8, [A] 104.8.1; IEBC®: SECTION 103, [A] 103.1, [A] 103.2, [A] 103.3, [A] 104.8, [A] 104.8.1; IPMC®: SECTION 103, [A] 103.1, [A] 103.2, [A] 103.3, [A] 104.7, [A] 104.7.1; IPSDC®: SECTION 103, [A] 103.1, [A] 103.1, [A] 103.2, [A] 103.2, [A] 103.3

Proposed Change as Submitted

Proponents: Ed Kulik, representing ICC Building Code Action Committee (bcac@iccsafe.org); Michael O'Brian, representing FCAC (fcac@iccsafe.org); Pennie Feehan, representing Plumbing, Mechanical, and Fuel Gas Code Action Committee (pmgcac@iccsafe.org); David Collins (sehpcac@iccsafe.org)

THIS IS A 3 PART CODE CHANGE. PART I WILL BE HEARD BY THE ADMINISTRATIVE CODE COMMITTEE. PART II WILL BE HEARD BY THE IRC-BUILDING CODE COMMITTEE. PART III WILL BE HEARD BY THE IgCC CODE COMMITTEE. SEE THE TENTATIVE HEARING ORDER FOR THESE COMMITTEES.

2018 International Building Code

Revise as follows:

SECTION 103 DEPARTMENT OF BUILDING SAFETY CODE COMPLIANCE AGENCY

[A] 103.1 Creation of enforcement agency. The Department of Building Safety [INSERT NAME OF DEPARTMENT] is hereby created and the official in charge thereof shall be known as the building official. The function of the agency shall be the implementation, administration and enforcement of the provisions of this code.

[A] 103.2 Appointment. The building official shall be appointed by the chief appointing authority of the jurisdiction.

[A] 103.3 Deputies. In accordance with the prescribed procedures of this jurisdiction and with the concurrence of the appointing authority, the building official shall have the authority to appoint a deputy building official, the other related technical officers, inspectors, plan examiners and other employees. Such employees shall have powers as delegated by the building official. For the maintenance of existing properties, see the International Property Maintenance Code.

2018 International Fire Code

Revise as follows:

SECTION 103 DEPARTMENT OF FIRE PREVENTION CODE COMPLIANCE AGENCY

- [A] 103.1 General. Creation of agency. The department of fire prevention is established within the jurisdiction under the direction of the fire code official. [INSERT NAME OF DEPARTMENT] is hereby created and the official in charge thereof shall be known as the fire code official. The function of the department agency shall be the implementation, administration and enforcement of the provisions of this code.
- [A] 103.2 Appointment. The fire code official shall be appointed by the chief appointing authority of the jurisdiction...; and the fire code official shall not be removed from office except for cause and after full opportunity to be heard on specific and relevant charges by and before the appointing authority.
- [A] 103.3 Deputies. In accordance with the prescribed procedures of this jurisdiction and with the concurrence of the appointing authority, the fire code official shall have the authority to appoint a deputy fire code official, other related technical officers, inspectors and other employees. Such employees shall have powers as delegated by the fire code official.
- [A] 103.4 104.7 Liability. The fire code official, member of the board of appeals, officer or employee charged with the enforcement of this code, while acting for the jurisdiction, in good faith and without malice in the discharge of the duties required by this code or other pertinent law or ordinance, shall not thereby be rendered civilly or criminally liable personally, and is hereby relieved from all personal liability for any damage accruing to persons or property as a result of an act or by reason of an act or omission in the discharge of official duties.
- [A] 103.4.1 Legal defense. Any suit or criminal complaint instituted against any officer or employee because of an act performed by that officer or employee in the lawful discharge of duties and under the provisions of this code shall be defended by the legal representatives of the

jurisdiction until the final termination of the proceedings. The *fire code official* or any subordinate shall not be liable for costs in an action, suit or proceeding that is instituted in pursuance of the provisions of this code; and any officer of the department of fire prevention, acting in good faith and without malice, shall be free from liability for acts performed under any of its provisions or by reason of any act or omission in the performance of official duties in connection therewith.

2018 International Plumbing Code

Revise as follows:

SECTION 103 DEPARTMENT OF PLUMBING INSPECTION CODE COMPLIANCE AGENCY

- 103.1 General. Creation of agency. The department of plumbing inspection [INSERT NAME OF DEPARTMENT] is hereby created and the executive official in charge thereof shall be known as the code official. The function of the agency shall be the implementation, administration and enforcement of the provisions of this code.
- 103.2 Appointment. The code official shall be appointed by the chief appointing authority of the jurisdiction.
- **103.3 Deputies.** In accordance with the prescribed procedures of this jurisdiction and with the concurrence of the appointing authority, the code official shall have the authority to appoint a deputy code official, other related technical officers, inspectors and other employees. Such employees shall have powers as delegated by the code official.
- 103.4_104.8 Liability. The code official, member of the board of appeals or employee charged with the enforcement of this code, while acting for the jurisdiction in good faith and without malice in the discharge of the duties required by this code or other pertinent law or ordinance, shall not thereby be rendered civilly or criminally liable personally, and is hereby relieved from all personal liability for any damage accruing to persons or property as a result of any act or by reason of an act or omission in the discharge of official duties.
- 103.4.1 Legal defense. Any suit or criminal complaint instituted against any officer or employee because of an act performed by that officer or employee in the lawful discharge of duties and under the provisions of this code shall be defended by the legal representative of the jurisdiction until the final termination of the proceedings. The code official or any subordinate shall not be liable for costs in any action, suit or proceeding that is instituted in pursuance of the provisions of this code.

2018 International Mechanical Code

Revise as follows:

SECTION 103 DEPARTMENT OF MECHANICAL INSPECTION CODE COMPLIANCE AGENCY

- [A] 103.1 General. Creation of agency. The department of mechanical inspection [INSERT NAME OF DEPARTMENT] is hereby created and the executive official in charge thereof shall be known as the code official. The function of the agency shall be the implementation, administration and enforcement of the provisions of this code.
- [A] 103.2 Appointment. The code official shall be appointed by the chief appointing authority of the jurisdiction.
- [A] 103.3 Deputies. In accordance with the prescribed procedures of this jurisdiction and with the concurrence of the appointing authority, the code official shall have the authority to appoint a deputy code official, other related technical officers, inspectors and other employees. Such employees shall have powers as delegated by the code official.
- [A] 103.4 104.8 Liability. The code official, member of the board of appeals or employee charged with the enforcement of this code, while acting for the jurisdiction in good faith and without malice in the discharge of the duties required by this code or other pertinent law or ordinance, shall not thereby be rendered civilly or criminally liable personally, and is hereby relieved from personal liability for any damage accruing to persons or property as a result of an act or by reason of an act or omission in the discharge of official duties.
- [A] 103.4.1 104.8.1 Legal defense. Any suit or criminal complaint instituted against any officer or employee because of an act performed by that officer or employee in the lawful discharge of duties and under the provisions of this code shall be defended by the legal representatives of the jurisdiction until the final termination of the proceedings. The code official or any subordinate shall not be liable for costs in an action, suit or proceeding that is instituted in pursuance of the provisions of this code.

2018 International Fuel Gas Code

Revise as follows:

SECTION 103 (IFGC) DEPARTMENT OF INSPECTION CODE COMPLIANCE AGENCY

[A] 103.1 General. Creation of agency. The Department of Inspection-[INSERT NAME OF DEPARTMENT] is hereby created and the executive

official in charge thereof shall be known as the code official. The function of the agency shall be the implementation, administration and enforcement of the provisions of this code.

- [A] 103.2 Appointment. The code official shall be appointed by the chief appointing authority of the jurisdiction.
- [A] 103.3 Deputies. In accordance with the prescribed procedures of this jurisdiction and with the concurrence of the appointing authority, the code official shall have the authority to appoint a deputy code official, other related technical officers, inspectors and other employees. Such employees shall have powers as delegated by the code official.
- [A] 103.4 104.8 Liability. The code official, member of the board of appeals or employee charged with the enforcement of this code, while acting for the jurisdiction in good faith and without malice in the discharge of the duties required by this code or other pertinent law or ordinance, shall not thereby be rendered civilly or criminally liable personally, and is hereby relieved from all personal liability for any damage accruing to persons or property as a result of an act or by reason of an act or omission in the discharge of official duties.
- [A] 103.4.1 104.8.1 Legal defense. Any suit or criminal complaint instituted against any officer or employee because of an act performed by that officer or employee in the lawful discharge of duties and under the provisions of this code shall be defended by the legal representatives of the jurisdiction until the final termination of the proceedings. The code official or any subordinate shall not be liable for costs in an action, suit or proceeding that is instituted in pursuance of the provisions of this code.

2018 International Existing Building Code

Revise as follows:

SECTION 103 DEPARTMENT OF BUILDING SAFETY CODE COMPLIANCE AGENCY

- [A] 103.1 Creation of enforcement agency. The Department of Building Safety [INSERT NAME OF DEPARTMENT] is hereby created , and the official incharge in charge thereof shall be known as the code official. The function of the agency shall be the implementation, administration and enforcement of the provisions of this code.
- [A] 103.2 Appointment. The code official shall be appointed by the chief appointing authority of the jurisdiction.
- [A] 103.3 Deputies. In accordance with the prescribed procedures of this jurisdiction and with the concurrence of the appointing authority, the code official shall have the authority to appoint a deputy code official, the other related technical officers, inspectors , plan examiners, and other employees. Such employees shall have powers as delegated by the code official.

2018 International Swimming Pool and Spa Code

Revise as follows:

SECTION 103 DEPARTMENT OF BUILDING SAFETY CODE COMPLIANCE AGENCY

- [A] 103.1 Creation of enforcement agency. The department of building safety [INSERT NAME OF DEPARTMENT] is hereby created and the official in charge thereof shall be known as the code official. The function of the agency shall be the implementation, administration and enforcement of the provisions of this code.
- [A] 103.2 Appointment. The code official shall be appointed by the chief appointing authority of the jurisdiction.
- [A] 103.3 Deputies. In accordance with the prescribed procedures of the this jurisdiction and with the concurrence of the appointing authority, the code official shall have the authority to appoint a deputy code official, the other related technical officers, inspectors, plans examiners and other employees. Such employees shall have powers as delegated by the code official.
- [A] 103.4 104.8 Liability. The code official, member of the board of appeals or employee charged with the enforcement of this code, while acting for the jurisdiction in good faith and without malice in the discharge of the duties required by this code or other pertinent law or ordinance, shall not thereby be rendered civilly or criminally liable personally and is hereby relieved from personal liability for any damage accruing to persons or property as a result of any act or by reason of an act or omission in the discharge of official duties.
- [A] 103.4.1 Legal defenses. Any suit or criminal complaint instituted against an officer or employee because of an act performed by that officer or employee in the lawful discharge of duties and under the provisions of this code shall be defended by legal representatives of the jurisdiction until the final termination of the proceedings. The code official or any subordinate shall not be liable for cost in any action, suit or proceeding that is instituted in pursuance of the provisions of this code.

2018 International Property Maintenance Code

Revise as follows:

SECTION 103 DEPARTMENT OF PROPERTY MAINTENANCE INSPECTION CODE COMPLIANCE AGENCY

[A] 103.1 General. Creation of agency. The department of property maintenance inspection [INSERT NAME OF DEPARTMENT] is hereby created and the executive official in charge thereof shall be known as the code official. The function of the agency shall be the implementation, administration and enforcement of the provisions of this code.

[A] 103.2 Appointment. The code official shall be appointed by the chief appointing authority of the jurisdiction.

[A] 103.3 Deputies. In accordance with the prescribed procedures of this jurisdiction and with the concurrence of the appointing authority, the code official shall have the authority to appoint a deputy (s). code official, other related technical officers, inspectors and other employees. Such employees shall have powers as delegated by the code official.

[A] 103.4 104.7 Liability. The code official, member of the board of appeals or employee charged with the enforcement of this code, while acting for the jurisdiction, in good faith and without malice in the discharge of the duties required by this code or other pertinent law or ordinance, shall not thereby be rendered civilly or criminally liable personally, and is hereby relieved from all personal liability for any damage accruing to persons or property as a result of an act or by reason of an act or omission in the discharge of official duties.

[A] 103.4.1 104.7.1 Legal defense. Any suit or criminal complaint instituted against any officer or employee because of an act performed by that officer or employee in the lawful discharge of duties and under the provisions of this code shall be defended by the legal representative of the jurisdiction until the final termination of the proceedings. The code official or any subordinate shall not be liable for costs in an action, suit or proceeding that is instituted in pursuance of the provisions of this code.

2018 International Private Sewage Disposal Code

Revise as follows:

SECTION 103 DEPARTMENT OFPRIVATE SEWAGE DISPOSAL INSPECTION CODE COMPLIANCE AGENCY

[A] 103.1 General. Creation of agency. The Department of Private Sewage Disposal Inspection [INSERT NAME OF DEPARTMENT] is hereby created and the executive official in charge thereof shall be known as the code official. The function of the agency shall be the implementation, administration and enforcement of the provisions of this code.

[A] 103.2 Appointment. The code official shall be appointed by the chief appointing authority of the jurisdiction.

[A] 103.3 Deputies. In accordance with the prescribed procedures of the this jurisdiction and with the concurrence of the appointing authority, the code official shall have the authority to appoint a deputy code official, other related technical officers, inspectors and other employees. Such employees shall have powers as delegated by the code official.

[A] 103.4 104.7 Liability. The code official, member of the board of appeals or employee charged with the enforcement of this code, while acting for the jurisdiction in good faith and without malice in the discharge of the duties required by this code or other pertinent law or ordinance, shall not thereby be rendered civilly or criminally liable personally, and is hereby relieved from all personal liability for any damage accruing to persons or property as a result of any act or by reason of an act or omission in the discharge of official duties.

[A] 103.4.1 Legal defense. Any suit or criminal complaint instituted against any officer or employee because of an act performed by that officer or employee in the lawful discharge of duties and under the provisions of this code shall be defended by the legal representatives of the jurisdiction until the final termination of the proceedings. The code official or any subordinate shall not be liable for costs in any action, suit or proceeding that is instituted in pursuance of the provisions of this code.

2018 International Wildland-Urban Interface Code

Revise as follows:

SECTION 103 ENFORCEMENT CODE COMPLIANCE AGENCY

[A] 103.1 Creation of enforcement agency. The department of [INSERT NAME OF DEPARTMENT] is hereby created and the official in charge thereof shall be known as the code official. The function of the agency shall be the implementation, administration and enforcement of the provisions of this code.

[A] 103.2 Appointment. The code official shall be appointed by the chief appointing authority of the jurisdiction.

[A] 103.3 Deputies. In accordance with the prescribed procedures of this jurisdiction and with the concurrence of the appointing authority, the code official shall have the authority to appoint a deputy(s). deputy code official, other related technical officers, inspectors and other employees. Such employees shall have powers as delegated by the code official.

Reason: There are many different names for the title of this section, but all include provisions for the creation of the code compliance agency. The department's responsibilities are more than just 'enforcement' of the code. The fill in the blank for the name allows for the agency to develop a name appropriate to their jurisdiction and responsibilities.

In some of the codes there will be a move from this section to *General Authority and responsibilities* section so that requirements for liability and legal defense will be in a consistent location.

The BCAC is working from the philosophy that ICC is a family of codes, so administrative requirements should be consistent across books. Most administrative and enforcement matters are the same for any code. Those matters unique for a specific code remain unchanged. This is one of a series of proposals being submitted relating to technical, editorial and organizational changes proposed for the Administrative chapters (Chapter 1) in all of the I-Codes.

While the Administrative Committee will consider each proposal independently, the proposals in this package are a correlated set of companion code change proposals."

The following is the template utilized to create this code change proposal. There may be some differences depending on the unique applications of each code – such as "building/fire/code official".

SECTION 103

CODE COMPLIANCE AGENCY

103.1 Creation of agency. The **[INSERT NAME OF DEPARTMENT]** is hereby created and the official in charge thereof shall be known as the *code official*/. The function of the agency shall be the implementation, administration and enforcement of the provisions of this code.

103.2 Appointment. The code official shall be appointed by the chief appointing authority of the jurisdiction.

103.3 Deputies. In accordance with the prescribed procedures of this jurisdiction and with the concurrence of the appointing authority, the *code official* shall have the authority to appoint a deputy *code official*, other related technical officers, inspectors and other employees. Such employees shall have powers as delegated by the *code official*.

This proposal is submitted by the ICC Building Code Action Committee (BCAC), the ICC Fire Code Action Committee (FCAC), the ICC Sustainable, Energy and High Performance Code Action Committee (SEHPCAC) and the ICC Plumbing/Mechanical/Gas Code Action Committee (PMG CAC).

BCAC was established by the ICC Board of Directors in July 2011 to pursue opportunities to improve and enhance assigned International Codes or portions thereof. Since 2017 the BCAC has held 6 open meetings. In addition, there were numerous Working Group meetings and conference calls for the current code development cycle, which included members of the committee as well as any interested party to discuss and debate the proposed changes. Related documentation and reports are posted on the BCAC website at: https://www.iccsafe.org/codes-tech-support/codes/codedevelopment-process/building-code-actioncommittee-bcac.

The FCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance assigned International Codes with regard to fire safety and hazardous materials in new and existing buildings and facilities and the protection of life and property in wildland urban interface areas. In 2018 the Fire-CAC has held 3 open meetings. In addition, there were numerous conference calls, Regional Work Group and Task Group meetings for the current code development cycle, which included members of the committees as well as any interested parties, to discuss and debate the proposed changes. Related documentation and reports are posted on the FCAC website at: https://www.iccsafe.org/codes-tech-support/cs/fire-code-action-committee-fcac/

The SEHPCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance International Codes with regard to sustainability, energy and high performance as it relates to the built environment included, but not limited to, how these criteria relate to the International Green Construction Code (IgCC) and the International Energy Conservation Code (IECC). In 2018-2019, the SEHPCAC has held five two- or three-day open meetings and numerous workgroup calls, to discuss and debate proposed changes and public comments. Attendees at the meetings and calls included members of the SEHPCAC as well as any interested parties. Related documentation and reports are posted on the SEHPCAC website at http://www.iccsafe.org/cs/SEHPCAC/Pages/default.aspx.

The PMG CAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance the International Codes or portions thereof that were under the purview of the PMG CAC. In 2017-2018, the PMG CAC held one face-to-face meeting and 11 conference call meetings. Numerous interested parties attended the committee meetings and offered their input. Related documentation and reports are posted on the PMGCAC website at: https://www.iccsafe.org/codes-tech-support/codes/code-development-process/pmg-code-action-committee-pmgcac.

Cost Impact: The code change proposal will not increase or decrease the cost of construction This is an editorial change with no change to construction requirements.

ADM16-19 Part I

Public Hearing Results

Errata: This proposal includes unpublished errata

Instead of new text for Section 103.1, it should have been a revise as follows.

2018 International Building Code

Revise as follows:

[A] 103.1 Creation of enforcement agency. The Department of Building Safety [INSERT NAME OF DEPARTMENT] is hereby created and the official in charge thereof shall be known as the building official. The function of the agency shall be the implementation, administration and enforcement of the provisions of this code.

2018 International Fire Code

Section 103.1 is shown correctly.

2018 International Plumbing Code

Revise as follows:

[A] 103.1 General Creation of agency. The department of plumbing inspection [INSERT NAME OF DEPARTMENT] is hereby created and the executive official in charge thereof shall be known as the code official. The function of the agency shall be the implementation, administration and enforcement of the provisions of this code.

2018 International Mechanical Code

Revise as follows:

[A] 103.1 General Creation of agency. The department of mechnical inspection [INSERT NAME OF DEPARTMENT] is hereby created and the executive official in charge thereof shall be known as the code official. The function of the agency shall be the implementation, administration and enforcement of the provisions of this code.

2018 International Fuel Gas Code

Revise as follows:

[A] 103.1 General Creation of agency. The department of inspection [INSERT NAME OF DEPARTMENT] is hereby created and the executive official in charge thereof shall be known as the code official. The function of the agency shall be the implementation, administration and enforcement of the provisions of this code.

2018 International Existing Building Code

Revise as follows:

[A] 103.1 Creation of enforcement agency. The Department of Building Safety [INSERT NAME OF DEPARTMENT] is hereby created, and the official in charge thereof shall be known as the code official. The function of the agency shall be the implementation, administration and enforcement of the provisions of this code.

2018 International Swimming Pool and Spa Code

Revise as follows:

[A] 103.1 Creation of enforcement agency. The department of building safety [INSERT NAME OF DEPARTMENT] is hereby created, and the official in charge thereof shall be known as the code official. The function of the agency shall be the implementation, administration and enforcement of the provisions of this code.

2018 International Property Maintenance Code

Revise as follows:

[A] 103.1 General Creation of agency. The department of property maintenance inspection [INSERT NAME OF DEPARTMENT] is hereby created and the executive official in charge thereof shall be known as the code official. The function of the agency shall be the implementation, administration and enforcement of the provisions of this code.

2018 International Private Sewage Disposal Code

Revise as follows:

[A] 103.1 General Creation of agency. The Department of Private Sewage Disposal Inspection INSERT NAME OF DEPARTMENT is hereby created and the executive official in charge thereof shall be known as the code official. The function of the agency shall be the implementation, administration and enforcement of the provisions of this code.

2018 International Wildland-Urban Interface Code

Revise as follows:

[A] 103.1 Creation of enforcement agency. The department of [INSERT NAME OF DEPARTMENT] is hereby created and the official in charge thereof shall be known as the code official. The function of the agency shall be the implementation, administration and enforcement of the provisions of this code.

Committee Action: As Submitted

Committee Reason: The committee stated that the approval was based on the improvement to the consistency and ease of use from the standardization of the code compliance enforcement agency section and naming across the codes. (Vote: 13-0)

Assembly Action: None

ADM16-19 Part I

NOTE: ADM16-19 PART III DID NOT RECEIVE A PUBLIC COMMENT AND IS REPRODUCED FOR INFORMATIONAL PURPOSES ONLY

ADM16-19 Part III

IGCC®: 103 (New), 103.1 (New), 103.2 (New), 103.3 (New)

Proposed Change as Submitted

Proponents: Ed Kulik, representing ICC Building Code Action Committee (bcac@iccsafe.org); Michael O'Brian, representing FCAC (fcac@iccsafe.org); Pennie Feehan, representing Plumbing, Mechanical, and Fuel Gas Code Action Committee (pmgcac@iccsafe.org); David Collins, representing SEHPCAC (sehpcac@iccsafe.org)

2018 International Green Construction Code

Add new text as follows:

103 CODE COMPLIANCE AGENCY

103.1 Creation of agency The [INSERT NAME OF DEPARTMENT] is hereby created and the official in charge thereof shall be known as the authority having jurisdiction (AHJ). The function of the agency shall be the implementation, administration and enforcement of the provisions of this code.

103.2 Appointment The authority having jurisdiction (AHJ) shall be appointed by the chief appointing authority of the jurisdiction.

103.3 Deputies In accordance with the prescribed procedures of this jurisdiction and with the concurrence of the appointing authority, the authority having jurisdiction (AHJ), other related technical officers, inspectors and other employees as shall be necessary. Such employees shall have powers as delegated by the authority having jurisdiction (AHJ).

Reason: There are many different names for the title of this section, but all include provisions for the creation of the code compliance agency. The department's responsibilities are more than just 'enforcement' of the code. The fill in the blank for the name allows for the agency to develop a name appropriate to their jurisdiction and responsibilities.

In some of the codes there will be a move from this section to *General Authority and responsibilities* section so that requirements for liability and legal defense will be in a consistent location.

The BCAC is working from the philosophy that ICC is a family of codes, so administrative requirements should be consistent across books. Most administrative and enforcement matters are the same for any code. Those matters unique for a specific code remain unchanged. This is one of a series of proposals being submitted relating to technical, editorial and organizational changes proposed for the Administrative chapters (Chapter 1) in all of the I-Codes.

While the Administrative Committee will consider each proposal independently, the proposals in this package are a correlated set of companion code change proposals."

The following is the template utilized to create this code change proposal. There may be some differences depending on the unique applications of each code – such as "building/fire/code official".

SECTION 103

CODE COMPLIANCE AGENCY

103.1 Creation of agency. The **[INSERT NAME OF DEPARTMENT]** is hereby created and the official in charge thereof shall be known as the *code official*/. The function of the agency shall be the implementation, administration and enforcement of the provisions of this code.

103.2 Appointment. The code official shall be appointed by the chief appointing authority of the jurisdiction.

103.3 Deputies. In accordance with the prescribed procedures of this jurisdiction and with the concurrence of the appointing authority, the *code official* shall have the authority to appoint a deputy *code official*, other related technical officers, inspectors and other employees. Such employees shall have powers as delegated by the *code official*.

This proposal is submitted by the ICC Building Code Action Committee (BCAC), the ICC Fire Code Action Committee (FCAC), the ICC Sustainable, Energy and High Performance Code Action Committee (SEHPCAC) and the ICC Plumbing/Mechanical/Gas Code Action Committee (PMG CAC).

BCAC was established by the ICC Board of Directors in July 2011 to pursue opportunities to improve and enhance assigned International Codes or portions thereof. Since 2017 the BCAC has held 6 open meetings. In addition, there were numerous Working Group meetings and conference calls for the current code development cycle, which included members of the committee as well as any interested party to discuss and debate the proposed changes. Related documentation and reports are posted on the BCAC website at: https://www.iccsafe.org/codes-tech-support/codes/codedevelopment-process/building-code-actioncommittee-bcac.

The FCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance assigned International Codes with regard to fire safety and hazardous materials in new and existing buildings and facilities and the protection of life and property in wildland urban interface areas. In 2018 the Fire-CAC has held 3 open meetings. In addition, there were numerous conference calls, Regional Work Group and Task Group meetings for the current code development cycle, which included members of the committees as well as any interested parties, to discuss and debate the proposed changes. Related documentation and reports are posted on the FCAC website at: https://www.iccsafe.org/codes-tech-support/cs/fire-code-action-committee-fcac/

The SEHPCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance International Codes with regard to sustainability, energy and high performance as it relates to the built environment included, but not limited to, how these criteria relate to the International Green Construction Code (IgCC) and the International Energy Conservation Code (IECC). In 2018-2019, the SEHPCAC has held five two- or three-day open meetings and numerous workgroup calls, to discuss and debate proposed changes and public comments. Attendees at the meetings and calls included members of the SEHPCAC as well as any interested parties. Related documentation and reports are posted on the SEHPCAC website at http://www.iccsafe.org/cs/SEHPCAC/Pages/default.aspx.

The PMG CAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance the International Codes or portions thereof that were under the purview of the PMG CAC. In 2017-2018, the PMG CAC held one face-to-face meeting and 11 conference call meetings. Numerous interested parties attended the committee meetings and offered their input. Related documentation and reports are posted on the PMGCAC website at: https://www.iccsafe.org/codes-tech-support/codes/code-development-process/pmg-code-action-committee-pmgcac.

Cost Impact: The code change proposal will not increase or decrease the cost of construction This is an editorial change with no change to construction requirements.

ADM16-19 Part III

Public Hearing Results

Errata: This proposal includes published errata Added proponent to the code change.

Committee Action: As Submitted

Committee Reason: This proposal provides consistency and correlation between codes. (Vote: 5-0)

Assembly Action: None

ADM16-19 Part III

ADM19-19

IBC®: [A] 104.11 (New)

Proposed Change as Submitted

Proponents: Manny Muniz, Self, representing Self (Mannymuniz.mm@gmail.com)

2018 International Building Code

Delete and substitute as follows:

[A] 104.11 Alternative materials, design and methods of construction and equipment. The provisions of this code are not intended to prevent the installation of any material or to prohibit any design or method of construction not specifically prescribed by this code, provided that any such alternative has been approved. An alternative material, design or method of construction shall be approved where the building official finds that the proposed design is satisfactory and complies with the intent of the provisions of this code, and that the material, method or work offered is, for the purpose intended, not less than the equivalent of that prescribed in this code in quality, strength, effectiveness, fire resistance, durability and safety. Where the alternative material, design or method of construction is not approved, the building official shall respond in writing, stating the reasons why the alternative was not approved.

[A] 104.11 Alternative materials, design and methods of construction and equipment. The provisions of this code are not intended to prevent the installation of any material or to prohibit any design or method of construction not specifically prescribed by this code, provided that any such alternative has been approved. An alternative material, design or method of construction shall be approved where the building official finds that the proposed design meets all of the following:

- 1. The alternative material, design or method of construction is satisfactory and complies with the intent of the provisions of this code,
- 2. The material, method or work offered is, for the purpose intended, not less than the equivalent of that prescribed in this code as it pertains to the following:
- 2.1. quality
- 2.2. strength
- 2.3. effectiveness
- 2.4. fire resistance
- 2.5. durability
- 2.6. safety

Where the alternative material, design or method of construction is not approved, the building official shall respond in writing, stating the reasons why the alternative was not approved.

Reason: This section can be written more clearly as to the various criteria that must be met in order to be approved as an alternate material, design or method of construction. This will make it easier for the building official to make the necessary evaluation and decision. Should the alternate not be approved, it will also make it easier for the building official to cite the reasons for disapproval. There are no changes to the various requirements that the building official must consider.

Bibliography: No bibliography.

Cost Impact: The code change proposal will not increase or decrease the cost of construction There are no changes to the existing requirements.

ADM19-19

Public Hearing Results

Committee Action: As Modified

Committee Modification: 2018 International Building Code

[A] 104.11 Alternative materials, design and methods of construction and equipment. The provisions of this code are not intended to prevent the installation of any material or to prohibit any design or method of construction not specifically prescribed by this code, provided that any such alternative has been approved. An alternative material, design or method of construction shall be approved where the building official finds that the proposed design alternative meets all of the following:

- 1. The alternative material, design or method of construction is satisfactory and complies with the intent of the provisions of this code,
- 2. The material, method or work offered is, for the purpose intended, not less than the equivalent of that prescribed in this code as it pertains to the following:
 - 2.1 quality
 - 2.2 strength
 - 2.3 effectiveness
 - 2.4 fire resistance
 - 2.5 durability
 - 2.6 safety

Where the alternative material, design or method of construction is not approved, the building official shall respond in writing, stating the reasons why the alternative was not approved.

Committee Reason: The committee stated that the approval of the modification was based on the improvement to the language that makes it clear that it is the alternative that is subject to the list of requirements. The approval of the proposal was based on the proponent's published reason. (Vote: 13-0)

Assembly Action: None

ADM19-19

Individual Consideration Agenda

Public Comment 1:

IBC®: [A] 104.11 (New)

Proponents:

Marcelo Hirschler, representing GBH International (mmh@gbhint.com)

requests As Modified by Public Comment

Modify as follows:

2018 International Building Code

[A] 104.11 Alternative materials, design and methods of construction and equipment. The provisions of this code are not intended to prevent the installation of any material or to prohibit any design or method of construction not specifically prescribed by this code, provided that any such alternative has been approved. An alternative material, design or method of construction shall be approved where the building official finds that the proposed alternative meets all of the following:

- 1. The alternative material, design or method of construction is satisfactory and complies with the intent of the provisions of this code,
- 2. The material, method or work offered is, for the purpose intended, not less than the equivalent of that prescribed in this code as it pertains to the following:
 - 2.1. quality
 - 2.2. strength
 - 2.3. effectiveness
 - 2.4. fire performance resistance
 - 2.5. durability
 - 2.6. safety

Where the alternative material, design or method of construction is not approved, the building official shall respond in writing, stating the reasons why

the alternative was not approved.

Commenter's Reason: Fire resistance is defined in the IBC as "That property of materials or their assemblies that prevents or retards the passage of excessive heat, hot gases or flames under conditions of use." Therefore, the term is being misused in this application.

In this location the intent is that the alternative material or product or design performs at least as well with respect to fire as the one covered by the code.

Therefore, the appropriate term to use is not fire resistance but fire performance. Fire performance is used in multiple locations in Chapter 8 of the IBC and is also used in other codes, such as the IFC, IRC and IEBC. The concept of fire performance is broader than the concept of fire resistance because it encompasses both reaction to fire (i.e. what the material, product or assembly generates in a fire) and fire resistance (which, as described above, refers to how a product or assembly protects against the passage of heat or flames).

The intent of the section modified by the proposal is to look at the concept of fire performance (however it applies for any individual case) and not simply at the more limited concept of fire resistance. Thus, the only change proposed by this public comment is to use the correct terminology.

Cost Impact: The net effect of the public comment and code change proposal will not increase or decrease the cost of construction This public comment corrects the code to use the proper terminology.

Public Comment# 1403

Public Comment 2:

IBC®: [A] 104.11 (New)

Proponents:

James Smith, American Wood Council, representing American Wood Council (jsmith@awc.org)

requests As Modified by Public Comment

Further modify as follows:

2018 International Building Code

[A] 104.11 Alternative materials, design and methods of construction and equipment. The provisions of this code are not intended to prevent the installation of any material or to prohibit any design or method of construction not specifically prescribed by this code, provided that any such alternative has been approved. An alternative material, design or method of construction shall be approved where the building official finds that the proposed alternative meets all of the following:

- 1. The alternative material the proposed design or method of construction is satisfactory and complies with the intent of the provisions of this code, and
- The the material, method or work offered is, for the purpose intended, not less than the equivalent of that prescribed in this code as it pertains to the following in:

2.1. quality,

2.2. strength,

2.3. effectiveness,

2.4. fire resistance,

2.5. durability, and

2.6. safety.

Where the alternative material, design or method of construction is not approved, the building official shall respond in writing, stating the reasons why the alternative was not approved.

Commenter's Reason: The Committee approval of the revised language in 104.11 was based upon, in part, the proposal's reason statement that there are no changes to the various requirements that the building official must consider. However, the specific association between "the proposed design" and complying with the intent of the provisions of the code has been changed. Section 104.11 Item 1 of the Committee's recommendation for approval includes the original proponent's wording that the alternative material and method of construction complies with the intent of the provisions of the code. We think this wording change could cause confusion for approval of materials and methods of construction that are fully intended to be

alternatives to those materials and methods of construction that are explicitly prescribed in the code.

The further modifications we are proposing to the Committee's "Approved as Modified" version implement changes that restores original wording of 104.11 while keeping the enumerated list of requirements. These specific additional modifications to restore the original wording while keeping the enumerated list are as follows:

104.11 last sentence before the enumerated list: "the proposed alternative meets all of the following" is deleted because it is not part of the current 104.11.

104.11 item 1: "The alternative material" and "or method of construction" is deleted because it is not part of the current 104.11 sentence associating design with intent of the code. "the proposed" and "and" is added to restore the current text of 104.11.

104.11 Item 2: "as it pertains to the following" is deleted because it is not part of the current 104.11. "in" is added to restore the current text of 104.11.

104.11 Item 2.1 through 2.5: commas and "and" is added to restore the current text of 104.11.

Cost Impact: The net effect of the public comment and code change proposal will not increase or decrease the cost of construction. We feel that the further modifications in this public comment are editorial in nature and will only make the language clearer for the code officials being called upon to approve alternatives.

ADM20-19

IBC®: [A] 104.11 (New)

Proposed Change as Submitted

Proponents: Manny Muniz, representing Self (Mannymuniz.mm@gmail.com)

2018 International Building Code

Revise as follows:

[A] 104.11 Alternative materials, design and methods of construction and equipment. The provisions of this code are not intended to prevent the installation of any material or to prohibit any design or method of construction not specifically prescribed by this code, provided that any such alternative has been approved. An alternative material, design or method of construction shall be approved where the building official finds that the proposed design is satisfactory and complies with the intent of the provisions of this code, and that the material, method or work offered is, for the purpose intended, not less than the equivalent of that prescribed in this code in quality, strength, effectiveness, fire resistance, durability and safety. Approval of an alternate material, design or method of construction shall be issued in writing demonstrating evaluation of all the criteria stated in this section. Where the alternative material, design or method of construction is not approved, the building official shall respond in writing, stating the reasons why the alternative was not approved.

Reason: Just as written documentation is required for not approving an alternate, written documentation should also be required when the alternate is approved to show that the building official has determined that the alternate meets all of the criteria of 104.11.

Cost Impact: The code change proposal will not increase or decrease the cost of construction This has no impact on the cost of construction.

ADM20-19

Public Hearing Results

Committee Action: Disapproved

Committee Reason: The committee stated that the reason for disapproval was that when an alternative is approved it is not necessary to document the reasons and that it would put an unnecessary burden on the code official to comply with the requirement. (Vote: 13-0)

Assembly Action: None

ADM20-19

Individual Consideration Agenda

Public Comment 1:

IBC®: [A] 104.11

Proponents:

Manny Muniz, representing Representing self (mannymuniz.mm@gmail.com)

requests As Modified by Public Comment

Replace as follows:

2018 International Building Code

[A] 104.11 Alternative materials, design and methods of construction and equipment. The provisions of this code are not intended to prevent the installation of any material or to prohibit any design or method of construction not specifically prescribed by this code, provided that any such alternative has been *approved*. An alternative material, design or method of construction shall be *approved* where the *building official* finds that the proposed design is satisfactory and complies with the intent of the provisions of this code, and that the material, method or work offered is, for the purpose intended, not less than the equivalent of that prescribed in this code in quality, strength, effectiveness, *fire resistance*, durability and safety.

<u>Approval of an alternate material, design or method of construction shall be documented.</u> Where the alternative material, design or method of construction is not *approved*, the *building official* shall respond in writing, stating the reasons why the alternative was not *approved*.

Commenter's Reason: Just as written documentation is required for not approving an alternate, approving an alternate should also be documented to explain why specifically prescribed provisions of the code were not followed. This will help should it become necessary to perform a forensic examination of a structure.

Bibliography: None

Cost Impact: The net effect of the public comment and code change proposal will not increase or decrease the cost of construction Will not increase or decrease cost of construction. This is a clarification of the requirements.

IBC®: [A] 104.11

Proposed Change as Submitted

Proponents: Manny Muniz, representing Self (Mannymuniz.mm@gmail.com)

2018 International Building Code

Revise as follows:

[A] 104.11 Alternative materials, design and methods of construction and equipment. The provisions of this code are not intended to prevent the installation of any material or to prohibit any design or method of construction not specifically prescribed by this code, provided that any such alternative has been approved. An alternative material, design or method of construction shall be approved where the building official finds that the proposed design is satisfactory and complies with the intent of the provisions of this code, and that the material, method or work offered is, for the purpose intended, not less than the equivalent of that prescribed in this code in quality, strength, effectiveness, fire resistance, durability and safety. Such approval shall be limited to a specific project. Where the alternative material, design or method of construction is not approved, the building officials shall respond in writing, stating the reasons why the alternative was not approved.

Reason: Alternates should be limited to a specific project in order to encourage the use of ICC-ES Acceptance Criteria or a formal code change so an alternate is not used in perpetuity, thus avoiding closer scrutiny. This will not prevent the building official from approving an alternate for future projects but provides a method for limiting them.

Cost Impact: The code change proposal will not increase or decrease the cost of construction

The code change does not prevent the building official from approving an alternate for any number of projects.

ADM21-19

Public Hearing Results

Committee Action: Disapproved

Committee Reason: The committee stated that the disapproval was based on the existing section already having the intent of being about a specific project and it also having the flexibility of allowing the code official to make a blanket approval. (Vote: 13-0)

Assembly Action: None

ADM21-19

Individual Consideration Agenda

Public Comment 1:

IBC®: [A] 104.11

Proponents:

Manny Muniz, representing Representing self (mannymuniz.mm@gmail.com)

requests As Modified by Public Comment

Replace as follows:

2018 International Building Code

[A] 104.11 Alternative materials, design and methods of construction and equipment. The provisions of this code are not intended to prevent the installation of any material or to prohibit any design or method of construction not specifically prescribed by this code, provided that any such alternative has been *approved*. An alternative material, design or method of construction shall be *approved* where the *building official* finds that the proposed design is satisfactory and complies with the intent of the provisions of this code, and that the material, method or work offered is, for the purpose intended, not less than the equivalent of that prescribed in this code in quality, strength, effectiveness, *fire resistance*, durability and safety.

<u>Such approval shall not establish precedence for future projects.</u> Where the alternative material, design or method of construction is not *approved*, the *building official* shall respond in writing, stating the reasons why the alternative was not *approved*.

Commenter's Reason: Alternates should be limited in order to encourage the use of ICC-ES Acceptance Criteria or a formal code change, so an alternate is not used in perpetuity, thus avoiding closer scrutiny. This will not prevent the building official from approving an alternate for future projects but provides a method for limiting them. The modified language addresses the committees concerns

Bibliography: No bibliography

Cost Impact: The net effect of the public comment and code change proposal will not increase or decrease the cost of construction. This will not increase or decrease the cost of construction. This is a clarification of the requirements.

IBC®: [A] 104.11.2

Proposed Change as Submitted

Proponents: Manny Muniz, representing Self (Mannymuniz.mm@gmail.com)

2018 International Building Code

[A] 104.11.2 Tests. Whenever there is insufficient evidence of compliance with the provisions of this code, or evidence that a material or method does not conform to the requirements of this code, or in order to substantiate claims for alternative materials or methods, the *building official* shall have the authority to require tests as evidence of compliance to be made without expense to the jurisdiction. Test methods shall be as specified in this code or by other recognized test standards. Test samples shall be randomly selected by an approved agency. In the absence of recognized and accepted test methods, the *building official* shall approve the testing procedures. Tests shall be performed by an approved agency. Reports of such tests shall be retained by the *building official* for the period required for retention of public records.

Reason: When the building official requires a test as evidence of compliance, it is important that the test samples be randomly selected by an approved agency so the agency knows what they are testing. This is similar to what test agencies do when testing a product that is to be listed. Unless otherwise instructed, test agencies will perform developmental tests on test samples submitted to them. Such developmental tests are not suitable for listing purposes nor are they suitable for tests required by this section.

Cost Impact: The code change proposal will not increase or decrease the cost of construction The cost of construction will not be affected by the verification of legitimate test samples.

ADM22-19

Public Hearing Results

Committee Action: Disapproved

Committee Reason: The committee stated that the reasons for disapproval were as follows: the testing agency already has the authority to perform as many test as necessary, the proposal does not specify who is responsible for requiring the random test samples and that the tests would be for only one assembly. (Vote: 13-0)

Assembly Action: None

ADM22-19

Individual Consideration Agenda

Public Comment MUNIZ-1:

IBC®: [A] 104.11.2

Proponents:

Manny Muniz, representing Representing self (mannymuniz.mm@gmail.com)

requests As Modified by Public Comment

Replace as follows:

2018 International Building Code

[A] 104.11.2 Tests. Whenever there is insufficient evidence of compliance with the provisions of this code, or evidence that a material or method does not conform to the requirements of this code, or in order to substantiate claims for alternative materials or methods, the *building official* shall have the authority to require tests as evidence of compliance to be made without expense to the jurisdiction. Test methods shall be as specified in this code or by other recognized test standards. In the absence of recognized and accepted test methods, the *building official* shall approve the testing procedures. Tests shall be performed by an *approved agency* that will randomly select test samples. Reports of such tests shall be retained by the *building official* for the period required for retention of public records.

Commenter's Reason: When the building official requires a test of an alternate material as evidence of compliance, it may be necessary to have the test samples randomly selected by an approved agency to verify what is being testing. This is similar to what test agencies do when testing a product that is to be listed. Approved testing agencies must have some certainty as to what it is they are testing and so they must choose the samples to be tested. The modified language addresses the concerns of the committee.

Cost Impact: The net effect of the public comment and code change proposal will not increase or decrease the cost of construction Will not increase or decrease cost of construction. This is a clarification of the requirements.

ADM23-19 Part I

IBC®: [A] 104.11, [A] 104.11.1, 104.11.1.1 (New), [A] 104.11.2, 107.3.1.1 (New), 202 (New)

Proposed Change as Submitted

Proponents: Michael Savage, representing Compliance Code Action Committee (CCAC) (ccac@iccsafe.org)

THIS IS A 2 PART CODE CHANGE. PART I WILL BE HEARD BY THE ADMINISTRATIVE CODE COMMITTEE. PART II WILL BE HEARD BY THE IBC-STRUCTURAL CODE COMMITTEE. SEE THE TENTATIVE HEARING ORDER FOR THIS COMMITTEES.

2018 International Building Code

[A] 104.11 Alternative materials, design and methods of construction and equipment. The provisions of this code are not intended to prevent the installation of any material or to prohibit any design or method of construction not specifically prescribed by this code, provided that any such alternative has been approved. An alternative material, design or method of construction shall be approved where the building official finds that the proposed design is satisfactory and complies with the intent of the provisions of this code, and that the material, method or work offered is, for the purpose intended, not less than the equivalent of that prescribed in this code in quality, strength, effectiveness, fire resistance, durability and safety. Where the alternative material, design or method of construction is not approved, the building official shall respond in writing, stating the reasons why the alternative was not approved.

[A] 104.11.1 Research reports. Supporting data, where necessary to assist in the approval of materials or assemblies not specifically provided for in this code, shall consist of valid research reports from approved sources.

Add new text as follows:

104.11.1.1 Approved sources. Agencies conducting product certification or product evaluation shall be accredited by an accreditation body. For the research report to be accepted for product approval, the scope of accreditation shall include the acceptance criteria referenced in the research report.

[A] 104.11.2 Tests. Whenever there is insufficient evidence of compliance with the provisions of this code, or evidence that a material or method does not conform to the requirements of this code, or in order to substantiate claims for alternative materials or methods, the *building official* shall have the authority to require tests as evidence of compliance to be made without expense to the jurisdiction. Test methods shall be as specified in this code or by other recognized test standards. In the absence of recognized and accepted test methods, the *building official* shall approve the testing procedures. Tests shall be performed by an *approved agency*. Reports of such tests shall be retained by the *building official* for the period required for retention of public records.

Add new text as follows:

107.3.1.1 Third-party certification. Products and materials required by the code to be in compliance with referenced standards shall be certified by a third-party certification agency as complying with the referenced standards. Products and materials shall bear the identification of the manufacturer and any markings required by the applicable referenced standards.

Add new definition as follows:

THIRD-PARTY CERTIFICATION AGENCY. An approved agency operating a product or material certification system that incorporates initial product testing, assessment and surveillance of a manufacturer's quality control system.

Reason: The standard practice in building products conformity assessment involves accreditation of the agencies by an accreditation body such as ISO. Third party testing, manufacturing inspections and product certification or product evaluation provide a higher level of quality assurance on these activities for the building official. Approved sources that issue research reports must be accredited to the specific acceptance criteria referenced in the research report. This ensures that the approved sources have the requisite technical expertise and experience to conduct such activities on behalf of the building official. Harmonized language is proposed for inclusion in a new Section 107.3.1.1 regarding third-party certification, and in Chapter 2 with a definition for third-party certification agency. The language in the new Section 107.3.1.1 is identical to language in the International Plumbing Code Section 303.4. The added definition is the same as that in the International Residential Code, International Plumbing Code and International Mechanical Code. The revised definition for Accreditation Body is necessary as it applies to product certification and inspection activities for building products and materials in general, and not lumber mills specifically. These additions will improve the consistency and intent of the I-codes.

Cost Impact: The code change proposal will not increase or decrease the cost of construction This proposal provides clarification and consistency.

ADM23-19 Part I

Public Hearing Results

Committee Action: Disapproved

Committee Reason: The committee stated that the reason for disapproval was that the provision of the original proposal is far too limiting on code officials and does not give credit to alternative agencies or individuals with expertise on certain products or methods. (Vote: 13-0)

Assembly Action: None

ADM23-19 Part I

Individual Consideration Agenda

Public Comment 1:

IBC®: 104.11.1.1 (New)

Proponents:

Michael Savage, representing Compliance Code Action Committee (CCAC) (ccac@iccsafe.org)

requests As Modified by Public Comment

Replace as follows:

2018 International Building Code

104.11.1.1 Approved sources for product certification or product evaluation. Product certification and product evaluations shall be performed by agencies that are accredited by an accreditation body or shall be performed by registered design professionals. The scope of accreditation shall include the standard or acceptance criteria referenced in the research report, for the research report to be accepted for product approval.

Commenter's Reason: Comments were received that the section "Approved Sources" conflicts with the definition of "Approved Source" elsewhere in the code. The section title was revised and clarified to pertain specifically to agencies conducting product certification and product evaluation. Comments were received that in some cases, registered design professionals may already do product certification or product evaluation for certain types of building products. The text was revised to include registered design professionals.

Comments were received that the term "acceptance criteria" was limiting. This is not the case, as the term "acceptance criteria" already appears many times throughout the code, and the meaning is well understood. "Standards" were added alongside "acceptance criteria", as research reports may be based on standards or acceptance criteria.

Comments were received that requiring third-party certification by third-party certification agencies would create an undue burden and was not necessary for all building products in the code. The third- party certification requirement and definition of third-party certification agency are consequently deleted..

For the reasons above, we strongly encourage overturning the committee and approving the code change as modified by this public comment.

Cost Impact: The net effect of the public comment and code change proposal will not increase or decrease the cost of construction The public comment removes the requirement for third party certification.

ADM23-19 Part II

IBC®: [BS] 202

Proposed Change as Submitted

Proponents: Michael Savage, representing Compliance Code Action Committee (CCAC) (ccac@iccsafe.org)

2018 International Building Code

Revise as follows:

[BS] ACCREDITATION BODY. An approved, third-party organization that is independent of the grading, product certification and inspection agencies; and the lumber mills, and that initially accredits and subsequently monitors agencies conducting building product certification or evaluation schemes, on a continuing basis, including the competency and performance of a grading or inspection agency related to carrying out specific tasks.

ADM23-19 Part II

Public Hearing Results

Committee Action: Disapproved

Committee Reason: The committee expressed concerns that the definition provided was unclear and the action was consistent with the action on Part I (disapproved).

(Vote: 14-0)

Assembly Action: None

ADM23-19 Part II

Individual Consideration Agenda

Public Comment 1:

Proponents:

Michael Savage, representing Compliance Code Action Committee (CCAC) (ccac@iccsafe.org)

requests As Submitted

Commenter's Reason: Comments were received that the proposed modifications to the definition of "Accreditation Body" were unclear. The definition already exists in the code and is well understood. The proposed code change to the definition clarifies the definition and makes it more general pertaining to building product certification or product evaluation.

Cost Impact: The net effect of the public comment and code change proposal will not increase or decrease the cost of construction The public comment requests As Submitted. The cost impact statement on the original proposal notes no increase or decrease in cost of construction. The original proposal provides clarification and consistency.

ADM24-19 Part I

IBC®: [A] 105.2 (New)

Proposed Change as Submitted

Proponents: Marc Levitan, representing the ICC 500 Development Committee; Pataya Scott, representing Federal Emergency Management Agency (pataya.scott@fema.dhs.gov); Ed Kulik, representing ICC Building Code Action Committee (bcac@iccsafe.org)

THIS IS A 2 PART CODE CHANGE. PART I WILL BE HEARD BY THE ADMINISTRATIVE CODE COMMITTEE. PART II WILL BE HEARD BY THE IRC-BUILDING CODE COMMITTEE. SEE THE TENTATIVE HEARING ORDER FOR THESE COMMITTEES.

2018 International Building Code

Revise as follows:

[A] 105.2 Work exempt from permit. Exemptions from *permit* requirements of this code shall not be deemed to grant authorization for any work to be done in any manner in violation of the provisions of this code or any other laws or ordinances of this jurisdiction. *Permits* shall not be required for the following:

Building:

- 1. One-story Other than storm shelters, one-story detached accessory structures used as tool and storage sheds, playhouses and similar uses, provided that the floor area is not greater than 120 square feet (11 m²).
- 2. Fences not over 7 feet (2134 mm) high.
- 3. Oil derricks.
- 4. Retaining walls that are not over 4 feet (1219 mm) in height measured from the bottom of the footing to the top of the wall, unless supporting a surcharge or impounding Class I, II or IIIA liquids.
- 5. Water tanks supported directly on grade if the capacity is not greater than 5,000 gallons (18 925 L) and the ratio of height to diameter or width is not greater than 2:1.
- 6. Sidewalks and driveways not more than 30 inches (762 mm) above adjacent grade, and not over any basement or *story* below and are not part of an *accessible route*.
- 7. Painting, papering, tiling, carpeting, cabinets, counter tops and similar finish work.
- 8. Temporary motion picture, television and theater stage sets and scenery.
- 9. Prefabricated *swimming pools* accessory to a Group R-3 occupancy that are less than 24 inches (610 mm) deep, are not greater than 5,000 gallons (18 925 L) and are installed entirely above ground.
- 10. Shade cloth structures constructed for nursery or agricultural purposes, not including service systems.
- 11. Swings and other playground equipment accessory to detached one- and two-family dwellings.
- 12. Window awnings in Group R-3 and U occupancies, supported by an exterior wall that do not project more than 54 inches (1372 mm) from the *exterior wall* and do not require additional support.
- 13. Nonfixed and movable fixtures, cases, racks, counters and partitions not over 5 feet 9 inches (1753 mm) in height.

Electrical:

- 1. **Repairs and maintenance:** Minor repair work, including the replacement of lamps or the connection of *approved* portable electrical equipment to *approved* permanently installed receptacles.
- 2. **Radio and television transmitting stations:** The provisions of this code shall not apply to electrical equipment used for radio and television transmissions, but do apply to equipment and wiring for a power supply and the installations of towers and antennas.
- 3. **Temporary testing systems:** A *permit* shall not be required for the installation of any temporary system required for the testing or servicing of electrical equipment or apparatus.

Gas:

- 1. Portable heating appliance.
- 2. Replacement of any minor part that does not alter approval of equipment or make such equipment unsafe.

Mechanical:

- 1. Portable heating appliance.
- 2. Portable ventilation equipment.
- 3. Portable cooling unit.
- 4. Steam, hot or chilled water piping within any heating or cooling equipment regulated by this code.
- 5. Replacement of any part that does not alter its approval or make it unsafe.
- 6. Portable evaporative cooler.
- 7. Self-contained refrigeration system containing 10 pounds (4.54 kg) or less of refrigerant and actuated by motors of 1 horsepower (0.75 kW) or less.

Plumbing:

- 1. The stopping of leaks in drains, water, soil, waste or vent pipe, provided, however, that if any concealed trap, drain pipe, water, soil, waste or vent pipe becomes defective and it becomes necessary to remove and replace the same with new material, such work shall be considered as new work and a *permit* shall be obtained and inspection made as provided in this code.
- 2. The clearing of stoppages or the repairing of leaks in pipes, valves or fixtures and the removal and reinstallation of water closets, provided that such repairs do not involve or require the replacement or rearrangement of valves, pipes or fixtures.

Reason: The list of 'Work exempted from permit' in the IBC includes detached accessory structures not greater than 120 square feet; the IRC exempts the same detached accessory structures, but sets the area threshold at 200 square feet. Some detached storm shelters – especially prefabricated units – may be smaller than 120 (or 200) square feet, and classified as accessory structures in accordance with administrative provisions described above. It should also be noted that storm shelters may serve as multi-function buildings such as garden sheds (residential) and light storage (residential and commercial). However, unlike other accessory structures where function is incidental, the storm shelter's primary function is to provide life safety protection from extreme wind events. As such, storm shelter construction and installation should always require a building permit to provide quality assurance for the life safety protection of all potential storm shelter occupants.

Non-permitted storm shelter installation is unfortunately common for residential prefabricated models which are frequently installed after the residential building has been occupied. Some Midwestern jurisdictions only permit storm shelters when they are installed under FEMA-sponsored rebate programs, but all storm shelters should provide consumers with the same level of life safety protection and associated security. Unpermitted prefabricated shelters are most vulnerable to inadequate anchorage because in most cases proper installation is not verified through an independent field inspection. For above ground storm shelters, the existing slab must meet manufacturer's minimum requirements to resist uplift and overturning during an extreme wind event. Accordingly, ICC 500 Section 106.3.1 requires special inspection to verify 1) the capacity of anchors that are post-installed in hardened concrete and 2) the adequacy of the existing slab to meet specifications provided by the manufacturer. For in-ground storm shelters, inadequate anchorage can result in shelters being dislodged when groundwater rises around them.

This proposal is submitted by the ICC Building Code Action Committee (BCAC) and the ICC 500 Storm Shelter Standard Development committee.

BCAC was established by the ICC Board of Directors in July 2011 to pursue opportunities to improve and enhance assigned International Codes or portions thereof. Since 2017 the BCAC has held 6 open meetings. In addition, there were numerous Working Group meetings and conference calls for the current code development cycle, which included members of the committee as well as any interested party to discuss and debate the proposed changes. Related documentation and reports are posted on the BCAC website at: https://www.iccsafe.org/codes-tech-support/codes/codedevelopment-process/building-code-actioncommittee-bcac.

The ICC 500 Standards Development committee is responsible for the development of the ICC/NSSA Standard for the Design and Construction of Storm Shelters. The committee is currently working on the development of the 2020 edition. In 2017 the ICC 500 committee held 7 open conference calls. In addition, there were numerous Working Group meetings and conference calls, which included members of the committee as well as any interested party to discuss and debate the proposed changes. Related documentation and reports are posted on the BCAC website at: https://www.iccsafe.org/codes-tech-support/codes/code-development-process/standards-development/is-stm.

Cost Impact: The code change proposal will increase the cost of construction Increases the cost for installing storm shelters by the cost of the permit fee, but only in jurisdictions that currently allow installation without permits.

ADM24-19 Part I

Public Hearing Results

Committee Action: Disapproved

Committee Reason: The committee stated that the reason for disapproval was that the proposed language was adding an exception to an exception and that storm shelters are not similar to the other structures that are listed in the section. Additionally there was disagreement over the need and use for the definitions to determine if the requirements apply. (Vote: 13-0)

Assembly Action: None

ADM24-19 Part I

Individual Consideration Agenda

Public Comment 1:

IBC®: [A] 105.2 (New)

Proponents:

Ed Kulik, representing Building Code Action Committee (bcac@iccsafe.org); Pataya Scott, representing FEMA (pataya.scott@fema.dhs.gov); Benchmark Harris, representing National Storm Shelter Association (bharris@huckabee-inc.com); Marc Levitan, representing ICC 500 Standard Development Committee (marc.levitan@nist.gov)

requests As Modified by Public Comment

Modify as follows:

2018 International Building Code

[A] 105.2 Work exempt from permit. Exemptions from *permit* requirements of this code shall not be deemed to grant authorization for any work to be done in any manner in violation of the provisions of this code or any other laws or ordinances of this jurisdiction. *Permits* shall not be required for the following:

Building:

- Other than storm shelters, one-story One-story detached accessory structures used as tool and storage sheds, playhouses and similar uses, provided that the floor area is not greater than 120 square feet (11 m²). This exemption does not apply to storm shelters.
- 2. Fences not over 7 feet (2134 mm) high.
- 3. Oil derricks.
- 4. Retaining walls that are not over 4 feet (1219 mm) in height measured from the bottom of the footing to the top of the wall, unless supporting a surcharge or impounding Class I, II or IIIA liquids.
- 5. Water tanks supported directly on grade if the capacity is not greater than 5,000 gallons (18 925 L) and the ratio of height to diameter or width is not greater than 2:1.
- 6. Sidewalks and driveways not more than 30 inches (762 mm) above adjacent grade, and not over any basement or *story* below and are not part of an *accessible route*.
- 7. Painting, papering, tiling, carpeting, cabinets, counter tops and similar finish work.
- 8. Temporary motion picture, television and theater stage sets and scenery.
- 9. Prefabricated *swimming pools* accessory to a Group R-3 occupancy that are less than 24 inches (610 mm) deep, are not greater than 5,000 gallons (18 925 L) and are installed entirely above ground.
- 10. Shade cloth structures constructed for nursery or agricultural purposes, not including service systems.
- 11. Swings and other playground equipment accessory to detached one- and two-family dwellings.
- 12. Window awnings in Group R-3 and U occupancies, supported by an exterior wall that do not project more than 54 inches (1372 mm) from the *exterior wall* and do not require additional support.
- 13. Nonfixed and movable fixtures, cases, racks, counters and partitions not over 5 feet 9 inches (1753 mm) in height.

Electrical:

- 1. **Repairs and maintenance:** Minor repair work, including the replacement of lamps or the connection of *approved* portable electrical equipment to *approved* permanently installed receptacles.
- 2. **Radio and television transmitting stations:** The provisions of this code shall not apply to electrical equipment used for radio and television transmissions, but do apply to equipment and wiring for a power supply and the installations of towers and antennas.
- 3. **Temporary testing systems:** A *permit* shall not be required for the installation of any temporary system required for the testing or servicing of electrical equipment or apparatus.

Gas:

- 1. Portable heating appliance.
- 2. Replacement of any minor part that does not alter approval of equipment or make such equipment unsafe.

Mechanical:

- 1. Portable heating appliance.
- 2. Portable ventilation equipment.
- 3. Portable cooling unit.
- 4. Steam, hot or chilled water piping within any heating or cooling equipment regulated by this code.
- 5. Replacement of any part that does not alter its approval or make it unsafe.
- 6. Portable evaporative cooler.
- 7. Self-contained refrigeration system containing 10 pounds (4.54 kg) or less of refrigerant and actuated by motors of 1 horsepower (0.75 kW) or less.

Plumbing:

- 1. The stopping of leaks in drains, water, soil, waste or vent pipe, provided, however, that if any concealed trap, drain pipe, water, soil, waste or vent pipe becomes defective and it becomes necessary to remove and replace the same with new material, such work shall be considered as new work and a *permit* shall be obtained and inspection made as provided in this code.
- 2. The clearing of stoppages or the repairing of leaks in pipes, valves or fixtures and the removal and reinstallation of water closets, provided that such repairs do not involve or require the replacement or rearrangement of valves, pipes or fixtures.

Commenter's Reason: The modification is only editorial and intended to address the committee's concern on grammar. Requiring permits for storm shelters is an important safety consideration.

This requirement for small residential storm shelters to have building permits was successful in the IRC. Residential storm shelter (16 or fewer occupants) can be installed serving Group R-3 and R-4 homes and townhouses that fall in the IBC, so this is applicable to the IBC and the IRC. All storm shelters need to have a building permit to ensure they meet safety requirements and so emergency responders know where they are. Storm shelters can serve other purposes when not needed, so they would be 'accessory' by being under 120 sq.ft., and used as storage sheds, playhouses or similar uses. This is needed to prevent 'home built' storm shelters that do not meet minimum safety requirements to protect a family during a storm.

This public comment is submitted by the ICC Building Code Action Committee (BCAC). BCAC was established by the ICC Board of Directors in July 2011 to pursue opportunities to improve and enhance assigned International Codes or portions thereof. Since 2017 the BCAC has held 6 open meetings. In addition, there were numerous Working Group meetings and conference calls for the current code development cycle, which included members of the committee as well as any interested party to discuss and debate the proposed changes. Related documentation and reports are posted on the BCAC website at: https://www.iccsafe.org/codes-tech-support/codes/codedevelopment-process/building-code-actioncommittee-bcac.

Cost Impact: The net effect of the public comment and code change proposal will increase the cost of construction Increases the cost for installing storm shelters by the cost of the permit fee, but only in jurisdictions that currently allow installation without permits.

NOTE: ADM24-19 PART II DID NOT RECEIVE A PUBLIC COMMENT AND IS REPRODUCED FOR INFORMATIONAL PURPOSES ONLY

ADM24-19 Part II

IRC®: R105.2 (New)

Proposed Change as Submitted

Proponents: Marc Levitan, representing the ICC 500 Development Committee; Pataya Scott, representing Federal Emergency Management Agency (pataya.scott@fema.dhs.gov); Ed Kulik, representing ICC Building Code Action Committee (bcac@iccsafe.org)

2018 International Residential Code

Revise as follows:

R105.2 Work exempt from permit. Exemption from *permit* requirements of this code shall not be deemed to grant authorization for any work to be done in any manner in violation of the provisions of this code or any other laws or ordinances of this *jurisdiction*. *Permits* shall not be required for the following:

Building:

- One- Other than storm shelters, one-story detached accessory structures, provided that the floor area does not exceed 200 square feet (18.58 m²).
- 2. Fences not over 7 feet (2134 mm) high.
- Retaining walls that are not over 4 feet (1219 mm) in height measured from the bottom of the footing to the top of the wall, unless supporting a surcharge.
- 4. Water tanks supported directly upon *grade* if the capacity does not exceed 5,000 gallons (18 927 L) and the ratio of height to diameter or width does not exceed 2 to 1.
- 5. Sidewalks and driveways.
- 6. Painting, papering, tiling, carpeting, cabinets, counter tops and similar finish work.
- 7. Prefabricated swimming pools that are less than 24 inches (610 mm) deep.
- 8. Swings and other playground equipment.
- 9. Window awnings supported by an exterior wall that do not project more than 54 inches (1372 mm) from the exterior wall and do not require additional support.
- 10. Decks not exceeding 200 square feet (18.58 m²) in area, that are not more than 30 inches (762 mm) above *grade* at any point, are not attached to a dwelling and do not serve the exit door required by Section R311.4.

Electrical:

- 1. Listed cord-and-plug connected temporary decorative lighting.
- 2. Reinstallation of attachment plug receptacles but not the outlets therefor.
- 3. Replacement of branch circuit overcurrent devices of the required capacity in the same location.
- 4. Electrical wiring, devices, *appliances*, apparatus or *equipment* operating at less than 25 volts and not capable of supplying more than 50 watts of energy.
- 5. Minor repair work, including the replacement of lamps or the connection of *approved* portable electrical *equipment* to *approved* permanently installed receptacles.

Gas:

- 1. Portable heating, cooking or clothes drying appliances.
- 2. Replacement of any minor part that does not alter approval of equipment or make such equipment unsafe.
- 3. Portable-fuel-cell appliances that are not connected to a fixed piping system and are not interconnected to a power grid.

Mechanical:

- 1. Portable heating appliances.
- 2. Portable ventilation appliances.
- 3. Portable cooling units.
- 4. Steam, hot- or chilled-water piping within any heating or cooling *equipment* regulated by this code.
- 5. Replacement of any minor part that does not alter approval of equipment or make such equipment unsafe.
- 6. Portable evaporative coolers.
- 7. Self-contained refrigeration systems containing 10 pounds (4.54 kg) or less of refrigerant or that are actuated by motors of 1 horsepower (746 W) or less.
- 8. Portable-fuel-cell appliances that are not connected to a fixed piping system and are not interconnected to a power grid.

Plumbing:

- The stopping of leaks in drains, water, soil, waste or vent pipe; provided, however, that if any concealed trap, drainpipe, water, soil, waste or vent pipe becomes defective and it becomes necessary to remove and replace the same with new material, such work shall be considered as new work and a *permit* shall be obtained and inspection made as provided in this code.
- 2. The clearing of stoppages or the repairing of leaks in pipes, valves or fixtures, and the removal and reinstallation of water closets, provided such repairs do not involve or require the replacement or rearrangement of valves, pipes or fixtures.

Reason: The list of 'Work exempted from permit' in the IBC includes detached accessory structures not greater than 120 square feet; the IRC exempts the same detached accessory structures, but sets the area threshold at 200 square feet. Some detached storm shelters – especially prefabricated units – may be smaller than 120 (or 200) square feet, and classified as accessory structures in accordance with administrative provisions described above. It should also be noted that storm shelters may serve as multi-function buildings such as garden sheds (residential) and light storage (residential and commercial). However, unlike other accessory structures where function is incidental, the storm shelter's primary function is to provide life safety protection from extreme wind events. As such, storm shelter construction and installation should always require a building permit to provide quality assurance for the life safety protection of all potential storm shelter occupants.

Non-permitted storm shelter installation is unfortunately common for residential prefabricated models which are frequently installed after the residential building has been occupied. Some Midwestern jurisdictions only permit storm shelters when they are installed under FEMA-sponsored rebate programs, but all storm shelters should provide consumers with the same level of life safety protection and associated security. Unpermitted prefabricated shelters are most vulnerable to inadequate anchorage because in most cases proper installation is not verified through an independent field inspection. For above ground storm shelters, the existing slab must meet manufacturer's minimum requirements to resist uplift and overturning during an extreme wind event. Accordingly, ICC 500 Section 106.3.1 requires special inspection to verify 1) the capacity of anchors that are post-installed in hardened concrete and 2) the adequacy of the existing slab to meet specifications provided by the manufacturer. For in-ground storm shelters, inadequate anchorage can result in shelters being dislodged when groundwater rises around them.

This proposal is submitted by the ICC Building Code Action Committee (BCAC) and the ICC 500 Storm Shelter Standard Development committee.

BCAC was established by the ICC Board of Directors in July 2011 to pursue opportunities to improve and enhance assigned International Codes or portions thereof. Since 2017 the BCAC has held 6 open meetings. In addition, there were numerous Working Group meetings and conference calls for the current code development cycle, which included members of the committee as well as any interested party to discuss and debate the proposed changes. Related documentation and reports are posted on the BCAC website at: https://www.iccsafe.org/codes-tech-support/codes/codedevelopment-process/building-code-actioncommittee-bcac.

The ICC 500 Standards Development committee is responsible for the development of the ICC/NSSA Standard for the Design and Construction of Storm Shelters. The committee is currently working on the development of the 2020 edition. In 2017 the ICC 500 committee held 7 open conference calls. In addition, there were numerous Working Group meetings and conference calls, which included members of the committee as well as any interested party to discuss and debate the proposed changes. Related documentation and reports are posted on the BCAC website at: https://www.iccsafe.org/codes-tech-support/codes/code-development-process/standards-development/is-stm.

Cost Impact: The code change proposal will increase the cost of construction

Increases the cost for installing storm shelters by the cost of the permit fee, but only in jurisdictions that currently allow installation without permits.

ADM24-19 Part II

Public Hearing Results

Committee Action: As Submitted

Committee Reason: It seems reasonable to require a permit for storm shelters, though the embedded exception is awkward. (Vote: 6-4)

Assembly Action: None

ADM24-19 Part II

ADM32-19 Part I

IBC®: SECTION 108, [A] 108.1, [A] 108.2, [A] 108.3, [A] 108.4; IPC®: SECTION 110, 110.1, 110.2, 110.3, 110.4; IMC®: SECTION 110, [A] 110.1, [A] 110.2, [A] 110.3, [A] 110.4; IFGC®: SECTION 110 (IFGC), [A] 110.1, [A] 110.2, [A] 110.3, [A] 110.4; IEBC®: SECTION 107, [A] 107.1, [A] 107.2, [A] 107.3, [A] 107.4; IPSDC®: SECTION 110, [A] 110.1, [A] 110.2, [A] 110.3, [A] 110.4; IWUIC®: SECTION 112, [A] 112.1, [A] 112.2, 112.3, [A] 112.4; ISPSC®: SECTION 106, 106.1, 106.2, 106.3, 106.4

Proposed Change as Submitted

Proponents: Ed Kulik, representing ICC Building Code Action Committee (bcac@iccsafe.org); Michael O'Brian, FCAC, representing FCAC (fcac@iccsafe.org); Pennie Feehan, representing Plumbing, Mechanical, and Fuel Gas Code Action Committee (pmgcac@iccsafe.org)

THIS IS A 2 PART CODE CHANGE. PART I WILL BE HEARD BY THE ADMINISTRATIVE CODE COMMITTEE. PART II WILL BE HEARD BY THE IRC-BUILDING CODE COMMITTEE. SEE THE TENTATIVE HEARING ORDER FOR THIS COMMITTEES.

2018 International Building Code

Revise as follows:

SECTION 108 TEMPORARY USES, EQUIPMENT AND STRUCTURES AND USES

[A] 108.1 General. The building official is authorized to issue a permit for temporary structures and temporary uses—, structures, uses, equipment or systems. Such permits shall be limited as to time of service, but shall not be permitted for more than 180 days. The building official is authorized to grant extensions for demonstrated cause.

[A] 108.2 Conformance. Temporary structures uses and uses shall structures shall comply with the requirements in Section 3103.

[A] 108.3 Temporary power. The building official is authorized to give permission to temporarily supply and use power in part of an electric installation before such installation utilities, sources of energy, fuel, power, water systems or sewer systems before an installation has been fully completed and the final certificate of completion approval has been issued. The part covered by the temporary certificate approval shall comply with the requirements specified for temporary lighting, heat or power in NFPA 70. this code.

[A] 108.4 Termination of approval. The building official is authorized to terminate such permit for a temporary structure uses equipment, or use system and to order the temporary structure or use same to be discontinued.

2018 International Plumbing Code

Revise as follows:

SECTION 110 TEMPORARY <u>USES, EQUIPMENT, AND SYSTEMS AND USES</u>

110.1 General. The code official is authorized to issue a permit for temporary <u>uses</u>, equipment, systems and uses. <u>or systems</u>. Such permits shall be limited as to time of service, but shall not be permitted for more than 180 days. The code official is authorized to grant extensions for demonstrated cause.

110.2 Conformance. Temporary <u>uses</u>, equipment, <u>and</u> systems and uses shall conform to the structural strength, fire safety, means of egress, accessibility, light, ventilation and sanitary requirements of this code as necessary to ensure the public health, safety and general welfare.

110.3 Temporary utilities. The code official is authorized to give permission to temporarily supply utilities, sources of energy, fuel, power, water systems or sewer systems before an installation has been fully completed and the final certificate of completion approval has been issued. The part covered by the temporary certificate approval shall comply with the requirements specified for temporary lighting, heat or power in the this code.

110.4 Termination of approval. The code official is authorized to terminate such permit for temporary <u>uses</u> equipment, <u>systems</u> or <u>uses system</u> and to order the <u>temporary equipment</u>, <u>systems or uses same</u> to be discontinued.

2018 International Mechanical Code

Revise as follows:

SECTION 110 TEMPORARY USES, EQUIPMENT, AND SYSTEMS AND USES

[A] 110.1 General. The code official is authorized to issue a permit for temporary <u>uses</u>, equipment, systems and uses. or <u>systems</u>. Such permits shall be limited as to time of service, but shall not be permitted for more than 180 days. The code official is authorized to grant extensions for demonstrated cause.

- [A] 110.2 Conformance. Temporary <u>uses</u>, equipment, <u>and</u> systems and uses shall conform to the structural strength, fire safety, means of egress, accessibility, light, ventilation and sanitary requirements of this code as necessary to ensure the public health, safety and general welfare.
- [A] 110.3 Temporary utilities. The code official is authorized to give permission to temporarily supply utilities, sources of energy, fuel, power, water systems or sewer systems before an installation has been fully completed and the final certificate of completion approval has been issued. The part covered by the temporary certificate approval shall comply with the requirements specified for temporary lighting, heat or power in the this code.
- [A] 110.4 Termination of approval. The code official is authorized to terminate such permit for temporary <u>uses</u> equipment, <u>systems</u> or <u>uses</u> <u>system</u> and to order the <u>temporary equipment</u>, <u>systems or uses same</u> to be discontinued.

2018 International Fuel Gas Code

Revise as follows:

SECTION 110 (IFGC) TEMPORARY USES, EQUIPMENT, AND SYSTEMS AND USES

- [A] 110.1 General. The code official is authorized to issue a permit for temporary <u>uses</u>, equipment, systems and uses. or <u>systems</u>. Such permits shall be limited as to time of service, but shall not be permitted for more than 180 days. The code official is authorized to grant extensions for demonstrated cause.
- [A] 110.2 Conformance. Temporary <u>uses</u>, equipment, <u>and</u> systems and uses shall conform to the structural strength, fire safety, means of egress, accessibility, light, ventilation and sanitary requirements of this code as necessary to ensure the public health, safety and general welfare.
- [A] 110.3 Temporary utilities. The code official is authorized to give permission to temporarily supply utilities, sources of energy, fuel, power, water systems or sewer systems before an installation has been fully completed and the final certificate of completion approval has been issued. The part covered by the temporary certificate approval shall comply with the requirements specified for temporary lighting, heat or power in the this code.
- [A] 110.4 Termination of approval. The code official is authorized to terminate such permit for a temporary structure uses equipment, or use system and to order the temporary structure or use same to be discontinued.

2018 International Existing Building Code

Revise as follows:

SECTION 107 TEMPORARY STRUCTURES AND USES, EQUIPMENT, AND SYSTEMS

- [A] 107.1 General. The code official is authorized to issue a permit for temporary uses-, equipment, or systems. Such permits shall be limited as to time of service, but shall not be permitted for more than 180 days. The code official is authorized to grant extensions for demonstrated cause.
- [A] 107.2 Conformance. Temporary uses, equipment, and systems shall conform to the structural strength, fire safety, means of egress, accessibility, light, ventilation and sanitary requirements of this code as necessary to ensure the public health, safety and general welfare.
- [A] 107.3 Temporary power. The code official is authorized to give permission to temporarily supply and use power in part of an electric installation before such installation utilities, sources of energy, fuel, power, water systems or sewer systems before an installation has been fully completed and the final certificate of completion approval has been issued. The part covered by the temporary certificate approval shall comply with the requirements specified for temporary lighting, heat or power in NFPA 70. this code.
- [A] 107.4 Termination of approval. The code official is authorized to terminate such permit for a temporary use uses equipment, or system and to order the temporary use same to be discontinued.

2018 International Private Sewage Disposal Code

Revise as follows:

SECTION 110 TEMPORARY USES, EQUIPMENT, AND SYSTEMS AND USES

- [A] 110.1 General. The code official is authorized to issue a permit for temporary <u>uses</u>, equipment, <u>systems and uses</u>. <u>or systems</u>. Such permits shall be limited as to time of service, but shall not be permitted for more than 180 days. The code official is authorized to grant extensions for demonstrated cause.
- [A] 110.2 Conformance. Temporary <u>uses</u>, equipment, <u>and</u> systems and uses shall conform to the structural strength, fire safety, means of egress, accessibility, light, ventilation and sanitary requirements of this code as necessary to ensure the public health, safety and general welfare.
- [A] 110.3 Temporary utilities. The code official is authorized to give permission to temporarily supply utilities, sources of energy, fuel, power, water

systems or sewer systems before an installation has been fully completed and the final certificate of completion approval has been issued. The part covered by the temporary certificate approval shall comply with the requirements specified for temporary lighting, heat or power in the this code.

[A] 110.4 Termination of approval. The code official is authorized to terminate such permit for a temporary structure uses equipment, or use system and to order the temporary structure or use same to be discontinued.

2018 International Wildland-Urban Interface Code

Revise as follows:

SECTION 112 TEMPORARY STRUCTURES AND USES, EQUIPMENT, AND SYSTEMS

[A] 112.1 General. The code official is authorized to issue a permit for temporary structures and temporary uses. uses, equipment, or systems. Such permits shall be limited as to time of service, but shall not be permitted for more than 180 days. The code official is authorized to grant extensions for demonstrated cause.

[A] 112.2 Conformance. Temporary structures and uses, equipment, and systems shall conform to the structural strength, fire safety, means of egress, accessibility, light, ventilation and sanitary requirements of this code as necessary to ensure the public health, safety and general welfare.

112.3 Temporary utilities. The code official is authorized to give permission to temporarily supply utilities, sources of energy, fuel, power, water systems or sewer systems before an installation has been fully completed and the final approval has been issued. The part covered by the temporary approval shall comply with the requirements specified for temporary lighting, heat or power in this code.

[A] 112.3 112.4 Termination of approval. The code official is authorized to terminate such permit for a temporary structure uses equipment, or use system and to order the temporary structure or use same to be discontinued.

2018 International Swimming Pool and Spa Code

Revise as follows:

SECTION 106 TEMPORARY USES, EQUIPMENT, AND SYSTEMS

106.1 General. The code official is authorized to issue a permit for temporary uses, equipment, or systems. Such permits shall be limited as to time of service, but shall not be permitted for more than 180 days. The code official is authorized to grant extensions for demonstrated cause.

106.2 Conformance. Temporary uses, equipment, and systems shall conform to the structural strength, fire safety, means of egress, accessibility, light, ventilation and sanitary requirements of this code as necessary to ensure the health, safety and general welfare.

106.3 Temporary utilities. The code official is authorized to give permission to temporarily supply utilities, sources of energy, fuel, power, water systems or sewer systems before an installation has been fully completed and the final approval has been issued. The part covered by the temporary approval shall comply with the requirements specified for temporary lighting, heat or power in this code.

106.4 Termination of approval. The code official is authorized to terminate such permit for temporary uses equipment, or system and to order the same to be discontinued.

Reason: The purpose of this proposal is coordination between codes for the section on temporary structures. The word use is moved to the front. The allowances for temporary connection under inspection and testing address more than just utilities, so the language in this section should match. The phrase "certificate of completion" is not defined, so "approved" would be a better choice.

The BCAC is working from the philosophy that ICC is a family of codes, so administrative requirements should be consistent across books. Most administrative and enforcement matters are the same for any code. Those matters unique for a specific code remain unchanged. This is one of a series of proposals being submitted relating to technical, editorial and organizational changes proposed for the Administrative chapters (Chapter 1) in all of the I-Codes.

While the Administrative Committee will consider each proposal independently, the proposals in this package are a correlated set of companion code change proposals."

The following is the template utilized to create this code change proposal. There may be some differences depending on the unique applications of each code – such as "building/fire/code official".

IBC

SECTION 108

TEMPORARY USES, EQUIPMENT, AND SYSTEMS

[A] 108.1 General. The building official is authorized to issue a permit for temporary uses, equipment, or systems. Such permits shall be limited as to time of service, but shall not be permitted for more than 180 days. The building official is authorized to grant extensions for demonstrated cause.

[A] 108.2 Conformance. Temporary uses, equipment, and systems shall conform to the structural strength, fire safety, means of egress, accessibility, light, ventilation and sanitary requirements of this code as necessary to ensure the health, safety and general welfare.

[A] 108.3 Temporary utilities. The building official is authorized to give permission to temporarily supply utilities, sources of energy, fuel, power, water systems or sewer systems before an installation has been fully completed and the final approval has been issued. The part covered by the temporary approval shall comply with the requirements specified for temporary lighting, heat or power in this code.

[A] 108.4 Termination of approval. The building official is authorized to terminate such permit for temporary uses equipment, or system and to order the same to be discontinued.

This proposal is submitted by the ICC Building Code Action Committee (BCAC), the ICC Fire Code Action Committee (FCAC), the ICC Sustainable and the ICC Plumbing/Mechanical/Gas Code Action Committee (PMG CAC).

BCAC was established by the ICC Board of Directors in July 2011 to pursue opportunities to improve and enhance assigned International Codes or portions thereof. Since 2017 the BCAC has held 6 open meetings. In addition, there were numerous Working Group meetings and conference calls for the current code development cycle, which included members of the committee as well as any interested party to discuss and debate the proposed changes. Related documentation and reports are posted on the BCAC website at: https://www.iccsafe.org/codes-tech-support/codes/codedevelopment-process/building-code-actioncommittee-bcac.

The FCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance assigned International Codes with regard to fire safety and hazardous materials in new and existing buildings and facilities and the protection of life and property in wildland urban interface areas. In 2018 the Fire-CAC has held 3 open meetings. In addition, there were numerous conference calls, Regional Work Group and Task Group meetings for the current code development cycle, which included members of the committees as well as any interested parties, to discuss and debate the proposed changes. Related documentation and reports are posted on the FCAC website at: https://www.iccsafe.org/codes-tech-support/cs/fire-code-action-committee-fcac/

The PMG CAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance the International Codes or portions thereof that were under the purview of the PMG CAC. In 2017-2018, the PMG CAC held one face-to-face meeting and 11 conference call meetings. Numerous interested parties attended the committee meetings and offered their input. Related documentation and reports are posted on the PMGCAC website at: https://www.iccsafe.org/codes-tech-support/codes/code-development-process/pmg-code-action-committee-pmgcac.

Cost Impact: The code change proposal will not increase or decrease the cost of construction This is an editorial change that provides consistency between I-codes.

ADM32-19 Part I

Public Hearing Results

Committee Action: Disapproved

Committee Reason: The committee stated that the reason for disapproval was that it is not all inclusive as the intent is and only goes half way. Additionally it was stated that it should include the IFC. (Vote: 10-3)

Assembly Action: None

ADM32-19 Part I

Individual Consideration Agenda

Public Comment 1:

IBC®: SECTION 108, [A] 108.1, [A] 108.2, [A] 108.3, [A] 108.4; IEBC®: SECTION 107, [A] 107.1, [A] 107.2, [A] 107.3, [A] 107.4; IWUIC®: SECTION 112, [A] 112.1, [A] 112.2, 112.3, [A] 112.4; ISPSC®: SECTION 106, 106.1, 106.2, 106.3, 106.4; IFC®: SECTION 106 (New), 106.1

(New), 106.2 (New), 106.3 (New), 106.4 (New)

Proponents:

Ed Kulik, representing ICC Building Code Action Committee (bcac@iccsafe.org); Pennie Feehan, representing Plumbing, Mechanical, and Fuel Gas Code Action Committee (pmgcac@iccsafe.org); Michael O'Brian, representing FCAC (fcac@iccsafe.org)

requests As Modified by Public Comment

Modify as follows:

2018 International Building Code

SECTION 108 TEMPORARY USES, STRUCTURES, EQUIPMENT AND STRUCTURES SYSTEMS

[A] 108.1 General. The building official is authorized to issue a permit for temporary uses, structures, uses, equipment or systems. Such permits shall be limited as to time of service, but shall not be permitted for more than 180 days. The building official is authorized to grant extensions for demonstrated cause.

- [A] 108.2 Conformance. Temporary uses and structures shall comply with the requirements in Section 3103.
- [A] 108.3 Temporary power. The *building official* is authorized to give permission to temporarily supply utilities, sources of energy, fuel, power, water systems or sewer systems before an installation has been fully completed and the final approval has been issued. The part covered by the temporary approval shall comply with the requirements specified for temporary lighting, heat or power in this code.
- [A] 108.4 Termination of approval. The building official is authorized to terminate such permit for temporary uses , structures, equipment, or system and to order the same to be discontinued.

2018 International Existing Building Code

SECTION 107 TEMPORARY USES, <u>STRUCTURES</u>, EQUIPMENT, AND SYSTEMS

- [A] 107.1 General. The code official is authorized to issue a permit for temporary uses, <u>structures</u>, equipment, or systems. Such permits shall be limited as to time of service, but shall not be permitted for more than 180 days. The code official is authorized to grant extensions for demonstrated cause.
- [A] 107.2 Conformance. Temporary uses, <u>structures</u>, equipment, and systems shall conform to the structural strength, fire safety, means of egress, accessibility, light, ventilation and sanitary requirements of this code as necessary to ensure the health, safety and general welfare.
- [A] 107.3 Temporary power. The code official is authorized to give permission to temporarily supply utilities, sources of energy, fuel, power, water systems or sewer systems before an installation has been fully completed and the final approval has been issued. The part covered by the temporary approval shall comply with the requirements specified for temporary lighting, heat or power in this code.
- [A] 107.4 Termination of approval. The code official is authorized to terminate such permit for temporary uses, structures, equipment, or system and to order the same to be discontinued.

2018 International Wildland-Urban Interface Code

SECTION 112 TEMPORARY USES, <u>STRUCTURES,</u> EQUIPMENT, AND SYSTEMS

- [A] 112.1 General. The code official is authorized to issue a permit for temporary uses, <u>structures</u>, equipment, or systems. Such permits shall be limited as to time of service, but shall not be permitted for more than 180 days. The code official is authorized to grant extensions for demonstrated cause.
- [A] 112.2 Conformance. Temporary uses, <u>structures</u>, equipment, and systems shall conform to the structural strength, fire safety, means of egress, accessibility, light, ventilation and sanitary requirements of this code as necessary to ensure the health, safety and general welfare.
- **112.3 Temporary utilities.** The code official is authorized to give permission to temporarily supply utilities, sources of energy, fuel, power, water systems or sewer systems before an installation has been fully completed and the final approval has been issued. The part covered by the temporary approval shall comply with the requirements specified for temporary lighting, heat or power in this code.
- [A] 112.4 Termination of approval. The code official is authorized to terminate such permit for temporary uses, structures, equipment, or system and to order the same to be discontinued.

2018 International Swimming Pool and Spa Code

SECTION 106 TEMPORARY USES, <u>STRUCTURES</u>, EQUIPMENT, AND SYSTEMS

- **106.1 General.** The code official is authorized to issue a permit for temporary uses, <u>structures</u>, equipment, or systems. Such permits shall be limited as to time of service, but shall not be permitted for more than 180 days. The code official is authorized to grant extensions for demonstrated cause.
- **106.2 Conformance.** Temporary uses, <u>structures</u>, <u>equipment</u>, and systems shall conform to the structural strength, fire safety, means of egress, accessibility, light, ventilation and sanitary requirements of this code as necessary to ensure the health, safety and general welfare.
- **106.3 Temporary utilities.** The code official is authorized to give permission to temporarily supply utilities, sources of energy, fuel, power, water systems or sewer systems before an installation has been fully completed and the final approval has been issued. The part covered by the temporary approval shall comply with the requirements specified for temporary lighting, heat or power in this code.
- **106.4 Termination of approval.** The code official is authorized to terminate such permit for temporary uses, structures, equipment, or system and to order the same to be discontinued.

2018 International Fire Code

SECTION 106 TEMPORARY USES, STRUCTURES, EQUIPMENT AND SYSTEMS

- 106.1 General. The fire code official is authorized to issue a permit for temporary uses, structures, equipment or systems. Such permits shall be limited as to time of service, but shall not be permitted for more than 180 days. The fire code official is authorized to grant extensions for demonstrated cause.
- 106.2 Conformance Temporary uses, equipment, and systems shall conform to the structural strength, fire safety, means of egress, accessibility, light, ventilation and sanitary requirements of this code as necessary to ensure the health, safety and general welfare.
- 106.3 Temporary power. The fire code official is authorized to give permission to temporarily supply utilities, sources of energy, fuel, power, water systems or sewer systems before an installation has been fully completed and the final approval has been issued. The part covered by the temporary approval shall comply with the requirements specified for temporary lighting, heat or power in this code.
- 106.4 Termination of approval. The fire code official is authorized to terminate such permit for a temporary uses, structures, equipment, or system and to order the same to be discontinued.

Commenter's Reason: During the code change hearings, no one spoke against this proposal. The original proposal modified the section for temporary facilities where it was already in the code with the exception of ISPSC. The committee felt that it was very important to add these safety options to the IFC as well, so this modification adds this to IFC. As requested by the committee, the BCAC worked with FCAC and PMGCAC to develop this public comment.

When looking for coordination, some of the codes did not include 'structure' and some did. The residential committee felt it was important to keep 'structures', so to be consistent, we are asking for a modification for codes that include structures, which includes, IBC, IEBC, IWUIC, ISPSC and IFC. This is mostly putting it back where it was in current text.

BCAC was established by the ICC Board of Directors in July 2011 to pursue opportunities to improve and enhance assigned International Codes or portions thereof. Since 2017 the BCAC has held 6 open meetings. In addition, there were numerous Working Group meetings and conference calls for the current code development cycle, which included members of the committee as well as any interested party to discuss and debate the proposed changes. Related documentation and reports are posted on the BCAC website at: https://www.iccsafe.org/codestechsupport/codes/codedevelopment-process/building-code-actioncommittee-bcac.

The FCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance assigned International Codes with regard to fire safety and hazardous materials in new and existing buildings and facilities and the protection of life and property in wildland urban interface areas. In 2018 the Fire-CAC has held 3 open meetings. In addition, there were numerous conference calls, Regional Work Group and Task Group meetings for the current code development cycle, which included members of the committees as well as any interested parties, to discuss and debate the proposed changes. Related documentation and reports are posted on the FCAC website at: https://www.iccsafe.org/codestechsupport/cs/fire-code-action-committee-fcac/

The PMGCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance the International Codes or portions thereof that were under the purview of the PMG CAC. In 2017-2018, the PMG CAC held one face-to-face meeting and 11 conference call meetings. Numerous interested parties attended the committee meetings and offered their input. Related documentation and reports are posted on the PMGCAC website at: https://www.iccsafe.org/codes-tech-support/codes/code-development-process/pmg-code-action-committee-pmgcac.

Cost Impact: The net effect of the public comment and code change proposal will not increase or decrease the cost of construction This is an editorial change that provides consistency between I-codes.

ADM32-19 Part II

IRC®: SECTION R107, R107.1, R107.2, R107.3, R107.4

Proposed Change as Submitted

Proponents: Ed Kulik, representing ICC Building Code Action Committee (bcac@iccsafe.org); Michael O'Brian, FCAC, representing FCAC (fcac@iccsafe.org); Pennie Feehan, representing Plumbing, Mechanical, and Fuel Gas Code Action Committee (pmgcac@iccsafe.org)

2018 International Residential Code

Revise as follows:

SECTION R107 TEMPORARY STRUCTURES USES, EQUIPMENT AND USES STRUCTURES

R107.1 General. The *building official* is authorized to issue a permit for temporary <u>structures and temporary uses. uses, equipment, or systems.</u> Such *permits* shall be limited as to time of service, but shall not be permitted for more than 180 days. The *building official* is authorized to grant extensions for demonstrated cause.

R107.2 Conformance. Temporary structures and uses shall uses, structures, equipment or systems shall conform to the structural strength, fire safety, means of egress, accessibility, light, ventilation and sanitary requirements of this code as necessary to ensure the public the health, safety and general welfare.

R107.3 Temporary power. The building official is authorized to give permission to temporarily supply and use power in part of an electric installation before such installation utilities, sources of energy, fuel, power, water systems or sewer systems before an installation has been fully completed and the final certificate of completion approval has been issued. The part covered by the temporary certificate approval shall comply with the requirements specified for temporary lighting, heat or power in NFPA 70. this code.

R107.4 Termination of approval. The building official is authorized to terminate such permit for a temporary structure uses equipment, or use system and to order the temporary structure or use same to be discontinued.

ADM32-19 Part II

Public Hearing Results

Committee Action: Disapproved

Committee Reason: The term "structures" is used in Section R107.2 in the laundry list and this is not consistent. The term is not used in the general scoping provisions of Section R107.1. (Vote: 10-1)

Assembly Action: None

ADM32-19 Part II

Individual Consideration Agenda

Public Comment 1:

IRC®: SECTION R107, R107.1, R107.2, R107.3, R107.4

Proponents:

Ed Kulik, representing ICC Building Code Action Committee (bcac@iccsafe.org)

requests As Modified by Public Comment

Modify as follows:

2018 International Residential Code

SECTION R107 TEMPORARY USES, STRUCTURES, EQUIPMENT AND STRUCTURES SYSTEMS

R107.1 General. The *building official* is authorized to issue a permit for temporary uses, <u>structures</u>, equipment, or systems. Such *permits* shall be limited as to time of service, but shall not be permitted for more than 180 days. The *building official* is authorized to grant extensions for demonstrated cause.

R107.2 Conformance. Temporary uses, structures, equipment or systems shall conform to the structural strength, fire safety, means of egress, accessibility, light, ventilation and sanitary requirements of this code as necessary to ensure the health, safety and general welfare.

R107.3 Temporary power. The building official is authorized to give permission to temporarily supply utilities, sources of energy, fuel, power, water systems or sewer systems before an installation has been fully completed and the final approval has been issued. The part covered by the temporary approval shall comply with the requirements specified for temporary lighting, heat or power in this code.

R107.4 Termination of approval. The building official is authorized to terminate such permit for temporary uses, structures, equipment, or system and to order the same to be discontinued.

Commenter's Reason: The IRC committee felt that temporary 'structures' should be included consistently in the sections of this proposal. This modification does that. There is also a public comment to ADM32-19 Part 1 to coordinate this with the other codes that deal with structures. BCAC was established by the ICC Board of Directors in July 2011 to pursue opportunities to improve and enhance assigned International Codes or portions thereof. Since 2017 the BCAC has held 6 open meetings. In addition, there were numerous Working Group meetings and conference calls for the current code development cycle, which included members of the committee as w ell as any interested party to discuss and debate the proposed changes. Related documentation and reports are posted on the BCAC website at: https://www.iccsafe.org/codes-techsupport/codes/codedevelopment-process/building-code-actioncommittee-bcac.

Cost Impact: The net effect of the public comment and code change proposal will not increase or decrease the cost of construction This is an editorial change that provides consistency between I-codes.

ADM33-19 Part II

IECC®: SECTION C104, C104.1, C104.2, C104.3, C104.4, C104.5, C104.6

Proposed Change as Submitted

Proponents: Ed Kulik, representing ICC Building Code Action Committee (bcac@iccsafe.org); Michael O'Brian, representing FCAC (fcac@iccsafe.org); David Collins, representing SEHPCAC (sehpcac@iccsafe.org)

2018 International Energy Conservation Code

Revise as follows:

SECTION C104 FEES

C104.1 Fees. Payment of fees. A permit shall not be issued valid until the fees prescribed in Section C104.2 by law have been paid, nor shall an amendment to a permit be released until the additional fee, if any, has been paid.

C104.2 Schedule of permit fees. A-Where a permit is required, a fee for each permit shall be paid as required, in accordance with the schedule as established by the applicable governing authority.

C104.3 Permit valuations. The applicant for a permit shall provide an estimated permit value at time of application. Permit valuations shall include total value of work, including materials and labor, for which the permit is being issued. If, in the opinion of the code official, the valuation is underestimated on the application, the permit shall be denied, unless the applicant can show detailed estimates to meet the approval of the code official. Final building permit valuation shall be set by the code official.

C104.3 C104.4 Work commencing before permit issuance. Any person who commences any work before obtaining the necessary permits shall be subject to an additional a fee established by the code official that shall be in addition to the required permit fees.

C104.4 C104.5 Related fees. The payment of the fee for the construction, alteration, removal or demolition of work done in connection to or concurrently with the work or activity authorized by a permit shall not relieve the applicant or holder of the permit from the payment of other fees that are prescribed by law.

C104.5 C104.6 Refunds. The code official is authorized to establish a refund policy.

Reason: There are two different proposals to address consistency in the Fees section – the end result would be coordination between all codes. The intent is consistency in language for 'Fees' within the codes – IBC, IFC, IEBC, IWUIC, IZC, Energy – Commercial and Residential.

- Payment of fees consistent title, always two sentences
- Schedule of permit fees IBC currently also includes "structures", while IFC and IEBC also includes "alterations". IWUIC and Energy do not
 include anything. Eliminate the laundry list and make all codes consistent.
- Permit valuation: added valuation to IWUIC and Energy; permits can be for other than just buildings
- Work commencing before permit issuance remove redundant language
- Refunds no change
- The IZC currently has a section on fees that is very limited. It was not clear what should be added other than a section on refunds.

The BCAC is working from the philosophy that ICC is a family of codes, so administrative requirements should be consistent across books. Most administrative and enforcement matters are the same for any code. Those matters unique for a specific code remain unchanged. This is one of a series of proposals being submitted relating to technical, editorial and organizational changes proposed for the Administrative chapters (Chapter 1) in all of the I-Codes.

While the Administrative Committee will consider each proposal independently, the proposals in this package are a correlated set of companion code change proposals."

The following is the template utilized to create this code change proposal. There may be some differences depending on the unique applications of each code – such as "building/fire/code official".

IBC

SECTION 109FEES

[A] 109.1 Payment of fees. A permit shall not be valid until the fees prescribed by law have been paid. Nor shall an amendment to a permit be released until the additional fee, if any, has been paid.

[A] 109.2 Schedule of permit fees. Where a permit is required, a fee for each permit shall be paid as required, in accordance with the schedule as

established by the applicable governing authority.

[A] 109.3 Permit valuations. The applicant for a *permit* shall provide an estimated *permit* value at time of application. *Permit* valuations shall include total value of work, including materials and labor, for which the *permit* is being issued, such as electrical, gas, mechanical, plumbing equipment and permanent systems. If, in the opinion of the *building official*, the valuation is underestimated on the application, the *permit* shall be denied, unless the applicant can show detailed estimates to meet the approval of the *building official*. Final building *permit* valuation shall be set by the *building official*.

[A] 109.4 Work commencing before permit issuance. Any person who commences any work before obtaining the necessary *permits* shall be subject to a fee established by the *building official* that shall be in addition to the required *permit* fees.

[A] 109.5 Related fees. The payment of the fee for the construction, alteration, removal or demolition for work done in connection to or concurrently with the work authorized by a permit shall not relieve the applicant or holder of the permit from the payment of other fees that are prescribed by law.

[A] 109.6 Refunds. The building official is authorized to establish a refund policy.

This proposal is submitted by the ICC Building Code Action Committee (BCAC), the ICC Fire Code Action Committee (FCAC), the ICC Sustainable and Energy and High Performance Code Action Committee (SEHPCAC).

BCAC was established by the ICC Board of Directors in July 2011 to pursue opportunities to improve and enhance assigned International Codes or portions thereof. Since 2017 the BCAC has held 6 open meetings. In addition, there were numerous Working Group meetings and conference calls for the current code development cycle, which included members of the committee as well as any interested party to discuss and debate the proposed changes. Related documentation and reports are posted on the BCAC website at: https://www.iccsafe.org/codes-tech-support/codes/codedevelopment-process/building-code-actioncommittee-bcac.

The FCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance assigned International Codes with regard to fire safety and hazardous materials in new and existing buildings and facilities and the protection of life and property in wildland urban interface areas. In 2018 the Fire-CAC has held 3 open meetings. In addition, there were numerous conference calls, Regional Work Group and Task Group meetings for the current code development cycle, which included members of the committees as well as any interested parties, to discuss and debate the proposed changes. Related documentation and reports are posted on the FCAC website at: https://www.iccsafe.org/codes-tech-support/cs/fire-code-action-committee-fcac/

The SEHPCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance International Codes with regard to sustainability, energy and high performance as it relates to the built environment included, but not limited to, how these criteria relate to the International Green Construction Code (IgCC) and the International Energy Conservation Code (IECC). In 2018-2019, the SEHPCAC has held five two- or three-day open meetings and numerous workgroup calls, to discuss and debate proposed changes and public comments. Attendees at the meetings and calls included members of the SEHPCAC as well as any interested parties. Related documentation and reports are posted on the SEHPCAC website at http://www.iccsafe.org/cs/SEHPCAC/Pages/default.aspx.

Cost Impact: The code change proposal will not increase or decrease the cost of construction This is an editorial change that provides consistency between I-codes.

ADM33-19 Part II

Public Hearing Results

Committee Action: Disapproved

Committee Reason: Specificity is not needed in this section. These provisions are commonly modified by adopting jurisdictions to install their own fee structure. (Vote: 14-1)

Assembly Action: None

ADM33-19 Part II

Individual Consideration Agenda

Public Comment 1:

Proponents:

Ed Kulik, representing ICC Building Code Action Committee (bcac@iccsafe.org); David Collins, representing SEHPCAC (sehpcac@iccsafe.org)

requests As Submitted

Commenter's Reason: We respectively disagrees with the Energy committee. The section on fees is existing. This proposal is only adding Section C104.3 for consistency within the family of codes.

Code change proposal ADM27 revised the Fee section where the fees where in the code to allow for the jurisdiction to set the codes and revise when they need to – rather than have it set when the code is adopted with no options for change.

Section 104.3 is current language in the 2018 editions of IRC, IEBC and IBC. ADM33 Part 1 and ADM27 together are to coordinate the fee section in the family of codes. This section does not require a fee for review or compliance with the energy code, but says where a permit is required.

The SEHPCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance International Codes with regard to sustainability, energy and high performance as it relates to the built environment included, but not limited to, how these criteria relate to the International Green Construction Code (IgCC) and the International Energy Conservation Code (IECC). In 2018-2019, the SEHPCAC has held five two- or three-day open meetings and numerous workgroup calls, to discuss and debate proposed changes and public comments. Attendees at the meetings and calls included members of the SEHPCAC as well as any interested parties. Related documentation and reports are posted on the SEHPCAC website at http://www.iccsafe.org/cs/SEHPCAC/Pages/default.aspx.

Cost Impact: The net effect of the public comment and code change proposal will not increase or decrease the cost of construction This is an editorial change that provides consistency between I-codes.

ADM33-19 Part III

IECC®: SECTION R104, R104.1, R104.2, R104.3, R104.4, R104.5, R104.6

Proposed Change as Submitted

Proponents: Ed Kulik, representing ICC Building Code Action Committee (bcac@iccsafe.org); Michael O'Brian, representing FCAC (fcac@iccsafe.org); David Collins, representing SEHPCAC (sehpcac@iccsafe.org)

2018 International Energy Conservation Code

Revise as follows:

SECTION R104 FEES

R104.1 Fees. Payment of fees. A permit shall not be issued until the fees prescribed in Section R104.2 by law have been paid, nor paid. Nor shall an amendment to a permit be released until the additional fee, if any, has been paid.

R104.2 Schedule of permit fees. A-Where a permit is required, a fee for each permit shall be paid as required, in accordance with the schedule as established by the applicable governing authority.

R104.3 Permit valuations. The applicant for a permit shall provide an estimated permit value at time of application. Permit valuations shall include total value of work, including materials and labor, for which the permit is being issued. If, in the opinion of the code official, the valuation is underestimated on the application, the permit shall be denied, unless the applicant can show detailed estimates to meet the approval of the code official. Final building permit valuation shall be set by the code official.

R104.3 R104.4 Work commencing before permit issuance. Any person who commences any work before obtaining the necessary permits shall be subject to an additional a fee established by the *code official* that shall be in addition to the required permit fees.

R104.4 R104.5 Related fees. The payment of the fee for the construction, alteration, removal or demolition of work done in connection to or concurrently with the work or activity authorized by a permit shall not relieve the applicant or holder of the permit from the payment of other fees that are prescribed by law.

R104.5 R104.6 Refunds. The code official is authorized to establish a refund policy.

Reason: There are two different proposals to address consistency in the Fees section – the end result would be coordination between all codes. The intent is consistency in language for 'Fees' within the codes – IBC, IFC, IEBC, IWUIC, IZC, Energy – Commercial and Residential.

- Payment of fees consistent title, always two sentences
- Schedule of permit fees IBC currently also includes "structures", while IFC and IEBC also includes "alterations". IWUIC and Energy do not include anything. Eliminate the laundry list and make all codes consistent.
- Permit valuation: added valuation to IWUIC and Energy; permits can be for other than just buildings
- Work commencing before permit issuance remove redundant language
- Refunds no change
- The IZC currently has a section on fees that is very limited. It was not clear what should be added other than a section on refunds.

The BCAC is working from the philosophy that ICC is a family of codes, so administrative requirements should be consistent across books. Most administrative and enforcement matters are the same for any code. Those matters unique for a specific code remain unchanged. This is one of a series of proposals being submitted relating to technical, editorial and organizational changes proposed for the Administrative chapters (Chapter 1) in all of the I-Codes.

While the Administrative Committee will consider each proposal independently, the proposals in this package are a correlated set of companion code change proposals."

The following is the template utilized to create this code change proposal. There may be some differences depending on the unique applications of each code – such as "building/fire/code official".

IBC

SECTION 109FEES

[A] 109.1 Payment of fees. A permit shall not be valid until the fees prescribed by law have been paid. Nor shall an amendment to a permit be released until the additional fee, if any, has been paid.

[A] 109.2 Schedule of permit fees. Where a permit is required, a fee for each permit shall be paid as required, in accordance with the schedule as

established by the applicable governing authority.

[A] 109.3 Permit valuations. The applicant for a *permit* shall provide an estimated *permit* value at time of application. *Permit* valuations shall include total value of work, including materials and labor, for which the *permit* is being issued, such as electrical, gas, mechanical, plumbing equipment and permanent systems. If, in the opinion of the *building official*, the valuation is underestimated on the application, the *permit* shall be denied, unless the applicant can show detailed estimates to meet the approval of the *building official*. Final building *permit* valuation shall be set by the *building official*.

[A] 109.4 Work commencing before permit issuance. Any person who commences any work before obtaining the necessary *permits* shall be subject to a fee established by the *building official* that shall be in addition to the required *permit* fees.

[A] 109.5 Related fees. The payment of the fee for the construction, alteration, removal or demolition for work done in connection to or concurrently with the work authorized by a permit shall not relieve the applicant or holder of the permit from the payment of other fees that are prescribed by law.

[A] 109.6 Refunds. The building official is authorized to establish a refund policy.

This proposal is submitted by the ICC Building Code Action Committee (BCAC), the ICC Fire Code Action Committee (FCAC), the ICC Sustainable and Energy and High Performance Code Action Committee (SEHPCAC).

BCAC was established by the ICC Board of Directors in July 2011 to pursue opportunities to improve and enhance assigned International Codes or portions thereof. Since 2017 the BCAC has held 6 open meetings. In addition, there were numerous Working Group meetings and conference calls for the current code development cycle, which included members of the committee as well as any interested party to discuss and debate the proposed changes. Related documentation and reports are posted on the BCAC website at: https://www.iccsafe.org/codes-tech-support/codes/codedevelopment-process/building-code-actioncommittee-bcac.

The FCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance assigned International Codes with regard to fire safety and hazardous materials in new and existing buildings and facilities and the protection of life and property in wildland urban interface areas. In 2018 the Fire-CAC has held 3 open meetings. In addition, there were numerous conference calls, Regional Work Group and Task Group meetings for the current code development cycle, which included members of the committees as well as any interested parties, to discuss and debate the proposed changes. Related documentation and reports are posted on the FCAC website at: https://www.iccsafe.org/codes-tech-support/cs/fire-code-action-committee-fcac/

The SEHPCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance International Codes with regard to sustainability, energy and high performance as it relates to the built environment included, but not limited to, how these criteria relate to the International Green Construction Code (IgCC) and the International Energy Conservation Code (IECC). In 2018-2019, the SEHPCAC has held five two- or three-day open meetings and numerous workgroup calls, to discuss and debate proposed changes and public comments. Attendees at the meetings and calls included members of the SEHPCAC as well as any interested parties. Related documentation and reports are posted on the SEHPCAC website at http://www.iccsafe.org/cs/SEHPCAC/Pages/default.aspx.

Cost Impact: The code change proposal will not increase or decrease the cost of construction This is an editorial change that provides consistency between I-codes.

ADM33-19 Part III

Public Hearing Results

Committee Action: Disapproved

Committee Modification: fE

Committee Reason: Fees should not be set by the code official. Fees should not be specified within the code. The proposal gives authority to the code official to set fees, but such can not be appealed as this code has no appeal process. The inclusion of labor cost of inspections in the determination of fees was questioned. (Vote: 10-1)

Assembly Action: None

ADM33-19 Part III

Individual Consideration Agenda

Public Comment 1:

Proponents:

Ed Kulik, representing ICC Building Code Action Committee (bcac@iccsafe.org); David Collins, representing SEHPCAC (sehpcac@iccsafe.org)

requests As Submitted

Commenter's Reason: We respectively disagrees with the Energy committee. The section on fees is existing. This proposal is only adding Section C104.3 for consistency within the family of codes.

Code change proposal ADM27 revised the Fee section where the fees where in the code to allow for the jurisdiction to set the codes and revise when they need to – rather than have it set when the code is adopted with no options for change.

Section 104.3 is current language in the 2018 editions of IRC, IEBC and IBC. ADM33 Part 1 and ADM27 together are to coordinate the fee section in the family of codes. This section does not require a fee for review or compliance with the energy code, but says where a permit is required.

The SEHPCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance International Codes with regard to sustainability, energy and high performance as it relates to the built environment included, but not limited to, how these criteria relate to the International Green Construction Code (IgCC) and the International Energy Conservation Code (IECC). In 2018-2019, the SEHPCAC has held five two- or three-day open meetings and numerous workgroup calls, to discuss and debate proposed changes and public comments. Attendees at the meetings and calls included members of the SEHPCAC as well as any interested parties. Related documentation and reports are posted on the SEHPCAC website at http://www.iccsafe.org/cs/SEHPCAC/Pages/default.aspx.

Cost Impact: The net effect of the public comment and code change proposal will not increase or decrease the cost of construction This is an editorial change that provides consistency between I-codes.

NOTE: ADM33-19 PART I DID NOT RECEIVE A PUBLIC COMMENT AND IS REPRODUCED FOR INFORMATIONAL PURPOSES ONLY

ADM33-19 Part I

IBC®: SECTION 109, [A] 109.1, [A] 109.2, [A] 109.3, [A] 109.4, [A] 109.5, [A] 109.6; IFC®: SECTION 106, [A] 106.1, [A] 106.2, 106.3 (New), [A] 106.4, [A] 106.5, [A] 106.6; IEBC®: SECTION 108, [A] 108.1, [A] 108.2, [A] 108.3, [A] 108.4, [A] 108.5, [A] 108.6; IWUIC®: SECTION 109, [A] 109.1, [A] 109.2, 109.3, [A] 109.4, [A] 109.5, [A] 109.6; IZC®: SECTION 111, [A] 111.1, 111.2

Proposed Change as Submitted

Proponents: Ed Kulik, representing ICC Building Code Action Committee (bcac@iccsafe.org); Michael O'Brian, representing FCAC (fcac@iccsafe.org); David Collins, representing SEHPCAC (sehpcac@iccsafe.org)

THIS IS A 4 PART CODE CHANGE. PART I WILL BE HEARD BY THE ADMINISTRATIVE CODE COMMITTEE. PART II WILL BE HEARD BY THE IRC-BUILDING CODE COMMITTEE. PART III WILL BE HEARD BY THE IECC-COMMERCIAL CODE COMMITTEE. PART IV WILL BE HEARD BY THE IGCC CODE COMMITTEE. SEE THE TENTATIVE HEARING ORDER FOR THESE COMMITTEES.

2018 International Building Code

Revise as follows:

SECTION 109 FEES

[A] 109.1 Payment of fees. A permit shall not be valid until the fees prescribed by law have been paid —nor shall an amendment to a permit be released until the additional fee, if any, has been paid.

[A] 109.2 Schedule of permit fees. On buildings, structures, electrical, gas, mechanical, and plumbing systems or alterations requiring Where a permit is required, a fee for each permit shall be paid as required, in accordance with the schedule as established by the applicable governing authority.

[A] 109.3 Building permit value at time of applications. The applicant for a permit shall provide an estimated permit value at time of application. Permit valuations shall include total value of work, including materials and labor, for which the permit is being issued, such as electrical, gas, mechanical, plumbing equipment and permanent systems. If, in the opinion of the building official, the valuation is underestimated on the application, the permit shall be denied, unless the applicant can show detailed estimates to meet the approval of the building official. Final building permit valuation shall be set by the building official.

[A] 109.4 Work commencing before permit issuance. Any person who commences any work on a building, structure, electrical, gas, mechanical or plumbing system before work before obtaining the necessary permits shall be subject to a fee established by the building official that shall be in addition to the required permit fees.

[A] 109.5 Related fees. The payment of the fee for the construction, alteration, removal or demolition for work done in connection to or concurrently with the work authorized by a building permit shall not relieve the applicant or holder of the permit from the payment of other fees that are prescribed by law.

[A] 109.6 Refunds. The building official is authorized to establish a refund policy.

2018 International Fire Code

Revise as follows:

SECTION 106 FEES

[A] 106.1 Fees. A permit shall not be issued until the fees have been paid, nor shall an amendment to a permit be released until the additional fee, if any, has been paid.

[A] 106.2 Schedule of permit fees. A-Where a permit is required, a fee for each permit shall be paid as required, in accordance with the schedule as established by the applicable governing authority.

Add new text as follows:

106.3 Permit valuations. The applicant for a permit shall provide an estimated permit value at time of application. Permit valuations shall include total value of work, including materials and labor, for which the permit is being issued, such as electrical, gas, mechanical, plumbing equipment and

permanent systems. If, in the opinion of the fire code official, the valuation is underestimated on the application, the permit shall be denied, unless the applicant can show detailed estimates to meet the approval of the fire code official. Final permit valuation shall be set by the fire code official.

Revise as follows:

- [A] 106.3 106.4 Work commencing before permit issuance. A person who commences any work, activity or operation regulated by this code before obtaining the necessary permits shall be subject to an additional a fee established by the applicable governing authority, which shall be in addition to the required permit fees.
- [A] 106.4 106.5 Related fees. The payment of the fee for the construction, alteration, removal or demolition of work done in connection to or concurrently with the work or activity authorized by a permit shall not relieve the applicant or holder of the permit from the payment of other fees that are prescribed by law.
- [A] 106.5 106.6 Refunds. The applicable governing authority is authorized to establish a refund policy.

2018 International Existing Building Code

Revise as follows:

SECTION 108 FEES

- [A] 108.1 Payment of fees. A permit shall not be valid until the fees prescribed by law have been paid. Nor paid nor shall an amendment to a permit be released until the additional fee, if any, has been paid.
- [A] 108.2 Schedule of permit fees. On buildings, electrical, gas, mechanical, and plumbing systems or alterations requiring. Where a permit is required, a fee for each permit shall be paid as required, in accordance with the schedule as established by the applicable governing authority.
- [A] 108.3 Building permit <u>Permit</u> valuations. The applicant for a permit shall provide an estimated permit value at time of application. Permit valuations shall include total value of work including materials and labor for which the permit is being issued, such as electrical, gas, mechanical, plumbing equipment, and permanent systems. If, in the opinion of the code official, the valuation is underestimated on the application, the permit shall be denied unless the applicant can show detailed estimates to meet the approval of the code official. Final building permit valuation shall be set by the code official.
- [A] 108.4 Work commencing before permit issuance. Any person who commences any work before obtaining the necessary permits shall be subject to an additional a fee established by the *code official* that shall be in addition to the required permit fees.
- [A] 108.5 Related fees. The payment of the fee for the construction, alteration, removal, or demolition of work done in connection to or concurrently with the work authorized by a building a permit shall not relieve the applicant or holder of the permit from the payment of other fees that are prescribed by law.
- [A] 108.6 Refunds. The code official is authorized to establish a refund policy.

2018 International Wildland-Urban Interface Code

Revise as follows:

SECTION 109 FEES

- [A] 109.1 Fees. Payment of fees. A permit shall not be issued until the fees prescribed in Section 109.2 by law have been paid , nor shall an amendment to a permit be released until the additional fee, if any, has been paid
- [A] 109.2 Schedule of permit fees. A-Where a permit is required, a fee for each permit shall be paid as required, in accordance with the schedule as established by the applicable governing authority.
- 109.3 Permit valuations. The applicant for a permit shall provide an estimated permit value at time of application. Permit valuations shall include total value of work, including materials and labor, for which the permit is being issued. If, in the opinion of the applicable governing authority, the valuation is underestimated on the application, the permit shall be denied, unless the applicant can show detailed estimates to meet the approval of the applicable governing authority. Final building permit valuation shall be set by the applicable governing authority.
- [A] 109.3 109.4 Work commencing before permit issuance. Any person who commences any work before obtaining the necessary permits shall be subject to an additional a fee established by the applicable governing authority, which shall be in addition to the required permit fees.
- [A] 109.4 109.5 Related fees. The payment of the fee for the construction, alteration, removal or demolition of work done in connection to or concurrently with the work or activity authorized by a permit shall not relieve the applicant or holder of the permit from the payment of other fees that are prescribed by law.

[A] 109.5 109.6 Refunds. The applicable governing authority is authorized to establish a refund policy.

2018 International Zoning Code

Revise as follows:

SECTION 111 FEES

[A] 111.1 Fees. A fee for services shall be charged. Fees shall be set by the jurisdiction and schedules shall be available at the office of the code official.

111.2 Refunds. The code official is authorized to establish a refund policy.

Reason: There are two different proposals to address consistency in the Fees section – the end result would be coordination between all codes. The intent is consistency in language for 'Fees' within the codes – IBC, IFC, IEBC, IWUIC, IZC, Energy – Commercial and Residential.

- Payment of fees consistent title, always two sentences
- Schedule of permit fees IBC currently also includes "structures", while IFC and IEBC also includes "alterations". IWUIC and Energy do not include anything. Eliminate the laundry list and make all codes consistent.
- Permit valuation: added valuation to IWUIC and Energy; permits can be for other than just buildings
- Work commencing before permit issuance remove redundant language
- Refunds no change
- The IZC currently has a section on fees that is very limited. It was not clear what should be added other than a section on refunds.

The BCAC is working from the philosophy that ICC is a family of codes, so administrative requirements should be consistent across books. Most administrative and enforcement matters are the same for any code. Those matters unique for a specific code remain unchanged. This is one of a series of proposals being submitted relating to technical, editorial and organizational changes proposed for the Administrative chapters (Chapter 1) in all of the I-Codes.

While the Administrative Committee will consider each proposal independently, the proposals in this package are a correlated set of companion code change proposals."

The following is the template utilized to create this code change proposal. There may be some differences depending on the unique applications of each code – such as "building/fire/code official".

IBC

SECTION 109FEES

[A] 109.1 Payment of fees. A permit shall not be valid until the fees prescribed by law have been paid. Nor shall an amendment to a permit be released until the additional fee, if any, has been paid.

[A] 109.2 Schedule of permit fees. Where a permit is required, a fee for each permit shall be paid as required, in accordance with the schedule as established by the applicable governing authority.

[A] 109.3 Permit valuations. The applicant for a *permit* shall provide an estimated *permit* value at time of application. *Permit* valuations shall include total value of work, including materials and labor, for which the *permit* is being issued, such as electrical, gas, mechanical, plumbing equipment and permanent systems. If, in the opinion of the *building official*, the valuation is underestimated on the application, the *permit* shall be denied, unless the applicant can show detailed estimates to meet the approval of the *building official*. Final building *permit* valuation shall be set by the *building official*.

[A] 109.4 Work commencing before permit issuance. Any person who commences any work before obtaining the necessary *permits* shall be subject to a fee established by the *building official* that shall be in addition to the required *permit* fees.

[A] 109.5 Related fees. The payment of the fee for the construction, alteration, removal or demolition for work done in connection to or concurrently with the work authorized by a permit shall not relieve the applicant or holder of the permit from the payment of other fees that are prescribed by law.

[A] 109.6 Refunds. The building official is authorized to establish a refund policy.

This proposal is submitted by the ICC Building Code Action Committee (BCAC), the ICC Fire Code Action Committee (FCAC), the ICC Sustainable and Energy and High Performance Code Action Committee (SEHPCAC).

BCAC was established by the ICC Board of Directors in July 2011 to pursue opportunities to improve and enhance assigned International Codes or portions thereof. Since 2017 the BCAC has held 6 open meetings. In addition, there were numerous Working Group meetings and conference calls for the current code development cycle, which included members of the committee as well as any interested party to discuss and debate the

proposed changes. Related documentation and reports are posted on the BCAC website at: https://www.iccsafe.org/codes-tech-support/codes/codedevelopment-process/building-code-actioncommittee-bcac.

The FCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance assigned International Codes with regard to fire safety and hazardous materials in new and existing buildings and facilities and the protection of life and property in wildland urban interface areas. In 2018 the Fire-CAC has held 3 open meetings. In addition, there were numerous conference calls, Regional Work Group and Task Group meetings for the current code development cycle, which included members of the committees as well as any interested parties, to discuss and debate the proposed changes. Related documentation and reports are posted on the FCAC website at: https://www.iccsafe.org/codes-tech-support/cs/fire-code-action-committee-fcac/

The SEHPCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance International Codes with regard to sustainability, energy and high performance as it relates to the built environment included, but not limited to, how these criteria relate to the International Green Construction Code (IgCC) and the International Energy Conservation Code (IECC). In 2018-2019, the SEHPCAC has held five two- or three-day open meetings and numerous workgroup calls, to discuss and debate proposed changes and public comments. Attendees at the meetings and calls included members of the SEHPCAC as well as any interested parties. Related documentation and reports are posted on the SEHPCAC website at http://www.iccsafe.org/cs/SEHPCAC/Pages/default.aspx.

Cost Impact: The code change proposal will not increase or decrease the cost of construction This is an editorial change that provides consistency between I-codes.

ADM33-19 Part I

Public Hearing Results

Errata: This proposal includes published errata

Added proponent to the code change. Corrected hearing committee banner.

Committee Action: As Modified

Committee Modification: 2018 International Fire Code

106.3 Permit valuations. The applicant for a permit shall provide an estimated permit value at time of application. Permit valuations shall include total value of work, including materials and labor, for which the permit is being issued, such as electrical, gas, mechanical, plumbing equipment and permanent systems. If, in the opinion of the building fire code official, the valuation is underestimated on the application, the permit shall be denied, unless the applicant can show detailed estimates to meet the approval of the building fire code official. Final building permit valuation shall be set by the building fire code official.

Committee Reason: The committee stated that the reason for the approval of the modification was the specific improvement to the language for its use in the IFC by using the common title to match the existing language. The reason for approval of the proposal was based on the proponent's reason statement. (Vote: 13-0).

Assembly Action: None

ADM33-19 Part I

NOTE: ADM33-19 PART IV RECEIVED A PUBLIC COMMENT THAT WAS FOUND TO BE EDITORIAL BY THE CODE CORRELATION COMMITTEE (CCC). PLEASE SEE CCC01-19 FOR THIS PUBLIC COMMENT.

ADM37-19 Part I

IBC®: [A] 110.6; IPC®: [A] 107.2.3; IMC®: [A] 107.2.3; IFGC®: [A] 107.2.3; IEBC®: [A] 109.6; ISPSC®: [A] 106.6; IPSDC®: [A] 107.4; IWUIC®: [A] 110.1.2.3; IFC®: [A] 107.2.2

Proposed Change as Submitted

Proponents: Robert DeVries, representing Self (rdevries@nuwool.com)

THIS IS A 2 PART CODE CHANGE. PART I WILL BE HEARD BY THE ADMINISTRATIVE CODE COMMITTEE. PART II WILL BE HEARD BY THE IRC-BUILDING CODE COMMITTEE. SEE THE TENTATIVE HEARING ORDER FOR THIS COMMITTEES.

2018 International Building Code

Revise as follows:

[A] 110.6 Approval required. Work shall not be done beyond the point indicated in each successive inspection without first obtaining the approval of the building official. The building official, upon notification, shall make the requested inspections and shall either indicate the portion of the construction that is satisfactory as completed, or notify the permit holder or his or her agent wherein the same fails to comply with this code. The notification shall be in writing and include specific reference to the code chapter and section number(s) in violation. Any portions that do not comply shall be corrected and such portion shall not be covered or concealed until authorized by the building official.

2018 International Plumbing Code

Revise as follows:

[A] 107.2.3 Approval required. Work shall not be done beyond the point indicated in each successive inspection without first obtaining the approval of the code official. The code official, upon notification, shall make the requested inspections and shall either indicate the portion of the construction that is satisfactory as completed, or notify the permit holder or his or her agent wherein the same fails to comply with this code. The notification shall be in writing and include specific reference to the code chapter and section number(s) in violation. Any portions that do not comply shall be corrected and such portion shall not be covered or concealed until authorized by the code official.

2018 International Mechanical Code

Revise as follows:

[A] 107.2.3 Approval required. Work shall not be done beyond the point indicated in each successive inspection without first obtaining the approval of the code official. The code official, upon notification, shall make the requested inspections and shall either indicate the portion of the construction that is satisfactory as completed, or notify the permit holder or his or her agent wherein the same fails to comply with this code. The notification shall be in writing and include specific reference to the code chapter and section number(s) in violation. Any portions that do not comply shall be corrected and such portion shall not be covered or concealed until authorized by the code official.

2018 International Fuel Gas Code

[A] 107.2.3 Approval required. Work shall not be done beyond the point indicated in each successive inspection without first obtaining the approval of the code official. The code official, upon notification, shall make the requested inspections and shall either indicate the portion of the construction that is satisfactory as completed, or notify the permit holder or his or her agent wherein the same fails to comply with this code. The notification shall be in writing and include specific reference to the code chapter and section number(s) in violation. Any portions that do not comply shall be corrected and such portion shall not be covered or concealed until authorized by the code official.

2018 International Existing Building Code

[A] 109.6 Approval required. Work shall not be done beyond the point indicated in each successive inspection without first obtaining the approval of the *code official*. The *code official*, on notification, shall make the requested inspections and shall either indicate the portion of the construction that is satisfactory as completed or shall notify the permit holder or an agent of the permit holder wherein the same fails to comply with this code. The notification shall be in writing and include specific reference to the code chapter and section number(s) in violation. Any portions that do not comply shall be corrected and such portion shall not be covered or concealed until authorized by the *code official*.

2018 International Swimming Pool and Spa Code

[A] 106.6 Approval required. Work shall not be done beyond the point indicated in each successive inspection without first obtaining the approval of the code official. The code official, upon notification, shall make the requested inspection and shall either indicate the portion of the construction that is satisfactory as completed, or notify the permit holder or his or her agent wherein the same fails to comply with this eode. code. The notification

shall be in writing and include specific reference to the code chapter and section number(s) in violation. Any portions that do not comply shall be corrected and such portion shall not be covered or concealed until authorized by the code official.

2018 International Private Sewage Disposal Code

:

[A] 107.4 Approval required. Work shall not be done beyond the point indicated in each successive inspection without first obtaining the approval of the code official. The code official, upon notification, shall make the requested inspections and shall either indicate the portion of the construction that is satisfactory as completed, or notify the permit holder or his or her agent wherein the same fails to comply with this code. The notification shall be in writing and include specific reference to the code chapter and section number(s) in violation. Any portions that do not comply shall be corrected and such portion shall not be covered or concealed until authorized by the code official.

2018 International Wildland-Urban Interface Code

Revise as follows:

[A] 110.1.2.3 Approval required. Work shall not be done beyond the point indicated in each successive inspection without first obtaining the approval of the code official. The code official, upon notification, shall make the requested inspections and shall either indicate the portion of the construction that is satisfactory as completed, or notify the permit holder or his or her agent wherein the same fails to comply with this code. The notification shall be in writing and include specific reference to the code chapter and section number(s) in violation. Any portions that do not comply shall be corrected and such portion shall not be covered or concealed until authorized by the code official.

2018 International Fire Code

Revise as follows:

[A] 107.2.2 Approval required. Work shall not be done beyond the point indicated in each successive inspection without first obtaining the approval of the *fire code official*. The *fire code official*, on notification, shall make the requested inspections and shall either indicate the portion of the construction that is satisfactory as completed, or notify the permit holder or his or her agent wherein the same fails to comply with this code. The notification shall be in writing and include specific reference to the code chapter and section number(s) in violation. Any portions that do not comply shall be corrected, and such portion shall not be covered or concealed until authorized by the *fire code official*.

Reason: As written there is no set method of notification. Putting the violation in writing including the chapter and section number(s) would greatly improve the permit holders understanding of the violation. This would reduce the amount of communication and time required to determine the actual violation. Having the chapter and section number(s) would give the permit holder immediate direction as to how to correct the violation.

Cost Impact: The code change proposal will not increase or decrease the cost of construction

While no cost impact was selected an argument could be made that the permit holder may save money by saving time trying to contact the building official.

ADM37-19 Part I

Public Hearing Results

Committee Action: Disapproved

Committee Reason: The committee stated that the reasons for disapproval were as follows: making this a mandatory requirement is too much of a burden to have to provide the information for every violation, the information can already be requested and that it should be up to each jurisdiction to determine the need for providing the information. Those that were opposed to the disapproval stated that the applicant is entitled to the information, it acts as an educator and it should be specific in order to avoid unnecessary repeated inspections. (Vote: 9-4)

Assembly Action: None

ADM37-19 Part I

Individual Consideration Agenda

Public Comment 1:

IBC®: [A] 110.6; IPC®: [A] 107.2.3; IMC®: [A] 107.2.3; IFGC®: [A] 107.2.3; IEBC®: [A] 109.6; ISPSC®: [A] 106.6; IPSDC®: [A] 107.4;

IWUIC®: [A] 110.1.2.3; IFC®: [A] 107.2.2

Proponents:

Stephen Thomas, representing Colorado Chapter (sthomas@coloradocode.net)

requests As Modified by Public Comment

Modify as follows:

2018 International Building Code

[A] 110.6 Approval required. Work shall not be done beyond the point indicated in each successive inspection without first obtaining the approval of the building official. The building official, upon notification, shall make the requested inspections and shall either indicate the portion of the construction that is satisfactory as completed, or notify the permit holder or his or her agent wherein the same fails to comply with this code. The notification shall be in writing . and When requested, the building official shall include specific reference to the code chapter and section number(s) in violation. Any portions that do not comply shall be corrected and such portion shall not be covered or concealed until authorized by the building official.

2018 International Plumbing Code

[A] 107.2.3 Approval required. Work shall not be done beyond the point indicated in each successive inspection without first obtaining the approval of the code official. The code official, upon notification, shall make the requested inspections and shall either indicate the portion of the construction that is satisfactory as completed, or notify the permit holder or his or her agent wherein the same fails to comply with this code. The notification shall be in writing. and—When requested, the code official shall include specific reference to the code chapter and section number(s) in violation. Any portions that do not comply shall be corrected and such portion shall not be covered or concealed until authorized by the code official.

2018 International Mechanical Code

[A] 107.2.3 Approval required. Work shall not be done beyond the point indicated in each successive inspection without first obtaining the approval of the code official. The code official, upon notification, shall make the requested inspections and shall either indicate the portion of the construction that is satisfactory as completed, or notify the permit holder or his or her agent wherein the same fails to comply with this code. The notification shall be in writing, and When requested, the code official shall include specific reference to the code chapter and section number(s) in violation. Any portions that do not comply shall be corrected and such portion shall not be covered or concealed until authorized by the code official.

2018 International Fuel Gas Code

[A] 107.2.3 Approval required. Work shall not be done beyond the point indicated in each successive inspection without first obtaining the approval of the code official. The code official, upon notification, shall make the requested inspections and shall either indicate the portion of the construction that is satisfactory as completed, or notify the permit holder or his or her agent wherein the same fails to comply with this code. The notification shall be in writing, and When requested, the code official shall include specific reference to the code chapter and section number(s) in violation. Any portions that do not comply shall be corrected and such portion shall not be covered or concealed until authorized by the code official.

2018 International Existing Building Code

[A] 109.6 Approval required. Work shall not be done beyond the point indicated in each successive inspection without first obtaining the approval of the *code official*. The *code official*, on notification, shall make the requested inspections and shall either indicate the portion of the construction that is satisfactory as completed or shall notify the permit holder or an agent of the permit holder wherein the same fails to comply with this code. The notification shall be in writing . and When requested, the code official shall include specific reference to the code chapter and section number(s) in violation. Any portions that do not comply shall be corrected and such portion shall not be covered or concealed until authorized by the *code official*.

2018 International Swimming Pool and Spa Code

[A] 106.6 Approval required. Work shall not be done beyond the point indicated in each successive inspection without first obtaining the approval of the code official. The code official, upon notification, shall make the requested inspection and shall either indicate the portion of the construction that is satisfactory as completed, or notify the permit holder or his or her agent wherein the same fails to comply with this code. The notification shall be in writing. and When requested, the code official shall include specific reference to the code chapter and section number(s) in violation. Any portions that do not comply shall be corrected and such portion shall not be covered or concealed until authorized by the code official.

2018 International Private Sewage Disposal Code

[A] 107.4 Approval required. Work shall not be done beyond the point indicated in each successive inspection without first obtaining the approval of the code official. The code official, upon notification, shall make the requested inspections and shall either indicate the portion of the construction that is satisfactory as completed, or notify the permit holder or his or her agent wherein the same fails to comply with this code. The notification shall be in writing, and When requested, the code official shall include specific reference to the code chapter and section number(s) in violation. Any portions that do not comply shall be corrected and such portion shall not be covered or concealed until authorized by the code official.

2018 International Wildland-Urban Interface Code

[A] 110.1.2.3 Approval required. Work shall not be done beyond the point indicated in each successive inspection without first obtaining the approval of the code official. The code official, upon notification, shall make the requested inspections and shall either indicate the portion of the construction that is satisfactory as completed, or notify the permit holder or his or her agent wherein the same fails to comply with this code. The notification shall be in writing. and When requested, the code official shall include specific reference to the code chapter and section number(s) in violation. Any portions that do not comply shall be corrected and such portion shall not be covered or concealed until authorized by the code official.

2018 International Fire Code

[A] 107.2.2 Approval required. Work shall not be done beyond the point indicated in each successive inspection without first obtaining the approval of the *fire code official*. The *fire code official*, on notification, shall make the requested inspections and shall either indicate the portion of the construction that is satisfactory as completed, or notify the permit holder or his or her agent wherein the same fails to comply with this code. The notification shall be in writing . and When requested, the fire code official shall include specific reference to the code chapter and section number(s) in violation. Any portions that do not comply shall be corrected, and such portion shall not be covered or concealed until authorized by the *fire code official*

Commenter's Reason: The original proposal was too restrictive for many jurisdictions. There is not enough time to include the section numbers for every item found during an inspection. In addition, most inspectors do not memorize specific code references. Therefore, they would need to take the time to look up the reference in the code. Therefore, the committee disapproved this item. We agree with the proponent that some inspectors require things that are not reference in the code. They prefer to have buildings built the way they would build them. Therefore, it is reasonable that if the builder requests a code reference, the inspector should be able to provide that information. If it is not in the code, they should not be requiring it. We have proposed language that would require the inspector to provide the code reference when requested by the builder, owner or architect. This is reasonable request.

Cost Impact: The net effect of the public comment and code change proposal will not increase or decrease the cost of construction This is an administrative requirement on the inspector and should not affect the cost of construction at all.

ADM37-19 Part II

IRC®: R109.4

Proposed Change as Submitted

Proponents: Robert DeVries, representing Self (rdevries@nuwool.com)

2018 International Residential Code

Revise as follows:

R109.4 Approval required. Work shall not be done beyond the point indicated in each successive inspection without first obtaining the approval of the building official. The building official, upon notification, shall make the requested inspections and shall either indicate the portion of the construction that is satisfactory as completed, or shall notify the permit holder or an agent of the permit holder wherein the same fails to comply with this code. The notification shall include, in writing, specific reference to the code chapter and section number(s) in violation. Any portions that do not comply shall be corrected and such portion shall not be covered or concealed until authorized by the building official.

Reason: As written there is no set method of notification. Putting the violation in writing including the chapter and section number(s) would greatly improve the permit holders understanding of the violation. This would reduce the amount of communication and time required to determine the actual violation. Having the chapter and section number(s) would give the permit holder immediate direction as to how to correct the violation.

Cost Impact: The code change proposal will not increase or decrease the cost of construction

While no cost impact was selected an argument could be made that the permit holder may save money by saving time trying to contact the building official

ADM37-19 Part II

Public Hearing Results

Committee Action: Disapproved

Committee Reason: This is language that addresses a local process. It is not suited for a national code. These requirements would slow down the inspection process. (Vote: 9-2)

Assembly Action: None

ADM37-19 Part II

Individual Consideration Agenda

Public Comment 1:

IRC®: R109.4

Proponents:

Stephen Thomas, representing Colorado Chapter (sthomas@coloradocode.net)

requests As Modified by Public Comment

Modify as follows:

2018 International Residential Code

R109.4 Approval required. Work shall not be done beyond the point indicated in each successive inspection without first obtaining the approval of the building official. The building official, upon notification, shall make the requested inspections and shall either indicate the portion of the construction that is satisfactory as completed, or shall notify the permit holder or an agent of the permit holder wherein the same fails to comply with this code. The notification shall include, be in writing, Where requested, the building official shall provide specific reference to the code chapter and section number(s) that is (are) being violated. Any portions that do not comply shall be corrected and such portion shall not be covered or concealed until authorized by the building official.

Commenter's Reason: The original proposal was too restrictive for many jurisdictions. There is not enough time to include the section numbers for every item found during an inspection. In addition, most inspectors do not memorize specific code references. Therefore, they would need to take the time to look up the reference in the code. Therefore, the committee disapproved this item. We agree with the proponent that some inspectors require things that are not reference in the code. They prefer to have buildings built the way they would build them. Therefore, it is reasonable that if the builder requests a code reference, the inspector should be able to provide that information. If it is not in the code, they should not be requiring it. We have proposed language that would require the inspector to provide the code reference when requested by the builder, owner or architect. This is reasonable request.

Cost Impact: The net effect of the public comment and code change proposal will not increase or decrease the cost of construction. This is an administrative change for the inspector and will not affect the cost of construction.

ADM39-19 Part II

IRC®: SECTION R111, R111.1, R111.2, R111.3

Proposed Change as Submitted

Proponents: Ed Kulik, representing ICC Building Code Action Committee (bcac@iccsafe.org); Pennie Feehan, representing Plumbing, Mechanical, and Fuel Gas Code Action Committee (pmgcac@iccsafe.org); Michael O'Brian, representing FCAC (fcac@iccsafe.org)

2018 International Residential Code

Revise as follows:

SECTION R111 SERVICE UTILITIES

R111.1 Connection of service utilities. A person shall not make connections from a utility, source of energy, fuel, or power, water system or sewer system to any building or system that is regulated by this code for which a permit is required, until approved by the building official.

R111.2 Temporary connection. The building official shall have the authority to authorize the temporary connection of the building or system to the utility, source of energy, fuel er power a temporary approval.

R111.3 Authority to disconnect service utilities. The building official shall have the authority to authorize disconnection of utility service to the building, structure or system regulated by this code and the referenced codes and standards set forth in Section R102.4 in in case of emergency where necessary to eliminate an immediate hazard to life or property or where such utility connection has been made without the approval required by Section R111.1 or R111.2. The building official shall notify the serving utility and where possible the owner or the owner's authorized agent and occupant of the building, structure or service system of the decision to disconnect prior to taking such action. If not notified prior to disconnection, the owner, the owner's authorized agent or occupant of the building, structure or service system shall be notified in writing as soon as practical thereafter.

ADM39-19 Part II

Public Hearing Results

Committee Action: Disapproved

Committee Reason: This would be in violation of the requirements of many public utilities across the country. (Vote: 6-4)

Assembly Action: None

ADM39-19 Part II

Individual Consideration Agenda

Public Comment 1:

IRC®: R111.2

Proponents:

Ed Kulik, representing ICC Building Code Action Committee (bcac@iccsafe.org)

requests As Modified by Public Comment

Modify as follows:

2018 International Residential Code

R111.2 Temporary connection. The building official shall have the authority to authorize the temporary connection of the building or system to the utility, source of energy, fuel power, water system or power sewer system for the purpose of testing systems or for use under a temporary approval.

Commenter's Reason: There was no testimony for or against this proposal The committee was split in their decision. The ICC is a family of codes – Part 1 was approved with the editorial modification indicated here. Connection (through the local utility) would be permitted for testing of a system (per Section R111.2).

BCAC was established by the ICC Board of Directors in July 2011 to pursue opportunities to improve and enhance assigned International Codes or portions thereof. Since 2017 the BCAC has held 6 open meetings. In addition, there were numerous Working Group meetings and conference calls for the current code development cycle, which included members of the committee as well as any interested party to discuss and debate the proposed changes. Related documentation and reports are posted on the BCAC website at: https://www.iccsafe.org/codestechsupport/codes/codedevelopment-process/building-code-actioncommittee-bcac.

Cost Impact: The net effect of the public comment and code change proposal will not increase or decrease the cost of construction This is an editorial change that provides consistency between I-codes.

NOTE: ADM39-19 PART I DID NOT RECEIVE A PUBLIC COMMENT AND IS REPRODUCED FOR INFORMATIONAL PURPOSES ONLY

ADM39-19 Part I

IBC®: SECTION 112, [A] 112.1, [A] 112.2, [A] 112.3; IPC®: SECTION 108, 108.1, 108.2, 108.3; IMC®: SECTION 108, [A] 108.1, [A] 108.2, 108.3; IFGC®: SECTION 108, [A] 108.1, [A] 108.2, 108.3; IEBC®: SECTION 111, [A] 111.1, [A] 111.2, [A] 111.3; IPSDC®: SECTION 108, [A] 108.1, [A] 108.2, 108.3; IWUIC®: SECTION 113, [A] 113.1, 113.2, [A] 113.3; ISPSC®: SECTION 107, [A] 107.1, [A] 107.2, 107.3

Proposed Change as Submitted

Proponents: Ed Kulik, representing ICC Building Code Action Committee (bcac@iccsafe.org); Pennie Feehan, representing Plumbing, Mechanical, and Fuel Gas Code Action Committee (pmgcac@iccsafe.org); Michael O'Brian, representing FCAC (fcac@iccsafe.org)

THIS IS A 2 PART CODE CHANGE. PART I WILL BE HEARD BY THE ADMINISTRATIVE CODE COMMITTEE. PART II WILL BE HEARD BY THE IRC-BUILDING CODE COMMITTEE. SEE THE TENTATIVE HEARING ORDER FOR THIS COMMITTEES.

2018 International Building Code

Revise as follows:

SECTION 112 SERVICE UTILITIES

[A] 112.1 Connection of service utilities. A person shall not make connections from a utility, source of energy, fuel, or sewer system to any building or system that is regulated by this code for which a permit is required, until released approved by the building official.

[A] 112.2 Temporary connection. The building official shall have the authority to authorize the temporary connection of the building or system to the utility, source of energy, fuel, or power, water system or power system for the purpose of testing systems or for use under a temporary approval.

[A] 112.3 Authority to disconnect service utilities. The building official shall have the authority to authorize disconnection of utility service to the building, structure or system regulated by this code and the referenced codes and standards set forth in Section 101.4 in case of emergency where necessary to eliminate an immediate hazard to life or property or where such utility connection has been made without the approval required by Section 112.1 or 112.2. The building official shall notify the serving utility, and wherever possible the owner or the owner's authorized agent and occupant of the building, structure or service system of the decision to disconnect prior to taking such action. If not notified prior to disconnecting, the owner, the owner's authorized agent or occupant of the building, structure or service system shall be notified in writing, as soon as practical thereafter.

2018 International Plumbing Code

Revise as follows:

SECTION 108 SERVICE UTILITIES

107.7.108.1 Connection of service utilities. A person shall not make connections from a utility, source of energy, fuel, power, water system or sewer system to any building or system that is regulated by this code for which a permit is required until authorized by the code official.

107.6 108.2 Temporary connection. The code official shall have the authority to authorize the temporary connection of the building or system to the utility source of energy, fuel, power, water system or power system for the purpose of testing plumbing systems or for use under a temporary certificate of occupancy, approval.

108.3 Authority to disconnect service utilities. The code official shall have the authority to authorize disconnection of utility service to the building, structure or system regulated by this code and the referenced codes and standards in case of emergency where necessary to eliminate an immediate hazard to life or property or where such utility connection has been made without the approval required by Section 108.1 or 108.2. The code official shall notify the serving utility, and wherever possible the owner or the owner's authorized agent and occupant of the building, structure or service system of the decision to disconnect prior to taking such action. If not notified prior to disconnecting, the owner, the owner's authorized agent or occupant of the building, structure or service system shall be notified in writing, as soon as practical thereafter.

2018 International Mechanical Code

Revise as follows:

SECTION 108 SERVICE UTILITIES

[A] 107.6 108.1 Connection of service utilities. A person shall not make connections from a utility, source of energy, fuel or power to any building or system that is regulated by this code for which a permit is required, until authorized by the code official.

[A] 107.5 108.2 Temporary connection. The code official shall have the authority to authorize the temporary connection of a mechanical-the building or system to the sources utility, source of energy, fuel, power, water system or power system for the purpose of testing mechanical systems or for use under a temporary certificate of occupancy: approval.

108.3 Authority to disconnect service utilities. The code official shall have the authority to authorize disconnection of utility service to the building, structure or system regulated by this code and the referenced codes and standards in case of emergency where necessary to eliminate an immediate hazard to life or property or where such utility connection has been made without the approval required by Section 108.1 or 108.2. The code official shall notify the serving utility, and wherever possible the owner or the owner's authorized agent and occupant of the building, structure or service system of the decision to disconnect prior to taking such action. If not notified prior to disconnecting, the owner, the owner's authorized agent or occupant of the building, structure or service system shall be notified in writing, as soon as practical thereafter.

2018 International Fuel Gas Code

Revise as follows:

SECTION 108 SERVICE UTILITIES

[A] 107.6 108.1 Connection of service utilities. A person shall not make connections from a utility, source of energy, fuel or power to any building or system that is regulated by this code for which a permit is required until authorized by the code official.

[A] 107.5 108.2 Temporary connection. The code official shall have the authority to allow authorize the temporary connection of an installation the building or system to the sources utility, source of energy, fuel, power, water system or power system for the purpose of testing the installation systems or for use under a temporary certificate of occupancy, approval.

108.3 Authority to disconnect service utilities. The code official shall have the authority to authorize disconnection of utility service to the building, structure or system regulated by this code and the referenced codes and standards in case of emergency where necessary to eliminate an immediate hazard to life or property or where such utility connection has been made without the approval required by Section 108.1 or 108.2. The code official shall notify the serving utility, and wherever possible the owner or the owner's authorized agent and occupant of the building, structure or service system of the decision to disconnect prior to taking such action. If not notified prior to disconnecting, the owner, the owner's authorized agent or occupant of the building, structure or service system shall be notified in writing, as soon as practical thereafter.

2018 International Existing Building Code

Revise as follows:

SECTION 111 SERVICE UTILITIES

[A] 111.1 Connection of service utilities. A person shall not make connections from a utility, source of energy, fuel, or sewer system or sewer system to any building or system that is regulated by this code for which a permit is required, until approved by the code official.

[A] 111.2 Temporary connection. The *code official* shall <u>shall</u> have the authority to authorize the temporary connection of the building or system to the utility_source of energy, fuel, or power <u>water system or power system for the purpose of testing systems or for use under a temporary approval.</u>

[A] 111.3 Authority to disconnect service utilities. The code official shall have the authority to authorize disconnection of utility service to the building, structure or system regulated by this code and the referenced codes and standards in case of emergency where necessary to eliminate an immediate hazard to life or property or where such utility connection has been made without the approval required by Section 111.1 or 111.2. The code official shall notify the serving utility and, wherever possible, the owner or the owner's authorized agent and the occupant of the building, structure or service system of the decision to disconnect prior to taking such action. If not notified prior to disconnecting, the owner, the owner's authorized agent or occupant of the building, structure or service system shall be notified in writing, as soon as practical thereafter.

2018 International Private Sewage Disposal Code

Revise as follows:

SECTION 108
SERVICE UTILITIES

[A] 107.9 108.1 Connection of service utilities. No person shall make connections from a utility, source of energy, fuel or power to any building or system that is regulated by this code for which a permit is required until authorized by the code official.

[A] 107.8 108.2 Temporary connection. The code official shall have the authority to allow authorize the temporary connection of an installation the building or system to the sources utility, source of energy, fuel, power, water system or power system for the purpose of testing the installation systems or for use under a temporary certificate of occupancy. approval.

108.3 Authority to disconnect service utilities. The code official shall have the authority to authorize disconnection of utility service to the building, structure or system regulated by this code and the referenced codes and standards in case of emergency where necessary to eliminate an immediate hazard to life or property or where such utility connection has been made without the approval required by Section 108.1 or 108.2. The code official shall notify the serving utility, and wherever possible the owner or the owner's authorized agent and occupant of the building, structure or service system of the decision to disconnect prior to taking such action. If not notified prior to disconnecting, the owner, the owner's authorized agent or occupant of the building, structure or service system shall be notified in writing, as soon as practical thereafter.

2018 International Wildland-Urban Interface Code

Revise as follows:

SECTION 113 SERVICE UTILITIES

[A] 113.1 Connection of service utilities. Any person shall not make connections from a utility, source of energy, fuel, or sewer system to any building or system that is regulated by this code for which a permit is required until released approved by the code official.

113.2 Temporary connection. The code official shall have the authority to authorize the temporary connection of the building or system to the utility, source of energy, fuel, power, water system or power system for the purpose of testing systems or for use under a temporary approval.

[A] 113.2 113.3 Authority to disconnect service utilities. The code official shall have the authority to authorize disconnection of utility service to the building, structure or system regulated by this code and the referenced codes and standards set forth in Section 102.4 in standards in case of emergency where necessary to eliminate an immediate hazard to life or property or where such utility connection has been made without the release approval required by Section 113.1.113.1 and 113.2. The code official shall notify the serving utility and, where possible, the owner or the owner's authorized agent and the occupant of the building, structure or service system of the decision to disconnect prior to taking such action. If not notified prior to disconnection, the owner, the owner's authorized agent or the occupant of the building, structure or service system shall be notified in writing as soon as practical thereafter.

2018 International Swimming Pool and Spa Code

Revise as follows:

SECTION 107 SERVICE UTILITIES

[A] 106.19_107.1 Connection of service utilities. A person shall not make connections from a utility, source of energy, fuel, power, water system or sewer system to any building or system that is regulated by this code for which a permit is required until authorized by the code official.

[A] 106.18 107.2 Temporary connection. The code official shall have the authority to authorize the temporary connection of the building or system to the utility, source of energy, fuel, power, water system or power system for the purpose of testing systems or for use under a temporary approval.

107.3 Authority to disconnect service utilities. The code official shall have the authority to authorize disconnection of utility service to the building, structure or system regulated by this code and the referenced codes and standards in case of emergency where necessary to eliminate an immediate hazard to life or property or where such utility connection has been made without the approval required by Section 107.1 or 107.2. The code official shall notify the serving utility, and wherever possible the owner or the owner's authorized agent and occupant of the building, structure or service system of the decision to disconnect prior to taking such action. If not notified prior to disconnecting, the owner, the owner's authorized agent or occupant of the building, structure or service system shall be notified in writing, as soon as practical thereafter.

Reason: The main purpose of this proposal is coordination between codes for the section on connection to services – including those coming from utilities or generated on-site. Revisions for the section on temporary services is addressed in a separate proposal.

Some of the codes had service utility requirements as part of the inspection section. For consistency across codes, it is proposed to move this to a separate section. Codes have references to codes and standards throughout the document, so a reference back to the list at the beginning of Chapter 1 is not inclusive (IBC, IRC, IWUIC). The list should include all the systems – not all codes included water and sewer systems – so it is proposed to be added as it is currently in the IPC. The authority to disconnect is an important safety feature that needs to be included in all the codes that deal with service utilities. It is proposed to be added to the codes that do not include that provision.

The BCAC is working from the philosophy that ICC is a family of codes, so administrative requirements should be consistent across books. Most administrative and enforcement matters are the same for any code. Those matters unique for a specific code remain unchanged. This is one of a

series of proposals being submitted relating to technical, editorial and organizational changes proposed for the Administrative chapters (Chapter 1) in all of the I-Codes

While the Administrative Committee will consider each proposal independently, the proposals in this package are a correlated set of companion code change proposals."

The following is the template utilized to create this code change proposal. There may be some differences depending on the unique applications of each code – such as "building/fire/code official".

IBC

SECTION 112

SERVICE UTILITIES

[A] 112.1 Connection of service utilities. A person shall not make connections from a utility, source of energy, fuel, power, water system or sewer system to any building or system that is regulated by this code for which a *permit* is required, until approved by the *building official*.

[A] 112.2 Temporary connection. The building official shall have the authority to authorize the temporary connection of the building or system to the utility, source of energy, fuel, power, water system or power system for the purpose of testing systems or for use under a temporary approval.

[A] 112.3 Authority to disconnect service utilities. The building official shall have the authority to authorize disconnection of utility service to the building, structure or system regulated by this code and the referenced codes and standards in case of emergency where necessary to eliminate an immediate hazard to life or property or where such utility connection has been made without the approval required by Section 112.1 or 112.2. The building official shall notify the serving utility, and wherever possible the owner or the owner's authorized agent and occupant of the building, structure or service system of the decision to disconnect prior to taking such action. If not notified prior to disconnecting, the owner, the owner's authorized agent or occupant of the building, structure or service system shall be notified in writing, as soon as practical thereafter.

This proposal is submitted by the ICC Building Code Action Committee (BCAC), the ICC Fire Code Action Committee (FCAC) and the ICC Plumbing/Mechanical/Gas Code Action Committee (PMG CAC).

BCAC was established by the ICC Board of Directors in July 2011 to pursue opportunities to improve and enhance assigned International Codes or portions thereof. Since 2017 the BCAC has held 6 open meetings. In addition, there were numerous Working Group meetings and conference calls for the current code development cycle, which included members of the committee as well as any interested party to discuss and debate the proposed changes. Related documentation and reports are posted on the BCAC website at: https://www.iccsafe.org/codes-tech-support/codes/codedevelopment-process/building-code-actioncommittee-bcac.

The FCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance assigned International Codes with regard to fire safety and hazardous materials in new and existing buildings and facilities and the protection of life and property in wildland urban interface areas. In 2018 the Fire-CAC has held 3 open meetings. In addition, there were numerous conference calls, Regional Work Group and Task Group meetings for the current code development cycle, which included members of the committees as well as any interested parties, to discuss and debate the proposed changes. Related documentation and reports are posted on the FCAC website at: https://www.iccsafe.org/codes-tech-support/cs/fire-code-action-committee-fcac/

The PMGCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance the International Codes or portions thereof that were under the purview of the PMG CAC. In 2017-2018, the PMG CAC held one face-to-face meeting and 11 conference call meetings. Numerous interested parties attended the committee meetings and offered their input. Related documentation and reports are posted on the PMGCAC website at: https://www.iccsafe.org/codes-tech-support/codes/code-development-process/pmg-code-action-committee-pmgcac.

Cost Impact: The code change proposal will not increase or decrease the cost of construction This is an editorial change that provides consistency between I-codes.

ADM39-19 Part I

Public Hearing Results

Committee Action: As Modified

Committee Modification: 2018 International Building Code

[A] 112.2 Temporary connection. The building official shall have the authority to authorize the temporary connection of the building or system to the utility, source of energy, fuel_, power_, water system or power_sewer_system for the purpose of testing systems or for use under a temporary approval.

2018 International Plumbing Code

108.2 Temporary connection. The code official shall have the authority to authorize the temporary connection of the building or system to the utility source of energy, fuel, power, water system or power sewer system for the purpose of testing plumbing systems or for use under a temporary approval.

2018 International Mechanical Code

[A] 108.2 Temporary connection. The code official shall have the authority to authorize the temporary connection of the building or system to the utility, source of energy, fuel, power, water system or power sewer system for the purpose of testing systems or for use under a temporary approval.

2018 International Fuel Gas Code

[A] 108.2 Temporary connection. The code official shall have the authority to authorize the temporary connection of the building or system to the utility, source of energy, fuel, power, water system or power sewer system for the purpose of testing systems or for use under a temporary approval.

2018 International Existing Building Code

[A] 111.2 Temporary connection. The *code official* shall shall have the authority to authorize the temporary connection of the building or system to the utility, source of energy, fuel, power water system or power sewer system for the purpose of testing systems or for use under a temporary approval.

2018 International Private Sewage Disposal Code

[A] 108.2 Temporary connection. The code official shall have the authority to authorize the temporary connection of the building or system to the utility, source of energy, fuel, power, water system or power_sween_system for the purpose of testing systems or for use under a temporary approval.

2018 International Wildland-Urban Interface Code

113.2 Temporary connection. The code official shall have the authority to authorize the temporary connection of the building or system to the utility, source of energy, fuel, power, water system or power_sween_system for the purpose of testing systems or for use under a temporary approval.

2018 International Swimming Pool and Spa Code

[A] 107.2 Temporary connection. The code official shall have the authority to authorize the temporary connection of the building or system to the utility, source of energy, fuel, power, water system or power system for the purpose of testing systems or for use under a temporary approval.

Committee Reason: The reason for the approval of the modification was to improve the language to include sewer systems within the scope of the temporary connection section. The reason for the approval of the proposal was based on the proponent's reason statement. (Vote: 13-0)

Assembly Action: None

ADM39-19 Part I

ADM40-19 Part II

IRC®: SECTION R112, R112.1, R112.2, R112.3, R112.4

Proposed Change as Submitted

Proponents: Ed Kulik, representing ICC Building Code Action Committee (bcac@iccsafe.org); Michael O'Brian, representing FCAC (fcac@iccsafe.org); Pennie Feehan, representing Plumbing, Mechanical, and Fuel Gas Code Action Committee (pmgcac@iccsafe.org); David Collins, representing SEHPCAC (sehpcac@iccsafe.org)

2018 International Residential Code

Revise as follows:

SECTION R112 BOARD MEANS OF APPEALS

R112.1 General. In order to hear and decide appeals of orders, decisions or determinations made by the building official relative to the application and interpretation of this code, there shall be and is hereby created a board of appeals. The building official shall be an ex officio member of said board but shall not have a vote on any matter before the board. The board of appeals shall be appointed by the applicable governing body authority and shall hold office at its pleasure. The board shall adopt rules of procedure for conducting its business -, and shall render all decisions and findings in writing to the appellant with a duplicate copy to the building official.

R112.2 Limitations on authority. An application for appeal shall be based on a claim that the true intent of this code or the rules legally adopted thereunder have been incorrectly interpreted, the provisions of this code do not fully apply or an equally good equivalent or better form of construction is proposed. The board shall not have authority to waive requirements of this code or interpret the administration of this code.

R112.3 Qualifications. The board of appeals shall consist of members who are qualified by experience and training to pass judgement on matters pertaining to building construction and are not employees of the *jurisdiction*.

R112.4 Administration. The building official shall take immediate action in accordance with the decision of the board.

Reason: The intent is to establish consistent language for the means of appeal throughout the code. The constitution of the board of appeals will be addressed in another change. There is some slight difference in the fire code in the section on limitations on authority and qualification where some differences given the scope of the code are appropriate to remain. The IPMC includes on additional section for stays of enforcement. The BCAC is working from the philosophy that ICC is a family of codes, so administrative requirements should be consistent across books. Most administrative and enforcement matters are the same for any code. Those matters unique for a specific code remain unchanged. This is one of a series of proposals being submitted relating to technical, editorial and organizational changes proposed for the Administrative chapters (Chapter 1) in all of the I-Codes.

While the Administrative Committee will consider each proposal independently, the proposals in this package are a correlated set of companion code change proposals."

The following is the template utilized to create this code change proposal. There may be some differences depending on the unique applications of each code – such as "building/fire/code official".

SECTION 113

MEANS OF APPEALS

[A] 113.1 General. In order to hear and decide appeals of orders, decisions or determinations made by the *code official* relative to the application and interpretation of this code, there shall be and is hereby created a board of appeals. The board of appeals shall be appointed by the applicable governing authority and shall hold office at its pleasure. The board shall adopt rules of procedure for conducting its business and shall render all decisions and findings in writing to the appellant with a duplicate copy to the *code official*.

[A] 113.2 Limitations on authority. An application for appeal shall be based on a claim that the true intent of this code or the rules legally adopted thereunder have been incorrectly interpreted, the provisions of this code do not fully apply or an equivalent or better form of construction is proposed. The board shall not have authority to waive requirements of this code or interpret the administration of this code.

[A] 113.3 Qualifications. The board of appeals shall consist of members who are qualified by experience and training and are not employees of the jurisdiction.

[A] 113.4 Administration. The code official shall take immediate action in accordance with the decision of the board.

This proposal is submitted by the ICC Building Code Action Committee (BCAC), the ICC Fire Code Action Committee (FCAC), the ICC Sustainable,

Energy and High Performance Code Action Committee (SEHPCAC) and the ICC Plumbing/Mechanical/Gas Code Action Committee (PMG CAC).

BCAC was established by the ICC Board of Directors in July 2011 to pursue opportunities to improve and enhance assigned International Codes or portions thereof. Since 2017 the BCAC has held 6 open meetings. In addition, there were numerous Working Group meetings and conference calls for the current code development cycle, which included members of the committee as well as any interested party to discuss and debate the proposed changes. Related documentation and reports are posted on the BCAC website at: https://www.iccsafe.org/codes-tech-support/codes/codedevelopment-process/building-code-actioncommittee-bcac.

The FCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance assigned International Codes with regard to fire safety and hazardous materials in new and existing buildings and facilities and the protection of life and property in wildland urban interface areas. In 2018 the Fire-CAC has held 3 open meetings. In addition, there were numerous conference calls, Regional Work Group and Task Group meetings for the current code development cycle, which included members of the committees as well as any interested parties, to discuss and debate the proposed changes. Related documentation and reports are posted on the FCAC website at: https://www.iccsafe.org/codes-tech-support/cs/fire-code-action-committee-fcac/

The SEHPCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance International Codes with regard to sustainability, energy and high performance as it relates to the built environment included, but not limited to, how these criteria relate to the International Green Construction Code (IgCC) and the International Energy Conservation Code (IECC). In 2018-2019, the SEHPCAC has held five two- or three-day open meetings and numerous workgroup calls, to discuss and debate proposed changes and public comments. Attendees at the meetings and calls included members of the SEHPCAC as well as any interested parties. Related documentation and reports are posted on the SEHPCAC website at http://www.iccsafe.org/cs/SEHPCAC/Pages/default.aspx.

The PMG CAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance the International Codes or portions thereof that were under the purview of the PMG CAC. In 2017-2018, the PMG CAC held one face-to-face meeting and 11 conference call meetings. Numerous interested parties attended the committee meetings and offered their input. Related documentation and reports are posted on the PMGCAC website at: https://www.iccsafe.org/codes-tech-support/codes/code-development-process/pmg-code-action-committee-pmgcac.

Cost Impact: The code change proposal will not increase or decrease the cost of construction This is an editorial proposal with no change to construction requirements.

ADM40-19 Part II

Public Hearing Results

Errata: This proposal includes published errata Added proponent to the code change.

Committee Action: Disapproved

Committee Reason: The code official needs to be able to give the board guidance and help interpret what is required by the code. We need to be able to appeal the entire code and not leave certain parts out. (Vote: 11-0)

Assembly Action: None

ADM40-19 Part II

Individual Consideration Agenda

Public Comment 1:

Proponents:

Ed Kulik, representing ICC Building Code Action Committee (bcac@iccsafe.org)

requests As Submitted

Commenter's Reason: ADM40 Part 1, 4 and 5 were approved for IBC, IEBC, IFC, IWUIC, IPC, IMC, IFGC, ISPSC, IPMC, IPSDC, IECC-Residential, IGCC. The committee had concerns about the make up of the board, and where a local or state jurisdiction made decisions. This section is to address the means for someone to appeal. The requirements for the board is addressed in ADM43.

Section R112.1 had the following sentence deleted (The building official shall be an ex officio member of said board but shall not have a vote on any

matter before the board.). This is already addressed in R112.3 with the board not being able to be employees of the jurisdiction. The code official would typically be involved in the process to provide information.

BCAC was established by the ICC Board of Directors in July 2011 to pursue opportunities to improve and enhance assigned International Codes or portions thereof. Since 2017 the BCAC has held 6 open meetings. In addition, there were numerous Working Group meetings and conference calls for the current code development cycle, which included members of the committee as well as any interested party to discuss and debate the proposed changes. Related documentation and reports are posted on the BCAC website at: https://www.iccsafe.org/codestechsupport/codes/codedevelopment-process/building-code-actioncommittee-bcac.

Cost Impact: The net effect of the public comment and code change proposal will not increase or decrease the cost of construction This is an editorial change that provides consistency between I-codes.

ADM40-19 Part III

IECC®: SECTION C109, C109.1, C109.2, C109.3, C109.4

Proposed Change as Submitted

Proponents: Ed Kulik, representing ICC Building Code Action Committee (bcac@iccsafe.org); Michael O'Brian, representing FCAC (fcac@iccsafe.org); Pennie Feehan, representing Plumbing, Mechanical, and Fuel Gas Code Action Committee (pmgcac@iccsafe.org); David Collins, representing SEHPCAC (sehpcac@iccsafe.org)

2018 International Energy Conservation Code

Revise as follows:

SECTION C109 BOARD MEANS OF APPEALS

C109.1 General. In order to hear and decide appeals of orders, decisions or determinations made by the code official relative to the application and interpretation of this code, there shall be and is hereby created a board of appeals. The code official shall be an ex officio member of said board but shall not have a vote on any matter before the board. The board of appeals shall be appointed by the applicable governing body authority and shall hold office at its pleasure. The board shall adopt rules of procedure for conducting its business; and shall render all decisions and findings in writing to the appellant with a duplicate copy to the code official.

C109.2 Limitations on authority. An application for appeal shall be based on a claim that the true intent of this code or the rules legally adopted thereunder have been incorrectly interpreted, the provisions of this code do not fully apply or an equally good equivalent or better form of construction is proposed. The board shall not have authority to waive requirements of this code or interpret the administration of this code.

C109.3 Qualifications. The board of appeals shall consist of members who are qualified by experience and training and are not employees of the jurisdiction.

C109.4 Administration. The code official shall take immediate action in accordance with the decision of the board.

Reason: The intent is to establish consistent language for the means of appeal throughout the code. The constitution of the board of appeals will be addressed in another change. There is some slight difference in the fire code in the section on limitations on authority and qualification where some differences given the scope of the code are appropriate to remain. The IPMC includes on additional section for stays of enforcement. The BCAC is working from the philosophy that ICC is a family of codes, so administrative requirements should be consistent across books. Most administrative and enforcement matters are the same for any code. Those matters unique for a specific code remain unchanged. This is one of a series of proposals being submitted relating to technical, editorial and organizational changes proposed for the Administrative chapters (Chapter 1) in all of the I-Codes.

While the Administrative Committee will consider each proposal independently, the proposals in this package are a correlated set of companion code change proposals."

The following is the template utilized to create this code change proposal. There may be some differences depending on the unique applications of each code – such as "building/fire/code official".

SECTION 113

MEANS OF APPEALS

[A] 113.1 General. In order to hear and decide appeals of orders, decisions or determinations made by the *code official* relative to the application and interpretation of this code, there shall be and is hereby created a board of appeals. The board of appeals shall be appointed by the applicable governing authority and shall hold office at its pleasure. The board shall adopt rules of procedure for conducting its business and shall render all decisions and findings in writing to the appellant with a duplicate copy to the *code official*.

[A] 113.2 Limitations on authority. An application for appeal shall be based on a claim that the true intent of this code or the rules legally adopted thereunder have been incorrectly interpreted, the provisions of this code do not fully apply or an equivalent or better form of construction is proposed. The board shall not have authority to waive requirements of this code or interpret the administration of this code.

[A] 113.3 Qualifications. The board of appeals shall consist of members who are qualified by experience and training and are not employees of the jurisdiction.

[A] 113.4 Administration. The code official shall take immediate action in accordance with the decision of the board.

This proposal is submitted by the ICC Building Code Action Committee (BCAC), the ICC Fire Code Action Committee (FCAC), the ICC Sustainable,

Energy and High Performance Code Action Committee (SEHPCAC) and the ICC Plumbing/Mechanical/Gas Code Action Committee (PMG CAC).

BCAC was established by the ICC Board of Directors in July 2011 to pursue opportunities to improve and enhance assigned International Codes or portions thereof. Since 2017 the BCAC has held 6 open meetings. In addition, there were numerous Working Group meetings and conference calls for the current code development cycle, which included members of the committee as well as any interested party to discuss and debate the proposed changes. Related documentation and reports are posted on the BCAC website at: https://www.iccsafe.org/codes-tech-support/codes/codedevelopment-process/building-code-actioncommittee-bcac.

The FCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance assigned International Codes with regard to fire safety and hazardous materials in new and existing buildings and facilities and the protection of life and property in wildland urban interface areas. In 2018 the Fire-CAC has held 3 open meetings. In addition, there were numerous conference calls, Regional Work Group and Task Group meetings for the current code development cycle, which included members of the committees as well as any interested parties, to discuss and debate the proposed changes. Related documentation and reports are posted on the FCAC website at: https://www.iccsafe.org/codes-tech-support/cs/fire-code-action-committee-fcac/

The SEHPCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance International Codes with regard to sustainability, energy and high performance as it relates to the built environment included, but not limited to, how these criteria relate to the International Green Construction Code (IgCC) and the International Energy Conservation Code (IECC). In 2018-2019, the SEHPCAC has held five two- or three-day open meetings and numerous workgroup calls, to discuss and debate proposed changes and public comments. Attendees at the meetings and calls included members of the SEHPCAC as well as any interested parties. Related documentation and reports are posted on the SEHPCAC website at http://www.iccsafe.org/cs/SEHPCAC/Pages/default.aspx.

The PMG CAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance the International Codes or portions thereof that were under the purview of the PMG CAC. In 2017-2018, the PMG CAC held one face-to-face meeting and 11 conference call meetings. Numerous interested parties attended the committee meetings and offered their input. Related documentation and reports are posted on the PMGCAC website at: https://www.iccsafe.org/codes-tech-support/codes/code-development-process/pmg-code-action-committee-pmgcac.

Cost Impact: The code change proposal will not increase or decrease the cost of construction This is an editorial proposal with no change to construction requirements.

ADM40-19 Part III

Public Hearing Results

Committee Action: Disapproved

Committee Reason: The proposed revisions place an undue burden on code officials. It is unreasonable to expect 'immediate' action. Perhaps 'timely' may be a better term. (Vote 12-3)

Assembly Action: None

ADM40-19 Part III

Individual Consideration Agenda

Public Comment 1:

Proponents:

Ed Kulik, representing ICC Building Code Action Committee (bcac@iccsafe.org); David Collins, representing SEHPCAC (sehpcac@iccsafe.org)

requests As Submitted

Commenter's Reason: ADM40 Parts 1, 4 and 5 were approved for coordination between IBC, IEBC, IFC, IWUIC, IPC, IMC, IFGC, ISPSC, IPMC, IPSDC, IPSDC, IECC-Residential, IGCC. The committee was concerned about the word "immediate" in Section 113.4. This is in the current IRC. It is only applicable if a building has gone to through a means of appeals and the board has made a decision. This should not be an undue burden on a building official. The intent is only to address the concern in a timely manner – not immediately following the meeting.

The SEHPCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance International Codes with regard to sustainability, energy and high performance as it relates to the built environment included, but not limited to, how these criteria relate to the

International Green Construction Code (IgCC) and the International Energy Conservation Code (IECC). In 2018-2019, the SEHPCAC has held five two- or three-day open meetings and numerous workgroup calls, to discuss and debate proposed changes and public comments. Attendees at the meetings and calls included members of the SEHPCAC as well as any interested parties. Related documentation and reports are posted on the SEHPCAC website at http://www.iccsafe.org/cs/SEHPCAC/Pages/default.aspx.

Cost Impact: The net effect of the public comment and code change proposal will not increase or decrease the cost of construction This is an editorial change that provides consistency between I-codes.

NOTE: ADM40-19 PART I DID NOT RECEIVE A PUBLIC COMMENT AND IS REPRODUCED FOR INFORMATIONAL PURPOSES ONLY

ADM40-19 Part I

IBC®: SECTION 113, [A] 113.1, [A] 113.2, [A] 113.3, 113.4 (New); IEBC®: SECTION 112, [A] 112.1, [A] 112.2, [A] 112.3, 113.4 (New); IFC®: SECTION 109, [A] 109.1, [A] 109.2, [A] 109.3, 109.4 (New); IWUIC®: SECTION 106, [A] 106.1, [A] 106.2, 106.3 (New), 106.4; IPC®: SECTION 109, 109.1 (New), 109.2, 109.3, 109.4, SECTION 110, 110.1; IMC®: SECTION 109, 109.1 (New), [A] 109.2, [A] 109.1.1, 109.3 (New), 109;4, SECTION 110, [A] 110.1; IFGC®: SECTION 109 (IFGC), 109.1, [A] 109.2, 109.3, 109.4, SECTION 110, [A] 110.1; ISPSC®: SECTION 108, 108.1, [A] 108.2, 108.3, 108.4, SECTION 109, [A] 109.1; IPMC®: SECTION 111, 111.1, [A] 111.2, 111.3, 111.4, [A] 111.5, SECTION 112, [A] 112.1; IPSDC®: SECTION 109, 109.1, [A] 109.2, 109.3, 109.4, SECTION 110, [A] 110.1

Proposed Change as Submitted

Proponents: Ed Kulik, representing ICC Building Code Action Committee (bcac@iccsafe.org); Michael O'Brian, representing FCAC (fcac@iccsafe.org); Pennie Feehan, representing Plumbing, Mechanical, and Fuel Gas Code Action Committee (pmgcac@iccsafe.org); David Collins, representing SEHPCAC (sehpcac@iccsafe.org)

THIS IS A 5 PART CODE CHANGE. PART I WILL BE HEARD BY THE ADMINISTRATIVE CODE COMMITTEE. PART II WILL BE HEARD BY THE IRC-BUILDING CODE COMMITTEE. PART III WILL BE HEARD BY THE IECC-COMMERCIAL CODE COMMITTEE. PART IV WILL BE HEARD BY THE IECC-RESIDENTIAL CODE COMMITTEE. PART V WILL BE HEARD BY THE IGCC CODE COMMITTEE. SEE THE TENTATIVE HEARING ORDER FOR THESE COMMITTEES.

2018 International Building Code

Revise as follows:

SECTION 113 BOARD MEANS OF APPEALS

[A] 113.1 General. In order to hear and decide appeals of orders, decisions or determinations made by the building official relative to the application and interpretation of this code, there shall be and is hereby created a board of appeals. The board of appeals shall be appointed by the applicable governing authority and shall hold office at its pleasure. The board shall adopt rules of procedure for conducting its business and shall render all decisions and findings in writing to the appellant with a duplicate copy to the building official.

[A] 113.2 Limitations on authority. An application for appeal shall be based on a claim that the true intent of this code or the rules legally adopted thereunder have been incorrectly interpreted, the provisions of this code do not fully apply or an equally good equivalent or better form of construction is proposed. The board shall not have authority to waive requirements of this code or interpret the administration of this code.

[A] 113.3 Qualifications. The board of appeals shall consist of members who are qualified by experience and training to pass on matters pertaining to building construction and are not employees of the jurisdiction.

Add new text as follows:

113.4 Administration. The building official shall take immediate action in accordance with the decision of the board.

2018 International Existing Building Code

Revise as follows:

SECTION 112 BOARD MEANS OF APPEALS

[A] 112.1 General. In order to hear and decide appeals of orders, decisions τ or determinations made by the code official relative to the application and interpretation of this code, there shall be and is hereby created a board of appeals. The board of appeals shall be appointed by the applicable governing body authority and shall hold office at its pleasure. The board shall adopt rules of procedure for conducting its business and shall render all decisions and findings in writing to the appellant with a duplicate copy to the building official.

[A] 112.2 Limitations on authority. An application for appeal shall be based on a claim that the true intent of this code or the rules legally adopted thereunder have been incorrectly interpreted, the provisions of this code do not fully apply , or an equally good equivalent or better form of construction is proposed. The board shall not have authority to waive requirements of this code or interpret the administration of this code.

[A] 112.3 Qualifications. The board of appeals shall consist of members who are qualified by experience and training to pass on matters pertaining to building construction and are not employees of the jurisdiction.

Add new text as follows:

113.4 Administration. The code official shall take immediate action in accordance with the decision of the board.

2018 International Fire Code

Revise as follows:

SECTION 109 BOARD MEANS OF APPEALS

[A] 109.1 Board of appeals established. In order to hear and decide appeals of orders, decisions or determinations made by the fire code official relative to the application and interpretation of this code, there shall be and is hereby created a board of appeals. The board of appeals shall be appointed by the applicable governing body authority and shall hold office at its pleasure. The fire code official shall be an ex officio member of said board but shall not have a vote on any matter before the board. The board shall adopt rules of procedure for conducting its business; and shall render all decisions and findings in writing to the appellant with a duplicate copy to the fire code official.

[A] 109.2 Limitations on authority. An application for appeal shall be based on a claim that the <u>true</u> intent of this code or the rules legally adopted <u>hereunder thereunder</u> have been incorrectly interpreted, the provisions of this code do not fully apply —or an equivalent <u>method of protection or safety or better form of construction</u> is proposed. The board shall not have authority to waive requirements of this <u>code or interpret the administration of this code</u>.

[A] 109.3 Qualifications. The board of appeals shall consist of members who are qualified by experience and training to pass on matters pertaining to hazards of fire, explosions, hazardous conditions or *fire protection systems*, and are not employees of the jurisdiction.

Add new text as follows:

109.4 Administration. The fire code official shall take immediate action in accordance with the decision of the board.

2018 International Wildland-Urban Interface Code

Revise as follows:

SECTION 106 MEANS OF APPEALS

[A] 106.1 General. To determine the suitability of alternative materials and methods and to provide for reasonable interpretations of the provisions In order to hear and decide appeals of orders, decisions or determinations made by the code official relative to the application and interpretation of this code, there shall be and is hereby is created a board of appeals consisting of five members who are qualified by experience and training to pass judgment on pertinent matters. The code official, building official and fire chief shall be ex officio members, and the code official shall act as secretary of the board. The appeals. The board of appeals shall be appointed by the legislative body applicable governing authority and shall hold office at their discretion. Its pleasure. The board shall adopt reasonable rules and regulations of procedure for conducting its investigations business and shall render all decisions and findings in writing to the eode official, appellant with a duplicate copy to the applicant. code official.

[A] 106.2 Limitations of authority. The board of appeals shall not have authority relative to interpretation of the administrative provisions of this code and An application for appeal shall be based on a claim that the true intent of this code or the rules legally adopted thereunder have been incorrectly interpreted, the provisions of this code do not fully apply or an equivalent or better form of construction is proposed. The board shall not have authority to waive requirements of this code or interpret the administration of this code.

Add new text as follows:

106.3 Qualifications. The board of appeals shall consist of members who are qualified by experience and training and are not employees of the jurisdiction.

Revise as follows:

106.4 Administration. The code official shall take immediate action in accordance with the decision of the board.

2018 International Plumbing Code

Revise as follows:

SECTION 109 MEANS OF APPEAL APPEALS

Add new text as follows:

109.1 General. In order to hear and decide appeals of orders, decisions or determinations made by the code official relative to the application and

interpretation of this code, there shall be and is hereby created a board of appeals. The board of appeals shall be appointed by the applicable governing authority and shall hold office at its pleasure. The board shall adopt rules of procedure for conducting its business and shall render all decisions and findings in writing to the appellant with a duplicate copy to the code official.

Revise as follows:

109.1 109.2 Application for appeals. Limitations on authority. Any person shall have the right to appeal a decision of the code official to the board of appeals. An application for appeal shall be based on a claim that the true intent of this code or the rules legally adopted thereunder have been incorrectly interpreted, the provisions of this code do not fully apply , or an equally good equivalent or better form of construction is proposed. The application shall be filed on a form obtained from the code official within 20 days after the notice was served, board shall not have authority to waive requirements of this code or interpret the administration of this code.

109.3 Qualifications. The board of appeals shall consist of members who are qualified by experience and training and are not employees of the jurisdiction.

109.4 Administration. The code official shall take immediate action in accordance with the decision of the board.

SECTION 110 BOARD OF APPEALS

109.2 110.1 Membership of board. The board of appeals shall consist of five members appointed by the chief appointing authority as follows: one for 5 years, one for 4 years, one for 3 years, one for 2 years and one for 1 year. Thereafter, each new member shall serve for 5 years or until a successor has been appointed.

2018 International Mechanical Code

Revise as follows:

SECTION 109 MEANS OF APPEAL APPEALS

Add new text as follows:

109.1 General. In order to hear and decide appeals of orders, decisions or determinations made by the code official relative to the application and interpretation of this code, there shall be and is hereby created a board of appeals. The board of appeals shall be appointed by the applicable governing authority and shall hold office at its pleasure. The board shall adopt rules of procedure for conducting its business and shall render all decisions and findings in writing to the appellant with a duplicate copy to the code official.

Revise as follows:

[A] 109.1_109.2 Application for appeal. Limitations on authority. A person shall have the right to appeal a decision of the code official to the board of appeals. An application for appeal shall be based on a claim that the true intent of this code or the rules legally adopted thereunder have been incorrectly interpreted, the provisions of this code do not fully apply , or an equally good equivalent or better form of construction is proposed. The application shall be filed on a form obtained from the code official within 20 days after the notice was served, board shall not have authority to waive requirements of this code or interpret the administration of this code.

Delete without substitution:

[A] 109.1.1 Limitation of authority. The board of appeals shall not have authority relative to interpretation of the administration of this code nor shall such board be empowered to waive requirements of this code.

Add new text as follows:

109.3 Qualifications. The board of appeals shall consist of members who are qualified by experience and training and are not employees of the jurisdiction.

Revise as follows:

109;4 Administration The code official shall take immediate action in accordance with the decision of the board.

SECTION 110 BOARD OF APPEALS

[A] 109.2 110.1 Membership of board. The board of appeals shall consist of five members appointed by the chief appointing authority as follows: one for 5 years; one for 4 years; one for 3 years; one for 2 years; and one for 1 year. Thereafter, each new member shall serve for 5 years or until a successor has been appointed.

2018 International Fuel Gas Code

Revise as follows:

SECTION 109 (IFGC) MEANS OF APPEAL

109.1 General. In order to hear and decide appeals of orders, decisions or determinations made by the code official relative to the application and interpretation of this code, there shall be and is hereby created a board of appeals. The board of appeals shall be appointed by the applicable governing authority and shall hold office at its pleasure. The board shall adopt rules of procedure for conducting its business and shall render all decisions and findings in writing to the appellant with a duplicate copy to the code official.

[A] 109.1 109.2 Application for appeal. Limitations on authority. A person shall have the right to appeal a decision of the code official to the board of appeals. An application for appeal shall be based on a claim that the true intent of this code or the rules legally adopted thereunder have been incorrectly interpreted, the provisions of this code do not fully apply or an equally good equivalent or better form of construction is proposed. The application shall be filed on a form obtained from the code official within 20 days after the notice was served, board shall not have authority to waive requirements of this code or interpret the administration of this code.

109.3 Qualifications. The board of appeals shall consist of members who are qualified by experience and training and are not employees of the jurisdiction.

109.4 Administration. The code official shall take immediate action in accordance with the decision of the board.

SECTION 110 BOARD OF APPEALS

[A] 109.2 110.1 Membership of board. The board of appeals shall consist of five members appointed by the chief appointing authority as follows: one for 5 years; one for 4 years; one for 3 years; one for 2 years and one for 1 year. Thereafter, each new member shall serve for 5 years or until a successor has been appointed.

2018 International Swimming Pool and Spa Code

Revise as follows:

SECTION 108 MEANS OF APPEAL

108.1 General. In order to hear and decide appeals of orders, decisions or determinations made by the code official relative to the application and interpretation of this code, there shall be and is hereby created a board of appeals. The board of appeals shall be appointed by the applicable governing authority and shall hold office at its pleasure. The board shall adopt rules of procedure for conducting its business and shall render all decisions and findings in writing to the appellant with a duplicate copy to the code official.

[A] 108.1 108.2 Application for appeal. Limitations on authority. Any person shall have the right to appeal a decision of the code official to the board of appeals. An application for appeal shall be based on a claim that the true intent of this code or the rules legally adopted there under thereunder have been incorrectly interpreted, the provisions of this code do not fully apply , or an equally good equivalent or better form of construction is proposed. The application shall be filed on a form obtained from the code official within 20 days after the notice was served, board shall not have authority to waive requirements of this code or interpret the administration of this code.

108.3 Qualifications. The board of appeals shall consist of members who are qualified by experience and training and are not employees of the jurisdiction.

108.4 Administration. The code official shall take immediate action in accordance with the decision of the board.

SECTION 109 BOARD OF APPEALS

[A] 108.2 109.1 Membership of board. The board of appeals shall consist of five members appointed by the chief appointing authority as follows: one for 5 years, one for 4 years, one for 3 years, one for 2 years and one for 1 year. Thereafter, each new member shall serve for 5 years or until a successor has been appointed.

2018 International Property Maintenance Code

Revise as follows:

SECTION 111 MEANS OF APPEAL

111.1 General. In order to hear and decide appeals of orders, decisions or determinations made by the code official relative to the application and

interpretation of this code, there shall be and is hereby created a board of appeals. The board of appeals shall be appointed by the applicable governing authority and shall hold office at its pleasure. The board shall adopt rules of procedure for conducting its business and shall render all decisions and findings in writing to the appellant with a duplicate copy to the code official.

[A] 111.1 111.2 Application for appeal. Limitations on authority. Any person directly affected by a decision of the code official or a notice or order issued under this code shall have the right to appeal to the board of appeals, provided that a written application for appeal is filed within 20 days after the day the decision, notice or order was served. An application for appeal shall be based on a claim that the true intent of this code or the rules legally adopted thereunder have been incorrectly interpreted, the provisions of this code do not fully apply , or the or an equivalent or better form of construction is proposed. The board shall not have authority to waive requirements of this code are adequately satisfied by other means, or interpret the administration of this code.

111.3 Qualifications. The board of appeals shall consist of members who are qualified by experience and training and are not employees of the jurisdiction.

111.4 Administration. The code official shall take immediate action in accordance with the decision of the board.

[A] 111.8 111.5 Stays of enforcement. Appeals of notice and orders (other than *Imminent Danger* notices) shall stay the enforcement of the notice and order until the appeal is heard by the appeals board.

SECTION 112 BOARD OF APPEALS

[A] 111.2 112.1 Membership of board. The board of appeals shall consist of not less than three members who are qualified by experience and training to pass on matters pertaining to property maintenance and who are not employees of the jurisdiction. The *code official* shall be an ex-officion member but shall not vote on any matter before the board. The board shall be appointed by the chief appointing authority, and shall serve staggered and overlapping terms.

2018 International Private Sewage Disposal Code

Revise as follows:

SECTION 109 MEANS OF APPEAL

109.1 General. In order to hear and decide appeals of orders, decisions or determinations made by the code official relative to the application and interpretation of this code, there shall be and is hereby created a board of appeals. The board of appeals shall be appointed by the applicable governing authority and shall hold office at its pleasure. The board shall adopt rules of procedure for conducting its business and shall render all decisions and findings in writing to the appellant with a duplicate copy to the code official.

[A] 109.1 109.2 Application for appeal. Limitations on authority. Any person shall have the right to appeal a decision of the code official to the board of appeals. An application for appeal shall be based on a claim that the true intent of this code or the rules legally adopted thereunder has have been incorrectly interpreted, the provisions of this code do not fully apply or an equally good equivalent or better form of construction is proposed. The application shall be filed on a form obtained from the code official within 20 days after the notice was served, board shall not have authority to waive requirements of this code or interpret the administration of this code.

109.3 Qualifications. The board of appeals shall consist of members who are qualified by experience and training and are not employees of the jurisdiction.

109,4 Administration The code official shall take immediate action in accordance with the decision of the board.

SECTION 110 BOARDS OF APPEALS

[A] 109.2 110.1 Membership of board. The board of appeals shall consist of five members appointed by the chief appointing authority as follows: one for 5 years, one for 4 years, one for 3 years, one for 2 years and one for 1 year. Thereafter, each new member shall serve for 5 years or until a successor has been appointed.

Reason: The intent is to establish consistent language for the means of appeal throughout the code. The constitution of the board of appeals will be addressed in another change. There is some slight difference in the fire code in the section on limitations on authority and qualification where some differences given the scope of the code are appropriate to remain. The IPMC includes on additional section for stays of enforcement. The BCAC is working from the philosophy that ICC is a family of codes, so administrative requirements should be consistent across books. Most administrative and enforcement matters are the same for any code. Those matters unique for a specific code remain unchanged. This is one of a series of proposals being submitted relating to technical, editorial and organizational changes proposed for the Administrative chapters (Chapter 1) in all of the I-Codes.

While the Administrative Committee will consider each proposal independently, the proposals in this package are a correlated set of companion code

change proposals."

The following is the template utilized to create this code change proposal. There may be some differences depending on the unique applications of each code – such as "building/fire/code official".

SECTION 113

MEANS OF APPEALS

[A] 113.1 General. In order to hear and decide appeals of orders, decisions or determinations made by the *code official* relative to the application and interpretation of this code, there shall be and is hereby created a board of appeals. The board of appeals shall be appointed by the applicable governing authority and shall hold office at its pleasure. The board shall adopt rules of procedure for conducting its business and shall render all decisions and findings in writing to the appellant with a duplicate copy to the *code official*.

[A] 113.2 Limitations on authority. An application for appeal shall be based on a claim that the true intent of this code or the rules legally adopted thereunder have been incorrectly interpreted, the provisions of this code do not fully apply or an equivalent or better form of construction is proposed. The board shall not have authority to waive requirements of this code or interpret the administration of this code.

[A] 113.3 Qualifications. The board of appeals shall consist of members who are qualified by experience and training and are not employees of the jurisdiction.

[A] 113.4 Administration. The code official shall take immediate action in accordance with the decision of the board.

This proposal is submitted by the ICC Building Code Action Committee (BCAC), the ICC Fire Code Action Committee (FCAC), the ICC Sustainable, Energy and High Performance Code Action Committee (SEHPCAC) and the ICC Plumbing/Mechanical/Gas Code Action Committee (PMG CAC).

BCAC was established by the ICC Board of Directors in July 2011 to pursue opportunities to improve and enhance assigned International Codes or portions thereof. Since 2017 the BCAC has held 6 open meetings. In addition, there were numerous Working Group meetings and conference calls for the current code development cycle, which included members of the committee as well as any interested party to discuss and debate the proposed changes. Related documentation and reports are posted on the BCAC website at: https://www.iccsafe.org/codes-tech-support/codes/codedevelopment-process/building-code-actioncommittee-bcac.

The FCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance assigned International Codes with regard to fire safety and hazardous materials in new and existing buildings and facilities and the protection of life and property in wildland urban interface areas. In 2018 the Fire-CAC has held 3 open meetings. In addition, there were numerous conference calls, Regional Work Group and Task Group meetings for the current code development cycle, which included members of the committees as well as any interested parties, to discuss and debate the proposed changes. Related documentation and reports are posted on the FCAC website at: https://www.iccsafe.org/codes-tech-support/cs/fire-code-action-committee-fcac/

The SEHPCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance International Codes with regard to sustainability, energy and high performance as it relates to the built environment included, but not limited to, how these criteria relate to the International Green Construction Code (IgCC) and the International Energy Conservation Code (IECC). In 2018-2019, the SEHPCAC has held five two- or three-day open meetings and numerous workgroup calls, to discuss and debate proposed changes and public comments. Attendees at the meetings and calls included members of the SEHPCAC as well as any interested parties. Related documentation and reports are posted on the SEHPCAC website at http://www.iccsafe.org/cs/SEHPCAC/Pages/default.aspx.

The PMG CAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance the International Codes or portions thereof that were under the purview of the PMG CAC. In 2017-2018, the PMG CAC held one face-to-face meeting and 11 conference call meetings. Numerous interested parties attended the committee meetings and offered their input. Related documentation and reports are posted on the PMGCAC website at: https://www.iccsafe.org/codes-tech-support/codes/code-development-process/pmg-code-action-committee-pmgcac.

Cost Impact: The code change proposal will not increase or decrease the cost of construction This is an editorial proposal with no change to construction requirements.

ADM40-19 Part I

Public Hearing Results

Errata: This proposal includes published errata Added proponent to the code change.

Committee Action: As Submitted

Committee Reason: The committee stated that the reason for approval was based on the improvement of the language to correlate all the I-Codes. (Vote: 12-0)

Assembly Action: None

ADM40-19 Part I

NOTE: ADM40-19 PART IV DID NOT RECEIVE A PUBLIC COMMENT AND IS REPRODUCED FOR INFORMATIONAL PURPOSES ONLY

ADM40-19 Part IV

IECC®: SECTION R109, R109.1, R109.2, R109.3, R109.4

Proposed Change as Submitted

Proponents: Ed Kulik, representing ICC Building Code Action Committee (bcac@iccsafe.org); Michael O'Brian, representing FCAC (fcac@iccsafe.org); Pennie Feehan, representing Plumbing, Mechanical, and Fuel Gas Code Action Committee (pmgcac@iccsafe.org); David Collins, representing SEHPCAC (sehpcac@iccsafe.org)

2018 International Energy Conservation Code

Revise as follows:

SECTION R109 BOARD MEANS OF APPEALS

R109.1 General. In order to hear and decide appeals of orders, decisions or determinations made by the code official relative to the application and interpretation of this code, there shall be and is hereby created a board of appeals. The code official shall be an ex officio member of said board but shall not have a vote on any matter before the board. The board of appeals shall be appointed by the applicable governing body authority and shall hold office at its pleasure. The board shall adopt rules of procedure for conducting its business, and shall render all decisions and findings in writing to the appellant with a duplicate copy to the code official.

R109.2 Limitations on authority. An application for appeal shall be based on a claim that the true intent of this code or the rules legally adopted thereunder have been incorrectly interpreted, the provisions of this code do not fully apply or an equally good equivalent or better form of construction is proposed. The board shall not have authority to waive requirements of this code or interpret the administration of this code.

R109.3 Qualifications. The board of appeals shall consist of members who are qualified by experience and training and are not employees of the jurisdiction.

Revise as follows:

R109.4 Administration. The code official shall take immediate action in accordance with the decision of the board.

Reason: The intent is to establish consistent language for the means of appeal throughout the code. The constitution of the board of appeals will be addressed in another change. There is some slight difference in the fire code in the section on limitations on authority and qualification where some differences given the scope of the code are appropriate to remain. The IPMC includes on additional section for stays of enforcement.

The BCAC is working from the philosophy that ICC is a family of codes, so administrative requirements should be consistent across books. Most administrative and enforcement matters are the same for any code. Those matters unique for a specific code remain unchanged. This is one of a series of proposals being submitted relating to technical, editorial and organizational changes proposed for the Administrative chapters (Chapter 1) in all of the I-Codes

While the Administrative Committee will consider each proposal independently, the proposals in this package are a correlated set of companion code change proposals."

The following is the template utilized to create this code change proposal. There may be some differences depending on the unique applications of each code – such as "building/fire/code official".

SECTION 113

MEANS OF APPEALS

[A] 113.1 General. In order to hear and decide appeals of orders, decisions or determinations made by the *code official* relative to the application and interpretation of this code, there shall be and is hereby created a board of appeals. The board of appeals shall be appointed by the applicable governing authority and shall hold office at its pleasure. The board shall adopt rules of procedure for conducting its business and shall render all decisions and findings in writing to the appellant with a duplicate copy to the *code official*.

[A] 113.2 Limitations on authority. An application for appeal shall be based on a claim that the true intent of this code or the rules legally adopted thereunder have been incorrectly interpreted, the provisions of this code do not fully apply or an equivalent or better form of construction is proposed. The board shall not have authority to waive requirements of this code or interpret the administration of this code.

[A] 113.3 Qualifications. The board of appeals shall consist of members who are qualified by experience and training and are not employees of the jurisdiction.

[A] 113.4 Administration. The code official shall take immediate action in accordance with the decision of the board.

This proposal is submitted by the ICC Building Code Action Committee (BCAC), the ICC Fire Code Action Committee (FCAC), the ICC Sustainable, Energy and High Performance Code Action Committee (SEHPCAC) and the ICC Plumbing/Mechanical/Gas Code Action Committee (PMG CAC).

BCAC was established by the ICC Board of Directors in July 2011 to pursue opportunities to improve and enhance assigned International Codes or portions thereof. Since 2017 the BCAC has held 6 open meetings. In addition, there were numerous Working Group meetings and conference calls for the current code development cycle, which included members of the committee as well as any interested party to discuss and debate the proposed changes. Related documentation and reports are posted on the BCAC website at: https://www.iccsafe.org/codes-tech-support/codes/codedevelopment-process/building-code-actioncommittee-bcac.

The FCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance assigned International Codes with regard to fire safety and hazardous materials in new and existing buildings and facilities and the protection of life and property in wildland urban interface areas. In 2018 the Fire-CAC has held 3 open meetings. In addition, there were numerous conference calls, Regional Work Group and Task Group meetings for the current code development cycle, which included members of the committees as well as any interested parties, to discuss and debate the proposed changes. Related documentation and reports are posted on the FCAC website at: https://www.iccsafe.org/codes-tech-support/cs/fire-code-action-committee-fcac/

The SEHPCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance International Codes with regard to sustainability, energy and high performance as it relates to the built environment included, but not limited to, how these criteria relate to the International Green Construction Code (IgCC) and the International Energy Conservation Code (IECC). In 2018-2019, the SEHPCAC has held five two- or three-day open meetings and numerous workgroup calls, to discuss and debate proposed changes and public comments. Attendees at the meetings and calls included members of the SEHPCAC as well as any interested parties. Related documentation and reports are posted on the SEHPCAC website at http://www.iccsafe.org/cs/SEHPCAC/Pages/default.aspx.

The PMG CAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance the International Codes or portions thereof that were under the purview of the PMG CAC. In 2017-2018, the PMG CAC held one face-to-face meeting and 11 conference call meetings. Numerous interested parties attended the committee meetings and offered their input. Related documentation and reports are posted on the PMGCAC website at: https://www.iccsafe.org/codes-tech-support/codes/code-development-process/pmg-code-action-committee-pmgcac.

Cost Impact: The code change proposal will not increase or decrease the cost of construction This is an editorial proposal with no change to construction requirements.

ADM40-19 Part IV

Public Hearing Results

Committee Action:	As Submitted
Committee Action.	AS Subinitieu

Committee Reason: Consistent with the action taken on ADM40-19. Per the proponent's reason statement. (Vote: 10-1)

Assembly Action: None

ADM40-19 Part IV

NOTE: ADM40-19 PART V DID NOT RECEIVE A PUBLIC COMMENT AND IS REPRODUCED FOR INFORMATIONAL PURPOSES ONLY

ADM40-19 Part V

IGCC®: SECTION 108, 108.1, 108.2, 108.3, 108.4 (New)

Proposed Change as Submitted

Proponents: Ed Kulik, representing ICC Building Code Action Committee (bcac@iccsafe.org); Michael O'Brian, representing FCAC (fcac@iccsafe.org); Pennie Feehan, representing Plumbing, Mechanical, and Fuel Gas Code Action Committee (pmgcac@iccsafe.org); David Collins, representing SEHPCAC (sehpcac@iccsafe.org)

2018 International Green Construction Code

Revise as follows:

SECTION 108 BOARD MEANS OF APPEALS

108.1 General. Appeals In order to hear and decide appeals of orders, decisions or determinations made by the authority having jurisdiction relative to the application and interpretation of this code, there shall be made to a Board of Appeals as determined by the and is hereby created a board of appeals. The board of appeals shall be appointed by the applicable governing authority and shall hold office at its pleasure. The board shall adopt rules of procedure for conducting its business, and shall render all decisions and findings in writing to the appellant with a duplicate copy to the authority having jurisdiction.

108.2 Limitations on authority. An application for appeal shall be based on a claim that the true intent of this code or the rules legally adopted there under have been incorrectly interpreted, the provisions of this code do not fully apply or an equivalent or better form of construction is proposed. The board shall not have authority to waive requirements of this <u>code or interpret the administration of this</u> code.

108.3 Qualifications. The members of the board of appeals related to interpretation of this code shall be shall consist of members who are qualified by experience and training in the matters covered by this code and shall not be to pass on matters pertaining to building construction and are not employees of the jurisdiction.

Add new text as follows:

108.4 Administration The authority having jurisdiction shall take immediate action in accordance with the decision of the board.

Reason: The intent is to establish consistent language for the means of appeal throughout the code. The constitution of the board of appeals will be addressed in another change. There is some slight difference in the fire code in the section on limitations on authority and qualification where some differences given the scope of the code are appropriate to remain. The IPMC includes on additional section for stays of enforcement. The BCAC is working from the philosophy that ICC is a family of codes, so administrative requirements should be consistent across books. Most administrative and enforcement matters are the same for any code. Those matters unique for a specific code remain unchanged. This is one of a series of proposals being submitted relating to technical, editorial and organizational changes proposed for the Administrative chapters (Chapter 1) in all of the I-Codes.

While the Administrative Committee will consider each proposal independently, the proposals in this package are a correlated set of companion code change proposals."

The following is the template utilized to create this code change proposal. There may be some differences depending on the unique applications of each code – such as "building/fire/code official".

SECTION 113

MEANS OF APPEALS

[A] 113.1 General. In order to hear and decide appeals of orders, decisions or determinations made by the *code official* relative to the application and interpretation of this code, there shall be and is hereby created a board of appeals. The board of appeals shall be appointed by the applicable governing authority and shall hold office at its pleasure. The board shall adopt rules of procedure for conducting its business and shall render all decisions and findings in writing to the appellant with a duplicate copy to the *code official*.

[A] 113.2 Limitations on authority. An application for appeal shall be based on a claim that the true intent of this code or the rules legally adopted thereunder have been incorrectly interpreted, the provisions of this code do not fully apply or an equivalent or better form of construction is

proposed. The board shall not have authority to waive requirements of this code or interpret the administration of this code.

[A] 113.3 Qualifications. The board of appeals shall consist of members who are qualified by experience and training and are not employees of the jurisdiction.

[A] 113.4 Administration. The code official shall take immediate action in accordance with the decision of the board.

This proposal is submitted by the ICC Building Code Action Committee (BCAC), the ICC Fire Code Action Committee (FCAC), the ICC Sustainable, Energy and High Performance Code Action Committee (SEHPCAC) and the ICC Plumbing/Mechanical/Gas Code Action Committee (PMG CAC).

BCAC was established by the ICC Board of Directors in July 2011 to pursue opportunities to improve and enhance assigned International Codes or portions thereof. Since 2017 the BCAC has held 6 open meetings. In addition, there were numerous Working Group meetings and conference calls for the current code development cycle, which included members of the committee as well as any interested party to discuss and debate the proposed changes. Related documentation and reports are posted on the BCAC website at: https://www.iccsafe.org/codes-tech-support/codes/codedevelopment-process/building-code-actioncommittee-bcac.

The FCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance assigned International Codes with regard to fire safety and hazardous materials in new and existing buildings and facilities and the protection of life and property in wildland urban interface areas. In 2018 the Fire-CAC has held 3 open meetings. In addition, there were numerous conference calls, Regional Work Group and Task Group meetings for the current code development cycle, which included members of the committees as well as any interested parties, to discuss and debate the proposed changes. Related documentation and reports are posted on the FCAC website at: https://www.iccsafe.org/codes-tech-support/cs/fire-code-action-committee-fcac/

The SEHPCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance International Codes with regard to sustainability, energy and high performance as it relates to the built environment included, but not limited to, how these criteria relate to the International Green Construction Code (IgCC) and the International Energy Conservation Code (IECC). In 2018-2019, the SEHPCAC has held five two- or three-day open meetings and numerous workgroup calls, to discuss and debate proposed changes and public comments. Attendees at the meetings and calls included members of the SEHPCAC as well as any interested parties. Related documentation and reports are posted on the SEHPCAC website at http://www.iccsafe.org/cs/SEHPCAC/Pages/default.aspx.

The PMG CAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance the International Codes or portions thereof that were under the purview of the PMG CAC. In 2017-2018, the PMG CAC held one face-to-face meeting and 11 conference call meetings. Numerous interested parties attended the committee meetings and offered their input. Related documentation and reports are posted on the PMGCAC website at: https://www.iccsafe.org/codes-tech-support/codes/code-development-process/pmg-code-action-committee-pmgcac.

Cost Impact: The code change proposal will not increase or decrease the cost of construction This is an editorial proposal with no change to construction requirements.

ADM40-19 Part V

Public Hearing Results

Errata: This proposal includes published errata Added a proponent to the code change.

Committee Action: As Submitted

Committee Reason: This proposal brings consistency to the IgCC with regards to the appeals process as it is addressed in other codes. (Vote: 5-0)

Assembly Action: None

ADM40-19 Part V

ADM43-19 Part II

IRC®: APPENDIX A (New), SECTION A101 (New), A101.1 (New), A101.2 (New), A101.2.1 (New), A101.2.2 (New), A101.3 (New), A101.3.1 (New), A101.3.2 (New), A101.3.3 (New), A101.3.5 (New), A101.3.6 (New), A101.3.7 (New), A101.3.8 (New), A101.4 (New), A101.5 (New), A101.5.1 (New), A101.5.2 (New), A101.5.3 (New), A101.5 (New), A101.7 (New), A101

Proposed Change as Submitted

Proponents: Ed Kulik, representing ICC Building Code Action Committee (bcac@iccsafe.org); Pennie Feehan, representing Plumbing, Mechanical, and Fuel Gas Code Action Committee (pmgcac@iccsafe.org); Michael O'Brian, representing FCAC (fcac@iccsafe.org); David Collins, representing SEHPCAC (sehpcac@iccsafe.org)

2018 International Residential Code

Add new text as follows:

APPENDIX A BOARD OF APPEALS

SECTION A101 GENERAL

A101.1 Scope. A board of appeals shall be established within the jurisdiction for the purpose of hearing applications for modification of the requirements of this code pursuant to the provisions of Section R112 (Means of Appeals). The board shall be established and operated in accordance with this section, and shall be authorized to hear evidence from appellants and the code official pertaining to the application and intent of this code for the purpose of issuing orders pursuant to these provisions.

Any person shall have the right to appeal a decision of the building official to the board. An application for appeal shall be based on a claim that the intent of this code or the rules legally adopted hereunder have been incorrectly interpreted, the provisions of this code do not fully apply or an equally good or better form of construction is proposed. The application shall be filed on a form obtained from the building official within 20 days after the notice was served.

- A101.2.1 Limitation of authority. The board shall not have authority to waive requirements of this code or interpret the administration of this code.
- A101.2.2 Stays of enforcement. Appeals of notice and orders, other than Imminent Danger notices, shall stay the enforcement of the notice and order until the appeal is heard by the board.
- A101.3 Membership of board. The board shall consist of five voting members appointed by the chief appointing authority of the jurisdiction. Each member shall serve for [INSERT NUMBER OF YEARS] years or until a successor has been appointed. The board member's terms shall be staggered at intervals, so as to provide continuity. The building official shall be an ex officio member of said board but shall not vote on any matter before the board.
- A101.3.1 Qualifications. The board shall consist of five individuals, who are qualified by experience and training to pass on matters pertaining to building construction and are not employees of the jurisdiction.
- A101.3.2 Alternate members. The chief appointing authority is authorized to appoint two alternate members who shall be called by the board chairperson to hear appeals during the absence or disqualification of a member. Alternate members shall possess the qualifications required for board membership, and shall be appointed for the same term or until a successor has been appointed.
- A101.3.3 Vacancies. Vacancies shall be filled for an unexpired term in the same manner in which original appointments are required to be made.
- A101.3.4 Chairperson. The board shall annually select one of its members to serve as chairperson.
- A101.3.5 Secretary. The chief appointing authority shall designate a qualified clerk to serve as secretary to the board. The secretary shall file a detailed record of all proceedings which shall set forth the reasons for the board's decision, the vote of each member, the absence of a member and any failure of a member to vote.
- A101.3.6 Conflict of interest. A member with any personal, professional or financial interest in a matter before the board shall declare such interest and refrain from participating in discussions, deliberations and voting on such matters.
- A101.3.7 Compensation of members. Compensation of members shall be determined by law.
- A101.3.8 Removal from the board. A member shall be removed from the board prior to the end of their terms only for cause. Any member with continued absence from regular meeting of the board may be removed at the discretion of the chief appointing authority.
- A101.4 Rules and procedures. The board shall establish policies and procedures necessary to carry out its duties consistent with the provisions of this code and applicable state law. The procedures shall not require compliance with strict rules of evidence, but shall mandate that only relevant information be presented.

A101.5 Notice of meeting. The board shall meet upon notice from the chairperson, within 10 days of the filing of an appeal or at stated periodic intervals.

A101.5.1 Open hearing. All hearings before the board shall be open to the public. The appellant, the appellant's representative, the code official and any person whose interests are affected shall be given an opportunity to be heard.

A101.5.2 Quorum. Three members of the board shall constitute a quorum.

A101.5.3 Postponed hearing. When five members are not present to hear an appeal, either the appellant or the appellant's representative shall have the right to request a postponement of the hearing.

A101.6 Legal counsel. The jurisdiction shall furnish legal counsel to the board to provide members with general legal advice concerning matters before them for consideration. Members shall be represented by legal counsel at the jurisdiction's expense in all matters arising from service within the scope of their duties.

A101.7 Board decision. The board shall only modify or reverse the decision of the building official by a concurring vote of three or more members.

A101.7.1 Resolution. The decision of the board shall be by resolution. Every decision shall be promptly filed in writing in the office of the building official within three days and shall be open to the public for inspection. A certified copy shall be furnished to the appellant or the appellant's representative and to the building official.

A101.7.2 Administration. The building official shall take immediate action in accordance with the decision of the board.

A101.8 Court review. Any person, whether or not a previous party of the appeal, shall have the right to apply to the appropriate court for a writ of certiorari to correct errors of law. Application for review shall be made in the manner and time required by law following the filing of the decision in the office of the chief administrative officer.

Reason: The intent of this proposal is to have a consistent set of requirements for the Board of Appeals. The right for someone to have an appeal is addressed in a separate proposal for Means of Appeals. Currently the IBC and IFC have these requirements in an appendix, while other codes either don't have it at all or have it in the text. It was felt that appendix was a more appropriate place to allow for the jurisdiction to establish their own criteria, or to use this appendix as a template.

The BCAC is working from the philosophy that ICC is a family of codes, so administrative requirements should be consistent across books. Most administrative and enforcement matters are the same for any code. Those matters unique for a specific code remain unchanged. This is one of a series of proposals being submitted relating to technical, editorial and organizational changes proposed for the Administrative chapters (Chapter 1) in all of the I-Codes.

While the Administrative Committee will consider each proposal independently, the proposals in this package are a correlated set of companion code change proposals."

The following is the template utilized to create this code change proposal. There may be some differences depending on the unique applications of each code – such as "building/fire/code official".

APPENDIX A

BOARD OF APPEALS

SECTION A101

GENERAL

A101.1 Scope. A board of appeals shall be established within the jurisdiction for the purpose of hearing applications for modification of the requirements of this code pursuant to the provisions of Section XXX (Means of Appeals). The board shall be established and operated in accordance with this section, and shall be authorized to hear evidence from appellants and the *code official* pertaining to the application and intent of this code for the purpose of issuing orders pursuant to these provisions.

A101.2 Application for appeal. Any person shall have the right to appeal a decision of the *code official* to the board. An application for appeal shall be based on a claim that the intent of this code or the rules legally adopted hereunder have been incorrectly interpreted, the provisions of this code do not fully apply or an equally good or better form of construction is proposed. The application shall be filed on a form obtained from the *code official* within 20 days after the notice was served.

A101.2.1 Limitation of authority. The board shall not have authority to waive requirements of this code or interpret the administration of this code.

A101.2.2 Stays of enforcement. Appeals of notice and orders, other than Imminent Danger notices, shall stay the enforcement of the notice and order until the appeal is heard by the board.

- **A101.3 Membership of board.** The board shall consist of five voting members appointed by the chief appointing authority of the jurisdiction. Each member shall serve for **[INSERT NUMBER OF YEARS]** years or until a successor has been appointed. The board member's terms shall be staggered at intervals, so as to provide continuity. The *code official* shall be an ex officio member of said board but shall not vote on any matter before the board.
- **A101.3.1 Qualifications.** The board shall consist of five individuals, who are qualified by experience and training to pass on matters pertaining to building construction and are not employees of the jurisdiction.
- **A101.3.2** Alternate members. The chief appointing authority may appoint two alternate members who shall be called by the board chairperson to hear appeals during the absence or disqualification of a member. Alternate members shall possess the qualifications required for board membership, and shall be appointed for the same term or until a successor has been appointed.
- A101.3.3 Vacancies. Vacancies shall be filled for an unexpired term in the same manner in which original appointments are required to be made.
- A101.3.4 Chairperson. The board shall annually select one of its members to serve as chairperson.
- **A101.3.5 Secretary.** The chief appointing authority shall designate a qualified clerk to serve as secretary to the board. The secretary shall file a detailed record of all proceedings which shall set forth the reasons for the board's decision, the vote of each member, the absence of a member and any failure of a member to vote.
- **A101.3.6 Conflict of interest.** A member with any personal, professional or financial interest in a matter before the board shall declare such interest and refrain from participating in discussions, deliberations and voting on such matters.
- A101.3.7 Compensation of members. Compensation of members shall be determined by law.
- **A101.3.8 Removal from the board.** A member shall be removed from the board prior to the end of their terms only for cause. Any member with continued absence from regular meeting of the board may be removed at the discretion of the chief appointing authority.
- **A101.4 Rules and procedures.** The board shall establish policies and procedures necessary to carry out its duties consistent with the provisions of this code and applicable state law. The procedures shall not require compliance with strict rules of evidence, but shall mandate that only relevant information be presented.
- **A101.5 Notice of meeting.** The board shall meet upon notice from the chairperson, within 10 days of the filing of an appeal or at stated periodic intervals.
- **A101.5.1 Open hearing.** All hearings before the board shall be open to the public. The appellant, the appellant's representative, the *code official* and any person whose interests are affected shall be given an opportunity to be heard.
- A101.5.2 Quorum. Three members of the board shall constitute a guorum.
- **A101.5.3 Postponed hearing.** When five members are not present to hear an appeal, either the appellant or the appellant's representative shall have the right to request a postponement of the hearing.
- **A101.6 Legal counsel.** The jurisdiction shall furnish legal counsel to the board to provide members with general legal advice concerning matters before them for consideration. Members shall be represented by legal counsel at the jurisdiction's expense in all matters arising from service within the scope of their duties.
- A101.7 Board decision. The board shall only modify or reverse the decision of the code official by a concurring vote of three or more members.
- **A101.7.1 Resolution.** The decision of the board shall be by resolution. Every decision shall be promptly filed in writing in the office of the *code official* within three days and shall be open to the public for inspection. A certified copy shall be furnished to the appellant or the appellant's representative and to the *code official*.
- A101.7.2 Administration. The code official shall take immediate action in accordance with the decision of the board.
- **A101.8 Court review.** Any person, whether or not a previous party of the appeal, shall have the right to apply to the appropriate court for a writ of certiorari to correct errors of law. Application for review shall be made in the manner and time required by law following the filing of the decision in the office of the chief administrative officer.
- This proposal is submitted by the ICC Building Code Action Committee (BCAC), the ICC Fire Code Action Committee (FCAC), the ICC Sustainable, Energy and High Performance Code Action Committee (SEHPCAC) and the ICC Plumbing/Mechanical/Gas Code Action Committee (PMG CAC).

BCAC was established by the ICC Board of Directors in July 2011 to pursue opportunities to improve and enhance assigned International Codes or portions thereof. Since 2017 the BCAC has held 6 open meetings. In addition, there were numerous Working Group meetings and conference calls for the current code development cycle, which included members of the committee as well as any interested party to discuss and debate the proposed changes. Related documentation and reports are posted on the BCAC website at: https://www.iccsafe.org/codes-tech-support/codes/codedevelopment-process/building-code-actioncommittee-bcac.

The FCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance assigned International Codes with regard to fire safety and hazardous materials in new and existing buildings and facilities and the protection of life and property in wildland urban interface areas. In 2018 the Fire-CAC has held 3 open meetings. In addition, there were numerous conference calls, Regional Work Group and Task Group meetings for the current code development cycle, which included members of the committees as well as any interested parties, to discuss and debate the proposed changes. Related documentation and reports are posted on the FCAC website at: https://www.iccsafe.org/codes-tech-support/cs/fire-code-action-committee-fcac/

The SEHPCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance International Codes with regard to sustainability, energy and high performance as it relates to the built environment included, but not limited to, how these criteria relate to the International Green Construction Code (IgCC) and the International Energy Conservation Code (IECC). In 2018-2019, the SEHPCAC has held five two- or three-day open meetings and numerous workgroup calls, to discuss and debate proposed changes and public comments. Attendees at the meetings and calls included members of the SEHPCAC as well as any interested parties. Related documentation and reports are posted on the SEHPCAC website at http://www.iccsafe.org/cs/SEHPCAC/Pages/default.aspx.

The PMG CAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance the International Codes or portions thereof that were under the purview of the PMG CAC. In 2017-2018, the PMG CAC held one face-to-face meeting and 11 conference call meetings. Numerous interested parties attended the committee meetings and offered their input. Related documentation and reports are posted on the PMGCAC website at: https://www.iccsafe.org/codes-tech-support/codes/code-development-process/pmg-code-action-committee-pmgcac.

Cost Impact: The code change proposal will not increase or decrease the cost of construction This is an editorial correlation and an option for jurisdictions to follow.

ADM43-19 Part II

Public Hearing Results

Errata: This proposal includes published errata Added proponent to the code change.

Committee Action: Disapproved

Committee Reason: The appendix contains too much detail for most jurisdictions. The Board of Appeals is handled differently in different jurisdictions. This information on the Board of Appeals is not needed in the IRC. (Vote: 10-1).

Assembly Action: None

ADM43-19 Part II

Individual Consideration Agenda

Public Comment 1:

Proponents:

Ed Kulik, representing ICC Building Code Action Committee (bcac@iccsafe.org)

requests As Submitted

Commenter's Reason: The main intent of the BCAC Administrative proposals for ICC to be considered a family of codes. ADM40 Part 1 and Part 3 were approved as submitted, therefore, this Appendix for the Board of Appeals will be in multiple codes.

In regards to the IRC provisions, ADM 40 Part 2 and ADM 43 Part 2 were intended to work together. The provisions currently in the IRC Section R112 (ADM 40 Part 2) are specific to customers having a means to appeal. The requirements for an actual Board of Appeals is provided in an appendix (ADM 43 Part 2) to provide guidance for a jurisdiction that might need this. The jurisdiction has the ability to make any modifications they feel are appropriate or use another model.

BCAC was established by the ICC Board of Directors in July 2011 to pursue opportunities to improve and enhance assigned International Codes or portions thereof. Since 2017 the BCAC has held 6 open meetings. In addition, there were numerous Working Group meetings and conference calls for the current code development cycle, which included members of the committee as well as any interested party to discuss and debate the proposed changes. Related documentation and reports are posted on the BCAC website at: https://www.iccsafe.org/codestechsupport/codes/codedevelopment-process/building-code-actioncommittee-bcac.

Cost Impact: The net effect of the public comment and code change proposal will not increase or decrease the cost of construction This is an editorial correlation and an option for jurisdictions to follow.

Public Comment# 1239

ADM43-19 Part IV

IECC: Appendix RA (New)

Proposed Change as Submitted

Proponents: Ed Kulik, representing ICC Building Code Action Committee (bcac@iccsafe.org); Pennie Feehan, representing Plumbing, Mechanical, and Fuel Gas Code Action Committee (pmgcac@iccsafe.org); Michael O'Brian, representing FCAC (fcac@iccsafe.org); David Collins, representing SEHPCAC (sehpcac@iccsafe.org)

2018 International Energy Conservation Code

Add new text as follows:

APPENDIX RA BOARD OF APPEALS-RESIDENTIAL

SECTION RA101 GENERAL

RA101.1 Scope. A board of appeals shall be established within the jurisdiction for the purpose of hearing applications for modification of the requirements of this code pursuant to the provisions of Section R109 (Means of Appeals). The board shall be established and operated in accordance with this section, and shall be authorized to hear evidence from appellants and the code official pertaining to the application and intent of this code for the purpose of issuing orders pursuant to these provisions.

RA101.2 Application for appeal. Any person shall have the right to appeal a decision of the code official to the board. An application for appeal shall be based on a claim that the intent of this code or the rules legally adopted hereunder have been incorrectly interpreted, the provisions of this code do not fully apply or an equally good or better form of construction is proposed. The application shall be filed on a form obtained from the code official within 20 days after the notice was served.

RA101.2.1 Limitation of authority. The board shall not have authority to waive requirements of this code or interpret the administration of this code.

RA101.2.2 Stays of enforcement. Appeals of notice and orders, other than Imminent Danger notices, shall stay the enforcement of the notice and order until the appeal is heard by the board.

RA101.3 Membership of board. The board shall consist of five voting members appointed by the chief appointing authority of the jurisdiction. Each member shall serve for [INSERT NUMBER OF YEARS] years or until a successor has been appointed. The board member's terms shall be staggered at intervals, so as to provide continuity. The code official shall be an ex officio member of said board but shall not vote on any matter before the board.

RA101.3.1 Qualifications. The board shall consist of five individuals, who are qualified by experience and training to pass on matters pertaining to building construction and are not employees of the jurisdiction.

RA101.3.2 Alternate members. The chief appointing authority is authorized to appoint two alternate members who shall be called by the board chairperson to hear appeals during the absence or disqualification of a member. Alternate members shall possess the qualifications required for board membership, and shall be appointed for the same term or until a successor has been appointed.

RA101.3.3 Vacancies. Vacancies shall be filled for an unexpired term in the same manner in which original appointments are required to be made.

RA101.3.4 Chairperson. The board shall annually select one of its members to serve as chairperson.

RA101.3.5 Secretary. The chief appointing authority shall designate a qualified clerk to serve as secretary to the board. The secretary shall file a detailed record of all proceedings which shall set forth the reasons for the board's decision, the vote of each member, the absence of a member and any failure of a member to vote.

RA101.3.6 Conflict of interest. A member with any personal, professional or financial interest in a matter before the board shall declare such interest and refrain from participating in discussions, deliberations and voting on such matters.

RA101.3.7 Compensation of members. Compensation of members shall be determined by law.

RA101.3.8 Removal from the board. A member shall be removed from the board prior to the end of their terms only for cause. Any member with continued absence from regular meeting of the board may be removed at the discretion of the chief appointing authority.

RA101.4 Rules and procedures. The board shall establish policies and procedures necessary to carry out its duties consistent with the provisions of this code and applicable state law. The procedures shall not require compliance with strict rules of evidence, but shall mandate that only relevant information be presented.

RA101.5 Notice of meeting. The board shall meet upon notice from the chairperson, within 10 days of the filing of an appeal or at stated periodic intervals.

RA101.5.1 Open hearing. All hearings before the board shall be open to the public. The appellant, the appellant's representative, the code official and any person whose interests are affected shall be given an opportunity to be heard.

RA101.5.2 Quorum. Three members of the board shall constitute a quorum.

RA101.5.3 Postponed hearing. When five members are not present to hear an appeal, either the appellant or the appellant's representative shall have the right to request a postponement of the hearing.

RA101.6 Legal counsel. The jurisdiction shall furnish legal counsel to the board to provide members with general legal advice concerning matters before them for consideration. Members shall be represented by legal counsel at the jurisdiction's expense in all matters arising from service within the scope of their duties.

RA101.7 Board decision. The board shall only modify or reverse the decision of the code official by a concurring vote of three or more members.

RA101.7.1 Resolution. The decision of the board shall be by resolution. Every decision shall be promptly filed in writing in the office of the code official within three days and shall be open to the public for inspection. A certified copy shall be furnished to the appellant or the appellant's representative and to the code official.

RA101.7.2 Administration. The code official shall take immediate action in accordance with the decision of the board.

RA101.8 Court review. Any person, whether or not a previous party of the appeal, shall have the right to apply to the appropriate court for a writ of certiorari to correct errors of law. Application for review shall be made in the manner and time required by law following the filling of the decision in the office of the chief administrative officer.

Reason: The intent of this proposal is to have a consistent set of requirements for the Board of Appeals. The right for someone to have an appeal is addressed in a separate proposal for Means of Appeals. Currently the IBC and IFC have these requirements in an appendix, while other codes either don't have it at all or have it in the text. It was felt that appendix was a more appropriate place to allow for the jurisdiction to establish their own criteria, or to use this appendix as a template.

The BCAC is working from the philosophy that ICC is a family of codes, so administrative requirements should be consistent across books. Most administrative and enforcement matters are the same for any code. Those matters unique for a specific code remain unchanged. This is one of a series of proposals being submitted relating to technical, editorial and organizational changes proposed for the Administrative chapters (Chapter 1) in all of the I-Codes.

While the Administrative Committee will consider each proposal independently, the proposals in this package are a correlated set of companion code change proposals."

The following is the template utilized to create this code change proposal. There may be some differences depending on the unique applications of each code – such as "building/fire/code official".

APPENDIX A

BOARD OF APPEALS

SECTION A101

GENERAL

A101.1 Scope. A board of appeals shall be established within the jurisdiction for the purpose of hearing applications for modification of the requirements of this code pursuant to the provisions of Section XXX (Means of Appeals). The board shall be established and operated in accordance with this section, and shall be authorized to hear evidence from appellants and the *code official* pertaining to the application and intent of this code for the purpose of issuing orders pursuant to these provisions.

A101.2 Application for appeal. Any person shall have the right to appeal a decision of the *code official* to the board. An application for appeal shall be based on a claim that the intent of this code or the rules legally adopted hereunder have been incorrectly interpreted, the provisions of this code do not fully apply or an equally good or better form of construction is proposed. The application shall be filed on a form obtained from the *code official* within 20 days after the notice was served.

A101.2.1 Limitation of authority. The board shall not have authority to waive requirements of this code or interpret the administration of this code.

A101.2.2 Stays of enforcement. Appeals of notice and orders, other than Imminent Danger notices, shall stay the enforcement of the notice and order until the appeal is heard by the board.

- **A101.3 Membership of board.** The board shall consist of five voting members appointed by the chief appointing authority of the jurisdiction. Each member shall serve for **[INSERT NUMBER OF YEARS]** years or until a successor has been appointed. The board member's terms shall be staggered at intervals, so as to provide continuity. The *code official* shall be an ex officio member of said board but shall not vote on any matter before the board.
- **A101.3.1 Qualifications.** The board shall consist of five individuals, who are qualified by experience and training to pass on matters pertaining to building construction and are not employees of the jurisdiction.
- **A101.3.2** Alternate members. The chief appointing authority may appoint two alternate members who shall be called by the board chairperson to hear appeals during the absence or disqualification of a member. Alternate members shall possess the qualifications required for board membership, and shall be appointed for the same term or until a successor has been appointed.
- A101.3.3 Vacancies. Vacancies shall be filled for an unexpired term in the same manner in which original appointments are required to be made.
- A101.3.4 Chairperson. The board shall annually select one of its members to serve as chairperson.
- **A101.3.5 Secretary.** The chief appointing authority shall designate a qualified clerk to serve as secretary to the board. The secretary shall file a detailed record of all proceedings which shall set forth the reasons for the board's decision, the vote of each member, the absence of a member and any failure of a member to vote.
- **A101.3.6 Conflict of interest.** A member with any personal, professional or financial interest in a matter before the board shall declare such interest and refrain from participating in discussions, deliberations and voting on such matters.
- A101.3.7 Compensation of members. Compensation of members shall be determined by law.
- **A101.3.8 Removal from the board.** A member shall be removed from the board prior to the end of their terms only for cause. Any member with continued absence from regular meeting of the board may be removed at the discretion of the chief appointing authority.
- **A101.4 Rules and procedures.** The board shall establish policies and procedures necessary to carry out its duties consistent with the provisions of this code and applicable state law. The procedures shall not require compliance with strict rules of evidence, but shall mandate that only relevant information be presented.
- **A101.5 Notice of meeting.** The board shall meet upon notice from the chairperson, within 10 days of the filing of an appeal or at stated periodic intervals.
- **A101.5.1 Open hearing.** All hearings before the board shall be open to the public. The appellant, the appellant's representative, the *code official* and any person whose interests are affected shall be given an opportunity to be heard.
- A101.5.2 Quorum. Three members of the board shall constitute a guorum.
- **A101.5.3 Postponed hearing.** When five members are not present to hear an appeal, either the appellant or the appellant's representative shall have the right to request a postponement of the hearing.
- **A101.6 Legal counsel.** The jurisdiction shall furnish legal counsel to the board to provide members with general legal advice concerning matters before them for consideration. Members shall be represented by legal counsel at the jurisdiction's expense in all matters arising from service within the scope of their duties.
- A101.7 Board decision. The board shall only modify or reverse the decision of the code official by a concurring vote of three or more members.
- **A101.7.1 Resolution.** The decision of the board shall be by resolution. Every decision shall be promptly filed in writing in the office of the *code official* within three days and shall be open to the public for inspection. A certified copy shall be furnished to the appellant or the appellant's representative and to the *code official*.
- A101.7.2 Administration. The code official shall take immediate action in accordance with the decision of the board.
- **A101.8 Court review.** Any person, whether or not a previous party of the appeal, shall have the right to apply to the appropriate court for a writ of certiorari to correct errors of law. Application for review shall be made in the manner and time required by law following the filing of the decision in the office of the chief administrative officer.
- This proposal is submitted by the ICC Building Code Action Committee (BCAC), the ICC Fire Code Action Committee (FCAC), the ICC Sustainable, Energy and High Performance Code Action Committee (SEHPCAC) and the ICC Plumbing/Mechanical/Gas Code Action Committee (PMG CAC).

BCAC was established by the ICC Board of Directors in July 2011 to pursue opportunities to improve and enhance assigned International Codes or portions thereof. Since 2017 the BCAC has held 6 open meetings. In addition, there were numerous Working Group meetings and conference calls for the current code development cycle, which included members of the committee as well as any interested party to discuss and debate the proposed changes. Related documentation and reports are posted on the BCAC website at: https://www.iccsafe.org/codes-tech-support/codes/codedevelopment-process/building-code-actioncommittee-bcac.

The FCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance assigned International Codes with regard to fire safety and hazardous materials in new and existing buildings and facilities and the protection of life and property in wildland urban interface areas. In 2018 the Fire-CAC has held 3 open meetings. In addition, there were numerous conference calls, Regional Work Group and Task Group meetings for the current code development cycle, which included members of the committees as well as any interested parties, to discuss and debate the proposed changes. Related documentation and reports are posted on the FCAC website at: https://www.iccsafe.org/codes-tech-support/cs/fire-code-action-committee-fcac/

The SEHPCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance International Codes with regard to sustainability, energy and high performance as it relates to the built environment included, but not limited to, how these criteria relate to the International Green Construction Code (IgCC) and the International Energy Conservation Code (IECC). In 2018-2019, the SEHPCAC has held five two- or three-day open meetings and numerous workgroup calls, to discuss and debate proposed changes and public comments. Attendees at the meetings and calls included members of the SEHPCAC as well as any interested parties. Related documentation and reports are posted on the SEHPCAC website at http://www.iccsafe.org/cs/SEHPCAC/Pages/default.aspx.

The PMG CAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance the International Codes or portions thereof that were under the purview of the PMG CAC. In 2017-2018, the PMG CAC held one face-to-face meeting and 11 conference call meetings. Numerous interested parties attended the committee meetings and offered their input. Related documentation and reports are posted on the PMGCAC website at: https://www.iccsafe.org/codes-tech-support/codes/code-development-process/pmg-code-action-committee-pmgcac.

Cost Impact: The code change proposal will not increase or decrease the cost of construction This is an editorial correlation and an option for jurisdictions to follow.

ADM43-19 Part IV

Public Hearing Results

Committee Action: Disapproved

Committee Reason: This is unnecessary (Vote: 11-0).

Assembly Action: None

ADM43-19 Part IV

Individual Consideration Agenda

Public Comment 1:

Proponents:

Ed Kulik, representing ICC Building Code Action Committee (bcac@iccsafe.org); David Collins, representing SEHPCAC (sehpcac@iccsafe.org)

requests As Submitted

Commenter's Reason: The main intent of the BCAC Administrative proposals for ICC to be considered a family of codes. ADM40 Part 1 and Part 3 were approved as submitted, therefore, this Appendix for the Board of Appeals will be in multiple codes, including the Commercial portion of the Energy Code.

In regards to the IRC provisions, ADM 40 Part 2 and ADM 43 Part 2 were intended to work together. The provisions currently in the IRC Section R112 (ADM 40 Part 2) are specific to customers having a means to appeal. The requirements for an actual Board of Appeals is provided in an appendix (ADM 43 Part 2) to provide guidance for a jurisdiction that might need this. The jurisdiction has the ability to make any modifications they feel are appropriate or use another model.

The SEHPCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance International Codes with regard to

sustainability, energy and high performance as it relates to the built environment included, but not limited to, how these criteria relate to the International Green Construction Code (IgCC) and the International Energy Conservation Code (IECC). In 2018-2019, the SEHPCAC has held five two- or three-day open meetings and numerous workgroup calls, to discuss and debate proposed changes and public comments. Attendees at the meetings and calls included members of the SEHPCAC as well as any interested parties. Related documentation and reports are posted on the SEHPCAC website at http://www.iccsafe.org/cs/SEHPCAC/Pages/default.aspx.

Cost Impact: The net effect of the public comment and code change proposal will not increase or decrease the cost of construction This is an editorial correlation and an option for jurisdictions to follow.

Public Comment# 1240

NOTE: ADM43-19 PART I DID NOT RECEIVE A PUBLIC COMMENT AND IS REPRODUCED FOR INFORMATIONAL PURPOSES ONLY

ADM43-19 Part I

IBC®: APPENDIX B, SECTION B101, [A] B101.1, B101.1 (New), B101.2 (New), B101.2.1 (New), [A] B101.3, [A] B101.3.1, [A] B101.3.2, B101.3.3 (New), [A] B101.3.4, [A] B101.3.5, [A] B101.3.6, [A] B101.3.7, B101.3.8 (New), [A] B101.4, [A] B101.5, [A] B101.5.1, B101.5.2 (New), [A] B101.5.3, B101.6 (New), [A] B101.7, [A] B101.7.1, [A] B101.7.2, B101.8 (New); IEBC®: APPENDIX A (New), SECTION A101 (New), A101.1 (New), A101.2 (New), A101.2.1 (New), A101.2.2 (New), A101.3 (New), A101.3.1 (New), A101.3.2 (New), A101.3.3 (New), A101.3.4 (New), A101.3.5 (New), A101.3.6 (New), A101.3.7 (New), A101.3.8 (New), A101.4 (New), A101.5 (New), A101.5.1 (New), A101.5.2 (New), A101.5.3 (New), A101.6 (New), A101.7 (New), A101.7.1 (New), A101.7.2 (New), A101.8 (New); IFC®: APPENDIX A, SECTION A101, A101.1, A101.2 (New), A101.2.1 (New), A102.2.2 (New), A101.2, A101.2.1, A101.2.2, A101.2.3, A101.2.4, A101.2.5, A101.3, A101.3.1, A101.3.1 (New), A101.3.2 (New), A101.3.3, A101.3.4 (New), A101.3.5, A101.9, A101.3.6, A101.3.7 (New), A101.3.8, A101.4, A101.5, A101.5.1 (New), A101.5.2, A101.5.3 (New), A101.6, A101.7 (New), A101.7.1 (New), A101.7.2 (New), A101.8 (New); IFGC®: APPENDIX A (New), A101 (New), A101.1 (New), A101.2 (New), A101.2.1 (New), A101.2.2 (New), [A] A101.3, [A] A101.3.1, [A] A101.3.2, A101.3.3 (New), [A] A101.3.4, [A] A101.3.5, [A] A101.3.6, [A] A101.3.7, A101.3.8 (New), [A] A101.4, [A] A101.5, [A] A101.5.1, A101.5.2 (New), [A] A101.5.3, A101.6 (New), [A] A101.7, [A] A101.7.1, [A] A101.7.2, [A] A101.8; IMC®: APPENDIX A (New), SECTION A101 (New), A101.1 (New), A101.2 (New), A101.2.1 (New), A101.2.2 (New), [A] A101.3, [A] A101.3.1, [A] A101.3.2, A101.3.3, [A] A101.3.4, [A] A101.3.5, [A] A101.3.6, [A] A101.3.7, A101.3.8 (New), [A] A101.4, [A] A101.5, [A] A101.5.1, A101.5.2 (New), [A] A101.5.3, A101.6 (New), [A] A101.7, [A] A101.7.1, [A] A101.7.2, [A] A101.8; IPC®: APPENDIX A (New), SECTION A101 (New), A101.1 (New), A101.2 (New), A101.2.1 (New), A101.2.2 (New), A101.3, A101.3.1, A101.3.2, A101.3.3 (New), A101.3.4, A101.3.5, A101.3.6, A101.3.7, A101.3.8 (New), A101.4, A101.5, A101.5.1, A101.5.2 (New), A101.5.3, A101.5 (New), A101.7, A101.7.1, A101.7.2, A101.8; IPSDC®: APPENDIX A (New), SECTION A101 (New), A101.1 (New), A101.2 (New), A101.2.1 (New), A101.2.2 (New), [A] A101.3, [A] A101.3.1, [A] A101.3.2, A101.3.3 (New), [A] A101.3.4, [A] A101.3.5, [A] A101.3.6, [A] A101.3.7, A101.3.8 (New), [A] A101.4, [A] A101.5, [A] A101.5.1, A101.5.2 (New), [A] A101.5.3, A101.6 (New), [A] A101.7, [A] A101.7.1, [A] A101.7.2, [A] A101.8; IPMC®: APPENDIX A (New), SECTION A101 (New), A101.1 (New), A101.2 (New), A101.2.1 (New), [A] A101.2.2, [A] A101.3, A101.3.1 (New), [A] A101.3.2, A101.3.3 (New), [A] A101.3.4, [A] A101.3.5, [A] A101.3.6, [A] A101.3.7, A101.3.8 (New), [A] A101.4, [A] A101.5, [A] A101.5.1, A101.5.2 (New), [A] A101.5.3, A101.6 (New), [A] A101.7, [A] A101.7.1, [A] A101.7.2, [A] A101.8; ISPSC®: APPENDIX A (New), SECTION A101 (New), A101.1 (New), A101.2 (New), A101.2.1 (New), A101.2.2 (New), [A] A101.3, [A] A101.3.1, [A] A101.3.2, A101.3.3 (New), [A] A101.3.4, [A] A101.3.5, [A] A101.3.6, [A] A101.3.7, A101.3.8 (New), [A] A101.4, [A] A101.5, [A] A101.5.1, A101.5.2 (New), [A] A101.5.3, A101.6 (New), [A] A101.7, [A] A101.7.1, [A] A101.7.2, [A] A101.8; IWUIC®: SECTION 106, [A] 106.1, A (New), SECTION A101 (New), A101.1 (New), A101.2 (New), A101.2.1 (New), A101.2.2 (New), A101.3 (New), A101.3.1 (New), A101.3.2 (New), A101.3.3 (New), A101.3.4 (New), A101.3.5 (New), A101.3.6 (New), A101.3.7 (New), A101.3.8 (New), A101.4 (New), A101.5 (New), A101.5.1 (New), A101.5.2 (New), A101.5.3 (New), A101.6 (New), A101.7 (New), A101.7.1 (New), A101.7.2 (New), A101.8 (New)

Proposed Change as Submitted

Proponents: Ed Kulik, representing ICC Building Code Action Committee (bcac@iccsafe.org); Pennie Feehan, representing Plumbing, Mechanical, and Fuel Gas Code Action Committee (pmgcac@iccsafe.org); Michael O'Brian, representing FCAC (fcac@iccsafe.org); David Collins, representing SEHPCAC (sehpcac@iccsafe.org)

THIS IS A 4 PART CODE CHANGE. PART I WILL BE HEARD BY THE ADMINISTRATIVE CODE COMMITTEE. PART II WILL BE HEARD BY THE IRC-BUILDING CODE COMMITTEE. PART III WILL BE HEARD BY THE IECC-COMMERCIAL CODE COMMITTEE. PART IV WILL BE HEARD BY THE IECC-RESIDENTIAL CODE COMMITTEE. SEE THE TENTATIVE HEARING ORDER FOR THESE COMMITTEES.

2018 International Building Code

APPENDIX B
BOARD OF APPEALS

Revise as follows:

SECTION B101 GENERAL

Delete without substitution:

[A] B101.1 Application. Applications for appeal shall be obtained from the building official. Applications shall be filed within 20 days after notice has been served.

Add new text as follows:

B101.1 Scope. A board of appeals shall be established within the jurisdiction for the purpose of hearing applications for modification of the requirements of this code pursuant to the provisions of Section 113 (Means of Appeals). The board shall be established and operated in

accordance with this section, and shall be authorized to hear evidence from appellants and the building official pertaining to the application and intent of this code for the purpose of issuing orders pursuant to these provisions.

B101.2 Application for appeal. Any person shall have the right to appeal a decision of the building official to the board. An application for appeal shall be based on a claim that the intent of this code or the rules legally adopted hereunder have been incorrectly interpreted, the provisions of this code do not fully apply or an equally good or better form of construction is proposed. The application shall be filed on a form obtained from the building official within 20 days after the notice was served.

B101.2.1 Limitation of authority. The board shall not have authority to waive requirements of this code or interpret the administration of this code.

B101.2 Stays of enforcement. Appeals of notice and orders, other than Imminent Danger notices, shall stay the enforcement of the notice and order until the appeal is heard by the board.

Revise as follows:

[A] B101.3 Membership of board. The board of appeals shall consist of persons five voting members appointed by the chief appointing authority of the jurisdiction. Each member shall serve for [INSERT NUMBER OF YEARS] years or until a successor has been appointed. The board member's terms shall be staggered at intervals, so as to provide continuity. The code official shall be an ex officio member of said board but shall not vote on any matter before the board. as follows:

- 1. One for 5 years; one for 4 years; one for 3 years; one for 2 years; and one for 1 year.
- 2. Thereafter, each new member shall serve for 5 years or until a successor has been appointed.

The building official shall be an ex officio member of said board but shall have no vote on any matter before the board.

[A] B101.2.2 B101.3.1 Qualifications. The board of appeals shall consist of five individuals, who are qualified by experience and training to pass on matters pertaining to building construction and are not employees of the jurisdiction one from each of the following professions or disciplines:

- 1. Registered design professional with architectural experience or a builder or superintendent of building construction with not fewer than 10 years of experience, 5 of which shall have been in responsible charge of work.
- 2. Registered design professional with structural engineering experience.
- 3. Registered design professional with mechanical and plumbing engineering experience or a mechanical contractor with not fewer than 10 years of experience, 5 of which shall have been in responsible charge of work.
- 4. Registered design professional with electrical engineering experience or an electrical contractor with not fewer than 10 years of experience, 5 of which shall have been in responsible charge of work.
- 5. Registered design professional with fire protection engineering experience or a fire protection contractor with not fewer than 10 years of experience, 5 of which shall have been in responsible charge of work.

[A] B101.3.2 Alternate members. The chief appointing authority shall is authorized to appoint two alternate members who shall be called by the board chairperson to hear appeals during the absence or disqualification of a member. Alternate members shall possess the qualifications required for board membership, and shall be appointed for 5 years, the same term or until a successor has been appointed.

Add new text as follows:

B101.3.3 Vacancies. Vacancies shall be filled for an unexpired term in the same manner in which original appointments are required to be made.

Revise as follows:

[A] B101.3.4 B101.3.4 Chairperson. The board shall annually select one of its members to serve as chairperson.

[A] <u>B101.2.6</u> <u>B101.3.5</u> <u>Secretary.</u> The chief <u>administrative officer appointing authority</u> shall designate a qualified clerk to serve as secretary to the board. The secretary shall file a detailed record of all proceedings in the office of the chief administrative officer. which shall set forth the reasons for the board's decision, the vote of each member, the absence of a member and any failure of a member to vote.

[A] B101.3.6 Disqualification Conflict of member, interest. A member shall not hear an appeal in which that member has a with any personal, professional or financial interest. Interest in a matter before the board shall declare such interest and refrain from participating in discussions, deliberations and voting on such matters.

[A] B101.2.7 B101.3.7 Compensation of members. Compensation of members shall be determined by law.

Add new text as follows:

B101.3.8 Removal from the board. A member shall be removed from the board prior to the end of their terms only for cause. Any member with continued absence from regular meeting of the board may be removed at the discretion of the chief appointing authority.

Revise as follows:

[A] B101.4 Rules and procedures. The board is authorized to shall establish policies and procedures necessary to carry out its duties consistent with the provisions of this code and applicable state law. The procedures shall not require compliance with strict rules of evidence, but shall mandate that only relevant information be presented.

[A] B101.5 Notice of meeting. The board shall meet upon notice from the chairperson, within 10 days of the filing of an appeal or at stated periodic meetings.

[A] B101.5.1 Open hearing. All hearings before the board shall be open to the public. The appellant, the appellant's representative, the building official and any person whose interests are affected shall be given an opportunity to be heard.

Add new text as follows:

B101.5.2 Quorum. Three members of the board shall constitute a guorum.

Delete without substitution:

[A] B101.3.2 Procedure. The board shall adopt and make available to the public through the secretary procedures under which a hearing will be conducted. The procedures shall not require compliance with strict rules of evidence, but shall mandate that only relevant information be received.

Revise as follows:

[A] B101.5.3 Postponed hearing. When five members are not present to hear an appeal, either the appellant or the appellant's representative shall have the right to request a postponement of the hearing.

Add new text as follows:

B101.6 Legal counsel. The jurisdiction shall furnish legal counsel to the board to provide members with general legal advice concerning matters before them for consideration. Members shall be represented by legal counsel at the jurisdiction's expense in all matters arising from service within the scope of their duties.

Revise as follows:

[A] B101.4 B101.7 Board decision. The board shall modify or reverse the decision of the building official by a concurring vote of two-thirds of its members. The board shall only modify or reverse the decision of the code official by a concurring vote of three or more members.

[A] B101.7.1 Resolution. The decision of the board shall be by resolution. Gertified copies shall be Every decision shall be promptly filed in writing in the office of the code official within three days and shall be open to the public for inspection. A certified copy shall be furnished to the appellant or the appellant's representative and to the building code official.

[A] B101.7.2 Administration. The building official shall take immediate action in accordance with the decision of the board.

Add new text as follows:

B101.8 Court review. Any person, whether or not a previous party of the appeal, shall have the right to apply to the appropriate court for a writ of certiorari to correct errors of law. Application for review shall be made in the manner and time required by law following the filling of the decision in the office of the chief administrative officer.

2018 International Existing Building Code

Add new text as follows:

APPENDIX A BOARD OF APPEALS

SECTION A101 GENERAL

A101.1 Scope. A board of appeals shall be established within the jurisdiction for the purpose of hearing applications for modification of the requirements of this code pursuant to the provisions of Section 112. The board shall be established and operated in accordance with this section, and shall be authorized to hear evidence from appellants and the code official pertaining to the application and intent of this code for the purpose of issuing orders pursuant to these provisions.

An application for appeal. Any person shall have the right to appeal a decision of the code official to the board. An application for appeal shall be based on a claim that the intent of this code or the rules legally adopted hereunder have been incorrectly interpreted, the provisions of this code do not fully apply or an equally good or better form of construction is proposed. The application shall be filed on a form obtained from the code official within 20 days after the notice was served.

A101.2.1 Limitation of authority. The board shall not have authority to waive requirements of this code or interpret the administration of this code.

A101.2.2 Stays of enforcement. Appeals of notice and orders, other than Imminent Danger notices, shall stay the enforcement of the notice and order until the appeal is heard by the board.

A101.3 Membership of board. The board shall consist of five voting members appointed by the chief appointing authority of the jurisdiction. Each

member shall serve for [INSERT NUMBER OF YEARS] years or until a successor has been appointed. The board member's terms shall be staggered at intervals, so as to provide continuity. The code official shall be an ex officio member of said board but shall not vote on any matter before the board.

- A101.3.1 Qualifications. The board shall consist of five individuals, who are qualified by experience and training to pass on matters pertaining to building construction and are not employees of the jurisdiction.
- A101.3.2 Alternate members. The chief appointing authority is authorized to appoint two alternate members who shall be called by the board chairperson to hear appeals during the absence or disqualification of a member. Alternate members shall possess the qualifications required for board membership, and shall be appointed for the same term or until a successor has been appointed.
- A101.3.3 Vacancies. Vacancies shall be filled for an unexpired term in the same manner in which original appointments are required to be made.
- A101.3.4 Chairperson. The board shall annually select one of its members to serve as chairperson.
- A101.3.5 Secretary. The chief appointing authority shall designate a qualified clerk to serve as secretary to the board. The secretary shall file a detailed record of all proceedings which shall set forth the reasons for the board's decision, the vote of each member, the absence of a member and any failure of a member to vote.
- A101.3.6 Conflict of interest. A member with any personal, professional or financial interest in a matter before the board shall declare such interest and refrain from participating in discussions, deliberations and voting on such matters.
- A101.3.7 Compensation of members. Compensation of members shall be determined by law.
- A101.3.8 Removal from the board. A member shall be removed from the board prior to the end of their terms only for cause. Any member with continued absence from regular meeting of the board may be removed at the discretion of the chief appointing authority.
- A101.4 Rules and procedures. The board shall establish policies and procedures necessary to carry out its duties consistent with the provisions of this code and applicable state law. The procedures shall not require compliance with strict rules of evidence, but shall mandate that only relevant information be presented.
- A101.5 Notice of meeting. The board shall meet upon notice from the chairperson, within 10 days of the filing of an appeal or at stated periodic intervals.
- A101.5.1 Open hearing. All hearings before the board shall be open to the public. The appellant, the appellant's representative, the code official and any person whose interests are affected shall be given an opportunity to be heard.
- A101.5.2 Quorum. Three members of the board shall constitute a quorum.
- A101.5.3 Postponed hearing. When five members are not present to hear an appeal, either the appellant or the appellant's representative shall have the right to request a postponement of the hearing.
- A101.6 Legal counsel. The jurisdiction shall furnish legal counsel to the board to provide members with general legal advice concerning matters before them for consideration. Members shall be represented by legal counsel at the jurisdiction's expense in all matters arising from service within the scope of their duties.
- A101.7 Board decision. The board shall only modify or reverse the decision of the code official by a concurring vote of three or more members.
- A101.7.1 Resolution. The decision of the board shall be by resolution. Every decision shall be promptly filed in writing in the office of the code official within three days and shall be open to the public for inspection. A certified copy shall be furnished to the appellant or the appellant's representative and to the code official.
- A101.7.2 Administration. The code official shall take immediate action in accordance with the decision of the board.
- A101.8 Court review. Any person, whether or not a previous party of the appeal, shall have the right to apply to the appropriate court for a writ of certiorari to correct errors of law. Application for review shall be made in the manner and time required by law following the filing of the decision in the office of the chief administrative officer.

2018 International Fire Code

APPENDIX A BOARD OF APPEALS

Revise as follows:

SECTION A101 GENERAL

A101.1 Scope. A board of appeals shall be established within the jurisdiction for the purpose of hearing applications for modification of the

requirements of the International Fire Code this code pursuant to the provisions of Section 108 of the International Fire Code. 109. The board shall be established and operated in accordance with this section, and shall be authorized to hear evidence from appellants and the fire code official pertaining to the application and intent of this code for the purpose of issuing orders pursuant to these provisions.

Add new text as follows:

An application for appeal. Any person shall have the right to appeal a decision of the fire code official to the board. An application for appeal shall be based on a claim that the intent of this code or the rules legally adopted hereunder have been incorrectly interpreted, the provisions of this code do not fully apply or an equally good or better form of construction is proposed. The application shall be filed on a form obtained from the fire code official within 20 days after the notice was served.

A101.2.1 Limitation of authority. The board shall not have authority to waive requirements of this code or interpret the administration of this code.

A102.2.2 Stays of enforcement. Appeals of notice and orders, other than Imminent Danger notices, shall stay the enforcement of the notice and order until the appeal is heard by the board.

Delete without substitution:

A101.2 Membership. The membership of the board shall consist of five voting members having the qualifications established by this section.

Members shall be nominated by the *fire code official* or the chief administrative officer of the jurisdiction, subject to confirmation by a majority vote of the governing body. Members shall serve without remuneration or compensation, and shall be removed from office prior to the end of their appointed terms only for cause.

A101.2.1 Design professional. One member shall be a practicing design professional registered in the practice of engineering or architecture in the state in which the board is established.

A101.2.2 Fire protection engineering professional. One member shall be a qualified engineer, technologist, technician or safety professional trained in fire protection engineering, fire science or fire technology. Qualified representatives in this category shall include fire protection contractors and certified technicians engaged in fire protection system design.

A101.2.3 Industrial safety professional. One member shall be a registered industrial or chemical engineer, certified hygienist, certified safety professional, certified hazardous materials manager or comparably qualified specialist experienced in chemical process safety or industrial safety.

A101.2.4 General contractor. One member shall be a contractor regularly engaged in the construction, alteration, maintenance, repair or remodeling of buildings or building services and systems regulated by the code.

A101.2.5 General industry or business representative. One member shall be a representative of business or industry not represented by a member from one of the other categories of board members described in Sections A101.2.1 through A101.2.4.

Revise as follows:

A101.3 Terms Membership of of office. board. Members shall be appointed for terms of 4 years. Members shall not be reappointed to serve more than two consecutive full terms.

The board shall consist of five voting members appointed by the chief appointing authority of the jurisdiction. Each member shall serve for [INSERT NUMBER OF YEARS] years or until a successor has been appointed. The board member's terms shall be staggered at intervals, so as to provide continuity. The fire code official shall be an ex officion member of said board but shall not vote on any matter before the board.

Delete without substitution:

A101.3.1 Initial appointments. Of the members first appointed, two shall be appointed for a term of 1 year, two for a term of 2 years, one for a term of 3 years.

Add new text as follows:

A101.3.1 Qualifications. The board shall consist of members who are qualified by experience and training to pass on matters pertaining to hazards of fire, explosions, hazardous conditions or fire protection systems, and are not employees of the jurisdiction.

A101.3.2 Alternate members. The chief appointing authority is authorized to appoint two alternate members who shall be called by the board chairperson to hear appeals during the absence or disqualification of a member. Alternate members shall possess the qualifications required for board membership, and shall be appointed for the same term or until a successor has been appointed.

Revise as follows:

A101.3.2 Vacancies. Vacancies shall be filled for an unexpired term in the same manner in which original appointments are required to be made. Members appointed to fill a vacancy in an unexpired term shall be eligible for reappointment to two full terms.

Add new text as follows:

A101.3.4 Chairperson. The board shall annually select one of its members to serve as chairperson.

Revise as follows:

A101.5 A101.3.5 Secretary of board. The fire code official shall act as secretary of the board and shall keep chief appointing authority shall designate a qualified clerk to serve as secretary to the board. The secretary shall file a detailed record of all its proceedings, which shall set forth the reasons for its decisions the board's decision, the vote of each member, the absence of a member and any failure of a member to vote.

Delete without substitution:

A101.9 Decisions. Every decision shall be promptly filed in writing in the office of the fire code official and shall be open to public inspection. A certified copy shall be sent by mail or otherwise to the appellant, and a copy shall be kept publicly posted in the office of the fire code official for 2 weeks after filing.

Revise as follows:

A101.3.6 Conflict of interest. Members with a material A member with any personal, professional or financial interest in a matter before the board shall declare such interest and refrain from participating in discussions, deliberations and voting on such matters.

Add new text as follows:

A101.3.7 Compensation of members. Compensation of members shall be determined by law.

Revise as follows:

A101.3.3 A101.3.8 Removal from office the board. Members A member shall be removed from office the board prior to the end of their terms only for cause. Continued absence of any member cause. Any member with continued absence from regular meetings meeting of the board shall, may be removed at the discretion of the applicable governing body, render any such member liable to immediate removal from office. chief appointing authority.

A101.10 A101.4 Procedures. Rules and procedures. The board shall be operated in accordance with the Administrative Procedures Act of the state in which it is established or shall establish rules and regulations for its own procedure not inconsistent establish policies and procedures necessary to carry out its duties consistent with the provisions of this code and applicable state law. The procedures shall not require compliance with strict rules of evidence, but shall mandate that only relevant information be presented.

A101.7 A101.5 Meetings. Notice of meetings. The board shall meet at regular intervals, to be determined by the chairman. In any event, the board shall meet upon notice from the chairperson, within 10 days after notice of appeal has been received, the filing of an appeal or at stated periodic intervals.

Add new text as follows:

A101.5.1 Open hearing. All hearings before the board shall be open to the public. The appellant, the appellant's representative, the fire code official and any person whose interests are affected shall be given an opportunity to be heard.

Revise as follows:

A101.4_A101.5.2 Quorum. Three members of the board shall constitute a quorum. In varying the application of any provisions of this code or in modifying an order of the fire code official, affirmative votes of the majority present, but not less than three, shall be required.

Add new text as follows:

A101.5.3 Postponed hearing. When five members are not present to hear an appeal, either the appellant or the appellant's representative shall have the right to request a postponement of the hearing.

Revise as follows:

A101.6 Legal counsel. The jurisdiction shall furnish legal counsel to the board to provide members with general legal advice concerning matters before them for consideration. Consideration. Members shall be represented by legal counsel at the jurisdiction's expense in all matters arising from service within the scope of their duties.

Add new text as follows:

A101.7 Board decision. The board shall only modify or reverse the decision of the fire code official by a concurring vote of three or more members.

A101.7.1 Resolution. The decision of the board shall be by resolution. Every decision shall be promptly filed in writing in the office of the fire code official within three days and shall be open to the public for inspection. A certified copy shall be furnished to the appellant or the appellant's representative and to the fire code official.

A101.7.2 Administration. The fire code official shall take immediate action in accordance with the decision of the board.

A101.8 Court review. Any person, whether or not a previous party of the appeal, shall have the right to apply to the appropriate court for a writ of certiorari to correct errors of law. Application for review shall be made in the manner and time required by law following the filling of the decision in the

2018 International Fuel Gas Code

Add new text as follows:

APPENDIX A BOARD OF APPEALS

A101 GENERAL

A101.1 Scope. A board of appeals shall be established within the jurisdiction for the purpose of hearing applications for modification of the requirements of this code pursuant to the provisions of Section 109 (Means of Appeals). The board shall be established and operated in accordance with this section, and shall be authorized to hear evidence from appellants and the code official pertaining to the application and intent of this code for the purpose of issuing orders pursuant to these provisions.

Any person shall have the right to appeal a decision of the code official to the board. An application for appeal shall be based on a claim that the intent of this code or the rules legally adopted hereunder have been incorrectly interpreted, the provisions of this code do not fully apply or an equally good or better form of construction is proposed. The application shall be filed on a form obtained from the code official within 20 days after the notice was served.

A101.2.1 Limitation of authority. The board shall not have authority to waive requirements of this code or interpret the administration of this code.

A101.2.2 Stays of enforcement. Appeals of notice and orders, other than Imminent Danger notices, shall stay the enforcement of the notice and order until the appeal is heard by the board.

Revise as follows:

[A] 109.2 A101.3 Membership of board. The board of appeals shall consist of five voting members appointed by the chief appointing authority as follows: one for 5 years; one for 4 years; one for 3 years; one for 2 years and one for 1 year. Thereafter, each new of the jurisdiction. Each member shall serve for 5 [INSERT NUMBER OF YEARS] years or until a successor has been appointed. The board member's terms shall be staggered at intervals, so as to provide continuity. The code official shall be an ex officio member of said board but shall not vote on any matter before the board.

[A] 109.2.1 A101.3.1 Qualifications. The board of appeals shall consist of five individuals, who are qualified by experience and training to pass on matters pertaining to building construction and are not employees of the jurisdiction.one from each of the following professions or disciplines.

- 1. Registered design professional who is a registered architect; or a builder or superintendent of building construction with not less than 10 years' experience, 5 of which shall have been in responsible charge of work.
- 2. Registered design professional with structural engineering or architectural experience.
- 3. Registered design professional with fuel gas and plumbing engineering experience; or a fuel gas contractor with not less than 10 years' experience, 5 of which shall have been in responsible charge of work.
- 4. Registered design professional with electrical engineering experience; or an electrical contractor with not less than 10 years' experience, 5 of which shall have been in responsible charge of work.
- 5. Registered design professional with fire protection engineering experience; or a fire protection contractor with not less than 10 years' experience, 5 of which shall have been in responsible charge of work.

[A] 109.2.2 Alternate members. The chief appointing authority shall is authorized to appoint two alternate members who shall be called by the board chairman chairperson to hear appeals during the absence or disqualification of a member. Alternate members shall possess the qualifications required for board membership, and shall be appointed for 5 years, the same term or until a successor has been appointed.

Add new text as follows:

A101.3.3 Vacancies. Vacancies shall be filled for an unexpired term in the same manner in which original appointments are required to be made.

Revise as follows:

- [A] 109.2.3 A101.3.4 Chairman. Chairperson. The board shall annually select one of its members to serve as chairman. chairperson.
- [A] 109.2.5 A101.3.5 Secretary. The chief administrative officer appointing authority shall designate a qualified clerk to serve as secretary to the board. The secretary shall file a detailed record of all proceedings in the office of the chief administrative officer, which shall set forth the reasons for the board's decision, the vote of each member, the absence of a member and any failure of a member to vote.
- [A] 109.2.4 A101.3.6 Disqualification Conflict of member. interest. A member shall not hear an appeal in which that member has a with any personal, professional or financial interest in a matter before the board shall declare such interest and refrain from participating in discussions, deliberations and voting on such matters.
- [A] 109.2.6 A101.3.7 Compensation of members. Compensation of members shall be determined by law.

Add new text as follows:

A101.3.8 Removal from the board. A member shall be removed from the board prior to the end of their terms only for cause. Any member with continued absence from regular meeting of the board may be removed at the discretion of the chief appointing authority.

Revise as follows:

[A] 109.4.1 A101.4 Procedure. Rules and procedures. The board shall adopt and make available to the public through the secretary procedures under which a hearing will be conducted. establish policies and procedures necessary to carry out its duties consistent with the provisions of this code and applicable state law. The procedures shall not require compliance with strict rules of evidence, but shall mandate that only relevant information be received. presented.

[A] 109.3 A101.5 Notice of meeting. The board shall meet upon notice from the chairman chairperson, within 10 days of the filing of an appeal, or at stated periodic meetings: intervals.

Add new text as follows:

[A] A101.5.1 Open hearing. All hearings before the board shall be open to the public. The appellant, the appellant's representative, the code official and any person whose interests are affected shall be given an opportunity to be heard.

A101.5.2 Quorum. Three members of the board shall constitute a quorum.

Revise as follows:

[A] 109.5 A101.5.3 Postponed hearing. Where When five members are not present to hear an appeal, either the appellant or the appellant's representative shall have the right to request a postponement of the hearing.

Add new text as follows:

A101.6 Legal counsel. The jurisdiction shall furnish legal counsel to the board to provide members with general legal advice concerning matters before them for consideration. Members shall be represented by legal counsel at the jurisdiction's expense in all matters arising from service within the scope of their duties.

Revise as follows:

[A] 109.6 A101.7 Board decision. The board shall only modify or reverse the decision of the code official by a concurring vote of three or more members.

[A] 109.6.1 A101.7.1 Resolution. The decision of the board shall be by resolution. Certified copies shall be Every decision shall be promptly filed in writing in the office of the code official within three days and shall be open to the public for inspection. A certified copy shall be furnished to the appellant or the appellant's representative and to the code official.

[A] 109.6.2 A101.7.2 Administration. The code official shall take immediate action in accordance with the decision of the board.

[A] 109.7 A101.8 Court review. Any person, whether or not a previous party to of the appeal, shall have the right to apply to the appropriate court for a writ of certiorari to correct errors of law. Application for review shall be made in the manner and time required by law following the filing of the decision in the office of the chief administrative officer.

2018 International Mechanical Code

Add new text as follows:

APPENDIX A BOARD OF APPEALS

SECTION A101 GENERAL

A101.1 Scope. A board of appeals shall be established within the jurisdiction for the purpose of hearing applications for modification of the requirements of this code pursuant to the provisions of Section 109 (Means of Appeals). The board shall be established and operated in accordance with this section, and shall be authorized to hear evidence from appellants and the code official pertaining to the application and intent of this code for the purpose of issuing orders pursuant to these provisions.

Any person shall have the right to appeal a decision of the code official to the board. An application for appeal shall be based on a claim that the intent of this code or the rules legally adopted hereunder have been incorrectly interpreted, the provisions of this code do not fully apply or an equally good or better form of construction is proposed. The application shall be filed on a form obtained from the code official within 20 days after the notice was served.

A101.2.1 Limitation of authority. The board shall not have authority to waive requirements of this code or interpret the administration of this code.

A101.2.2 Stays of enforcement. Appeals of notice and orders, other than Imminent Danger notices, shall stay the enforcement of the notice and order until the appeal is heard by the board.

Revise as follows:

[A] 109.2 A101.3 Membership of board. The board of appeals shall consist of five voting members appointed by the chief appointing authority as follows: one for 5 years; one for 4 years; one for 3 years; one for 2 years; and one for 1 year. Thereafter, each new of the jurisdiction. Each member shall serve for 5 [INSERT NUMBER OF YEARS] years or until a successor has been appointed. The board member's terms shall be staggered at intervals, so as to provide continuity. The code official shall be an ex officion member of said board but shall not vote on any matter before the board.

[A] 109.2.1 A101.3.1 Qualifications. The board of appeals shall consist of five individuals, who are qualified by experience and training to pass on matters pertaining to building construction and are not employees of the jurisdiction. one from each of the following professions or disciplines.

- 1. Registered design professional who is a registered architect; or a builder or superintendent of building construction with not less than 10 years' experience, 5 of which shall have been in responsible charge of work.
- 2. Registered design professional with structural engineering or architectural experience.
- 3. Registered design professional with mechanical and plumbing engineering experience; or a mechanical contractor with not less than 10 years' experience. 5 of which shall have been in responsible charge of work.
- 4. Registered design professional with electrical engineering experience; or an electrical contractor with not less than 10 years' experience, 5 of which shall have been in responsible charge of work.
- 5. Registered design professional with fire protection engineering experience; or a fire protection contractor with not less than 10 years' experience, 5 of which shall have been in responsible charge of work.

[A] 109.2.2 Alternate members. The chief appointing authority shall is authorized to appoint two alternate members who shall be called by the board chairman chairperson to hear appeals during the absence or disqualification of a member. Alternate members shall possess the qualifications required for board membership, and shall be appointed for 5 years, the same term or until a successor has been appointed.

A101.3.3 Vacancies. Vacancies shall be filled for an unexpired term in the same manner in which original appointments are required to be made.

[A] 109.2.3 A101.3.4 Chairman. Chairperson. The board shall annually select one of its members to serve as chairman. chairperson.

[A] 109.2.5 A101.3.5 Secretary. The chief administrative officer appointing authority shall designate a qualified clerk to serve as secretary to the board. The secretary shall file a detailed record of all proceedings in the office of the chief administrative officer. which shall set forth the reasons for the board's decision, the vote of each member, the absence of a member and any failure of a member to vote.

[A] 109.2.4 A101.3.6 Disqualification Conflict of member. interest. A member shall not hear an appeal in which that member has a with any personal, professional or financial interest in a matter before the board shall declare such interest and refrain from participating in discussions, deliberations and voting on such matters.

[A] 109.2.6 A101.3.7 Compensation of members. Compensation of members shall be determined by law.

Add new text as follows:

A101.3.8 Removal from the board. A member shall be removed from the board prior to the end of their terms only for cause. Any member with continued absence from regular meeting of the board may be removed at the discretion of the chief appointing authority.

Revise as follows:

[A] 109.4.1 A101.4 Procedure. Rules and procedures. The board shall adopt and make available to the public through the secretary procedures under which a hearing will be conducted. establish policies and procedures necessary to carry out its duties consistent with the provisions of this code and applicable state law. The procedures shall not require compliance with strict rules of evidence, but shall mandate that only relevant information be received. presented.

[A] 109.3 A101.5 Notice of meeting. The board shall meet upon notice from the chairman chairperson, within 10 days of the filing of an appeal -or at stated periodic meetings. intervals.

Add new text as follows:

[A] A101.5.1 Open hearing. All hearings before the board shall be open to the public. The appellant, the appellant's representative, the code official and any person whose interests are affected shall be given an opportunity to be heard.

A101.5.2 Quorum. Three members of the board shall constitute a quorum.

Revise as follows:

[A] 109.5 A101.5.3 Postponed hearing. When five members are not present to hear an appeal, either the appellant or the appellant's representative shall have the right to request a postponement of the hearing.

Add new text as follows:

A101.6 Legal counsel.. The jurisdiction shall furnish legal counsel to the board to provide members with general legal advice concerning matters before them for consideration. Members shall be represented by legal counsel at the jurisdiction's expense in all matters arising from service within the scope of their duties.

Revise as follows:

[A] 109.6 A101.7 Board decision. The board shall only modify or reverse the decision of the code official by a concurring vote of three or more members.

[A] 109.6.1 A101.7.1 Resolution. The decision of the board shall be by resolution. Certified copies shall be Every decision shall be promptly filed in writing in the office of the code official within three days and shall be open to the public for inspection. A certified copy shall be furnished to the appellant or the appellant's representative and to the code official.

[A] 109.6.2 A101.7.2 Administration. The code official shall take immediate action in accordance with the decision of the board.

[A] 109.7 A101.8 Court review. Any person, whether or not a previous party of the appeal, shall have the right to apply to the appropriate court for a writ of certiorari to correct errors of law. Application for review shall be made in the manner and time required by law following the filing of the decision in the office of the chief administrative officer.

2018 International Plumbing Code

Add new text as follows:

APPENDIX A BOARD OF APPEALS

SECTION A101 GENERAL

A101.1 Scope. A board of appeals shall be established within the jurisdiction for the purpose of hearing applications for modification of the requirements of this code pursuant to the provisions of Section XXX (Means of Appeals). The board shall be established and operated in accordance with this section, and shall be authorized to hear evidence from appellants and the code official pertaining to the application and intent of this code for the purpose of issuing orders pursuant to these provisions.

A101.2 Application for appeal. Any person shall have the right to appeal a decision of the code official to the board. An application for appeal shall be based on a claim that the intent of this code or the rules legally adopted hereunder have been incorrectly interpreted, the provisions of this code do not fully apply or an equally good or better form of construction is proposed. The application shall be filed on a form obtained from the code official within 20 days after the notice was served.

A101.2.1 Limitation of authority. The board shall not have authority to waive requirements of this code or interpret the administration of this code.

A101.2.2 Stays of enforcement. Appeals of notice and orders, other than Imminent Danger notices, shall stay the enforcement of the notice and order until the appeal is heard by the board.

Revise as follows:

109.2 A101.3 Membership of board. The board of appeals shall consist of five voting members appointed by the chief appointing authority as follows: one for 5 years, one for 4 years, one for 3 years, one for 2 years and one for 1 year. Thereafter, each new of the jurisdiction. Each member shall serve for 5 [INSERT NUMBER OF YEARS] years or until a successor has been appointed. The board member's terms shall be staggered at intervals, so as to provide continuity. The code official shall be an ex officio member of said board but shall not vote on any matter before the board.

109.2.1 A101.3.1 Qualifications. The board of appeals shall consist of five individuals, who are qualified by experience and training to pass on matters pertaining to building construction and are not employees of the jurisdiction, one from each of the following professions or disciplines:

- 1. Registered design professional who is a registered architect; or a builder or superintendent of building construction with not less than 10 years' experience, 5 years of which shall have been in responsible charge of work.
- 2. Registered design professional with structural engineering or architectural experience.
- 3. Registered design professional with mechanical and plumbing engineering experience; or a mechanical and plumbing contractor with not less than 10 years' experience, 5 years of which shall have been in responsible charge of work.
- 4. Registered design professional with electrical engineering experience; or an electrical contractor with not less than 10 years' experience, 5 years of which shall have been in responsible charge of work.
- 5. Registered design professional with fire protection engineering experience; or a fire protection contractor with not less than 10 years' experience, 5 years of which shall have been in responsible charge of work.

109.2.2 A101.3.2 Alternate members. The chief appointing authority shall is authorized to appoint two alternate members who shall be called by the board chairman chairperson to hear appeals during the absence or disqualification of a member. Alternate members shall possess the qualifications required for board membership, and shall be appointed for 5 years the same term or until a successor has been appointed.

Add new text as follows:

A101.3.3 Vacancies. Vacancies shall be filled for an unexpired term in the same manner in which original appointments are required to be made.

Revise as follows:

109.2.3 A101.3.4 Chairman. Chairperson. The board shall annually select one of its members to serve as chairman. chairperson.

109.2.5 A101.3.5 Secretary. The chief administrative officer appointing authority shall designate a qualified clerk to serve as secretary to the board. The secretary shall file a detailed record of all proceedings in the office of the chief administrative officer, which shall set forth the reasons for the board's decision, the vote of each member, the absence of a member and any failure of a member to vote.

109.2.4 A101.3.6 Disqualification Conflict of member. interest. A member shall not hear an appeal in which that member has with any personal, professional or financial interest. interest in a matter before the board shall declare such interest and refrain from participating in discussions, deliberations and voting on such matters.

109.2.6 A101.3.7 Compensation of members. Compensation of members shall be determined by law.

Add new text as follows:

A101.3.8 Removal from the board. A member shall be removed from the board prior to the end of their terms only for cause. Any member with continued absence from regular meeting of the board may be removed at the discretion of the chief appointing authority.

Revise as follows:

109.4.1 A101.4 Procedure. Rules and procedures. The board shall adopt and make available to the public through the secretary procedures under which a hearing will be conducted. establish policies and procedures necessary to carry out its duties consistent with the provisions of this code and applicable state law. The procedures shall not require compliance with strict rules of evidence, but shall mandate that only relevant information be received, presented.

109.3 A101.5 Notice of meeting. The board shall meet upon notice from the ehairman chairperson, within 10 days of the filing of an appeal or at stated periodic meetings, intervals.

199.4 A101.5.1 Open hearing. Hearings All hearings before the board shall be open to the public. The appellant, the appellant's representative, the code official and any person whose interests are affected shall be given an opportunity to be heard.

Add new text as follows:

A101.5.2 Quorum. Three members of the board shall constitute a quorum.

Revise as follows:

109.5 A101.5.3 Postponed hearing. When five members are not present to hear an appeal, either the appellant or the appellant's representative shall have the right to request a postponement of the hearing.

Add new text as follows:

A101.6 Legal counsel. The jurisdiction shall furnish legal counsel to the board to provide members with general legal advice concerning matters before them for consideration. Members shall be represented by legal counsel at the jurisdiction's expense in all matters arising from service within the scope of their duties.

Revise as follows:

109.6 A101.7 Board decision. The board shall only modify or reverse the decision of the code official by a concurring vote of three or more members.

109.6.1 A101.7.1 Resolution. The decision of the board shall be by resolution. Gertified copies shall be Every decision shall be promptly filed in writing in the office of the code official within three days and shall be open to the public for inspection. A certified copy shall be furnished to the appellant or the appellant's representative and to the code official.

109.6.2 A101.7.2 Administration. The code official shall take immediate action in accordance with the decision of the board.

109.7 A101.8 Court review. Any person, whether or not a previous party of the appeal, shall have the right to apply to the appropriate court for a writ of certiorari to correct errors of law. Application for review shall be made in the manner and time required by law following the filing of the decision in the office of the chief administrative officer.

2018 International Private Sewage Disposal Code

Add new text as follows:

APPENDIX A BOARD OF APPEALS

SECTION A101 GENERAL

A101.1 Scope. A board of appeals shall be established within the jurisdiction for the purpose of hearing applications for modification of the requirements of this code pursuant to the provisions of Section 109 (Means of Appeals). The board shall be established and operated in accordance with this section, and shall be authorized to hear evidence from appellants and the code official pertaining to the application and intent of this code for the purpose of issuing orders pursuant to these provisions.

A101.2 Application for appeal. Any person shall have the right to appeal a decision of the code official to the board. An application for appeal shall be based on a claim that the intent of this code or the rules legally adopted hereunder have been incorrectly interpreted, the provisions of this code do not fully apply or an equally good or better form of construction is proposed. The application shall be filed on a form obtained from the code official within 20 days after the notice was served.

A101.2.1 Limitation of authority. The board shall not have authority to waive requirements of this code or interpret the administration of this code.

A101.2.2 Stays of enforcement. Appeals of notice and orders, other than Imminent Danger notices, shall stay the enforcement of the notice and order until the appeal is heard by the board.

Revise as follows:

[A] 109.2 A101.3 Membership of board. The board of appeals shall consist of five voting members appointed by the chief appointing authority as follows: one for 5 years, one for 4 years, one for 3 years, one for 2 years and one for 1 year. Thereafter, each new of the jurisdiction. Each member shall serve for 5 [INSERT NUMBER OF YEARS] years or until a successor has been appointed. The board member's terms shall be staggered at intervals, so as to provide continuity. The code official shall be an ex officio member of said board but shall not vote on any matter before the board.

[A] 109.2.1 A101.3.1 Qualifications. The board of appeals shall consist of five individuals, who are qualified by experience and training to pass on matters pertaining to building construction and are not employees of the jurisdiction. one from each of the following professions or disciplines.

- 1. Registered design professional who is a registered architect; or a builder or superintendent of building construction with not less than 10 years' experience, 5 years of which shall have been in responsible charge of work.
- 2. Registered design professional with structural engineering or architectural experience.
- 3. Registered design professional with mechanical and plumbing engineering experience; or a mechanical and plumbing contractor with not less than 10 years' experience, 5 years of which shall have been in responsible charge of work.
- 4. Registered design professional with electrical engineering experience; or an electrical contractor with not less than 10 years' experience, 5 years of which shall have been in responsible charge of work.
- 5. Registered design professional with fire protection engineering experience; or a fire protection contractor with not less than 10 years' experience, 5 years of which shall have been in responsible charge of work.

[A] 109.2.2 A101.3.2 Alternate members. The chief appointing authority shall is authorized to appoint two alternate members who shall be called by the board chairman chairperson to hear appeals during the absence or disqualification of a member. Alternate members shall possess the qualifications required for board membership, and shall be appointed for 5 years the same term or until a successor has been appointed.

Add new text as follows:

A101.3.3 Vacancies. Vacancies shall be filled for an unexpired term in the same manner in which original appointments are required to be made.

Revise as follows:

[A] 109.2.3 A101.3.4 Chairman. Chairperson. The board shall annually select one of its members to serve as chairman. chairperson.

[A] 109.2.5 A101.3.5 Secretary. The chief administrative officer appointing authority shall designate a qualified clerk to serve as secretary to the board. The secretary shall file a detailed record of all proceedings in the office of the chief administrative officer. which shall set forth the reasons for the board's decision, the vote of each member, the absence of a member and any failure of a member to vote.

[A] 109.2.4 A101.3.6 Disqualification Conflict of a member. interest. A member shall not hear an appeal in which that member has with any personal, professional or financial interest in a matter before the board shall declare such interest and refrain from participating in discussions, deliberations and voting on such matters.

[A] 109.2.6 A101.3.7 Compensation of members. Compensation of members shall be determined by law.

Add new text as follows:

A101.3.8 Removal from the board. A member shall be removed from the board prior to the end of their terms only for cause. Any member with continued absence from regular meeting of the board may be removed at the discretion of the chief appointing authority.

Revise as follows:

[A] 109.4.1 A101.4 Procedure. Rules and procedures. The board shall adopt and make available to the public through the secretary procedures under which a hearing will be conducted. establish policies and procedures necessary to carry out its duties consistent with the provisions of this code and applicable state law. The procedures shall not require compliance with strict rules of evidence, but shall mandate that only relevant information be received. presented.

[A] 109.3 A101.5 Notice of meeting. The board shall meet upon notice from the chairman chairperson, within 10 days of the filing of an appeal or at stated periodic meetings. intervals.

Add new text as follows:

[A] A101.5.1 Open hearing. All hearings before the board shall be open to the public. The appellant, the appellant's representative, the code official and any person whose interests are affected shall be given an opportunity to be heard.

A101.5.2 Quorum. Three members of the board shall constitute a guorum.

Revise as follows:

[A] 109.5 A101.5.3 Postponed hearing. When five members are not present to hear an appeal, either the appellant or the appellant's representative shall have the right to request a postponement of the hearing.

Add new text as follows:

A101.6 Legal counsel. The jurisdiction shall furnish legal counsel to the board to provide members with general legal advice concerning matters before them for consideration. Members shall be represented by legal counsel at the jurisdiction's expense in all matters arising from service within the scope of their duties.

Revise as follows:

- [A] 109.6 A101.7 Board decision. The board shall only modify or reverse the decision of the code official by a concurring vote of three or more members.
- [A] 109.6.1 A101.7.1 Resolution. The decision of the board shall be by resolution. Certified copies shall be Every decision shall be promptly filed in writing in the office of the code official within three days and shall be open to the public for inspection. A certified copy shall be furnished to the appellant or the appellant's representative and to the code official.
- [A] 109.6.2 A101.7.2 Administration. The code official shall take immediate action in accordance with the decision of the board.
- [A] 109.7 A101.8 Court review. Any person, whether or not a previous party of the appeal, shall have the right to apply to the appropriate court for a writ of certiorari to correct errors of law. Application for review shall be made in the manner and time required by law following the filing of the decision in the office of the chief administrative officer.

2018 International Property Maintenance Code

Add new text as follows:

APPENDIX A BOARD OF APPEALS

SECTION A101 GENERAL

A101.1 Scope. A board of appeals shall be established within the jurisdiction for the purpose of hearing applications for modification of the requirements of this code pursuant to the provisions of Section 111 (Means of Appeals). The board shall be established and operated in accordance with this section, and shall be authorized to hear evidence from appellants and the code official pertaining to the application and intent of this code for the purpose of issuing orders pursuant to these provisions.

A101.2 Application for appeal. Any person shall have the right to appeal a decision of the code official to the board. An application for appeal shall be based on a claim that the intent of this code or the rules legally adopted hereunder have been incorrectly interpreted, the provisions of this code do not fully apply or an equally good or better form of construction is proposed. The application shall be filed on a form obtained from the code official within 20 days after the notice was served.

A101.2.1 Limitation of authority. The board shall not have authority to waive requirements of this code or interpret the administration of this code.

Revise as follows:

[A] 111.8 A101.2.2 Stays of enforcement. Appeals of notice and orders (other, other than Imminent Danger notices) notices, shall stay the enforcement of the notice and order until the appeal is heard by the appeals board.

[A] 111.2 A101.3 Membership of board. The board of appeals shall consist of not less than three members who are qualified by experience and

training to pass on matters pertaining to property maintenance and who are not employees of the jurisdiction. The five voting members appointed by the chief appointing authority of the jurisdiction. Each member shall serve for [INSERT NUMBER OF YEARS] years or until a successor has been appointed. The board member's terms shall be staggered at intervals, so as to provide continuity. The code official shall be an ex-officio member of said board but shall not vote on any matter before the board. The board shall be appointed by the chief appointing authority, and shall serve staggered and overlapping terms.

Add new text as follows:

A101.3.1 Qualifications. The board shall consist of five individuals, who are qualified by experience and training to pass on matters pertaining to building construction and are not employees of the jurisdiction.

Revise as follows:

[A] 111.2.1_A101.3.2 Alternate members. The chief appointing authority shall appoint not less than is authorized to appoint two alternate members who shall be called by the board chairman chairperson to hear appeals during the absence or disqualification of a member. Alternate members shall possess the qualifications required for board membership, membership, and shall be appointed for the same term or until a successor has been appointed.

Add new text as follows:

A101.3.3 Vacancies. Vacancies shall be filled for an unexpired term in the same manner in which original appointments are required to be made.

Revise as follows:

- [A] 111.2.2 A101.3.4 Chairman. Chairperson. The board shall annually select one of its members to serve as chairman. chairperson.
- [A] 111.2.4 A101.3.5 Secretary. The chief administrative officer appointing authority shall designate a qualified person clerk to serve as secretary to the board. The secretary shall file a detailed record of all proceedings in the office of the chief administrative officer, which shall set forth the reasons for the board's decision, the vote of each member, the absence of a member and any failure of a member to vote.
- [A] 111.2.3 A101.3.6 Disqualification Conflict of member. interest. A member shall not hear an appeal in which that member has a with any personal, professional or financial interest in a matter before the board shall declare such interest and refrain from participating in discussions, deliberations and voting on such matters.
- [A] 111.2.5 A101.3.7 Compensation of members. Compensation of members shall be determined by law.

Add new text as follows:

A101.3.8 Removal from the board. A member shall be removed from the board prior to the end of their terms only for cause. Any member with continued absence from regular meeting of the board may be removed at the discretion of the chief appointing authority.

Revise as follows:

- [A] 111.4.1 A101.4 Procedure. Rules and procedures. The board shall adopt and make available to the public through the secretary procedures under which a hearing will be conducted. establish policies and procedures necessary to carry out its duties consistent with the provisions of this code and applicable state law. The procedures shall not require compliance with strict rules of evidence, but shall mandate that only relevant information be received. presented.
- [A] 111.3 A101.5 Notice of meeting. The board shall meet upon notice from the chairman chairperson, within 20-10 days of the filing of an appeal, or at stated periodic meetings. intervals.

Add new text as follows:

[A] A101.5.1 Open hearing. All hearings before the board shall be open to the public. The appellant, the appellant's representative, the code official and any person whose interests are affected shall be given an opportunity to be heard.

A101.5.2 Quorum. Three members of the board shall constitute a quorum.

Revise as follows:

[A] 111.5 A101.5.3 Postponed hearing. When the full board is five members are not present to hear an appeal, either the appellant or the appellant's representative shall have the right to request a postponement of the hearing.

Add new text as follows:

A101.6 Legal counsel. The jurisdiction shall furnish legal counsel to the board to provide members with general legal advice concerning matters before them for consideration. Members shall be represented by legal counsel at the jurisdiction's expense in all matters arising from service within the scope of their duties.

Revise as follows:

[A] 111.6 A101.7 Board decision. The board shall only modify or reverse the decision of the code official only by a concurring vote of a majority of the total number of appointed board three or more members.

[A] 111.6.1 A101.7.1 Records and copies. Resolution. The decision of the board shall be recorded. Copies shall be by resolution. Every decision shall be promptly filed in writing in the office of the code official within three days and shall be open to the public for inspection. A certified copy shall be furnished to the appellant or the appellant's representative and to the code official.

[A] 111.6.2 A101.7.2 Administration. The code official shall take immediate action in accordance with the decision of the board.

[A] 111.7 A101.8 Court review. Any person, whether or not a previous party of the appeal, shall have the right to apply to the appropriate court for a writ of certiorari to correct errors of law. Application for review shall be made in the manner and time required by law following the filing of the decision in the office of the chief administrative officer.

2018 International Swimming Pool and Spa Code

Add new text as follows:

APPENDIX A BOARD OF APPEALS

SECTION A101 GENERAL

A101.1 Scope. A board of appeals shall be established within the jurisdiction for the purpose of hearing applications for modification of the requirements of this code pursuant to the provisions of Section 108 (Means of Appeals). The board shall be established and operated in accordance with this section, and shall be authorized to hear evidence from appellants and the code official pertaining to the application and intent of this code for the purpose of issuing orders pursuant to these provisions.

A101.2 Application for appeal. Any person shall have the right to appeal a decision of the code official to the board. An application for appeal shall be based on a claim that the intent of this code or the rules legally adopted hereunder have been incorrectly interpreted, the provisions of this code do not fully apply or an equally good or better form of construction is proposed. The application shall be filed on a form obtained from the code official within 20 days after the notice was served.

A101.2.1 Limitation of authority. The board shall not have authority to waive requirements of this code or interpret the administration of this code.

A101.2.2 Stays of enforcement. Appeals of notice and orders, other than Imminent Danger notices, shall stay the enforcement of the notice and order until the appeal is heard by the board.

Revise as follows:

[A] 108.2 A101.3 Membership of board. The board of appeals shall consist of five voting members appointed by the chief appointing authority as follows: one for 5 years, one for 4 years, one for 3 years, one for 2 years and one for 1 year. Thereafter, each new of the jurisdiction. Each member shall serve for 5 [INSERT NUMBER OF YEARS] years or until a successor has been appointed. The board member's terms shall be staggered at intervals, so as to provide continuity. The code official shall be an ex officio member of said board but shall not vote on any matter before the board.

[A] 108.2.1 A101.3.1 Qualifications. The board of appeals shall consist of five individuals, who are qualified by experience and training to pass on matters pertaining to building construction and are not employees of the jurisdiction. one from each of the following professions or disciplines:

- 1. Registered design professional who is a registered architect; or a builder or superintendent of building construction with not less than 10 years' experience, 5 years of which shall have been in responsible charge of work.
- 2. Registered design professional with structural engineering or architectural experience.
- 3. Registered design professional with mechanical and plumbing engineering experience; or a mechanical and plumbing contractor with not less than 10 years' experience, 5 years of which shall have been in responsible charge of work.
- 4. Registered design professional with electrical engineering experience; or an electrical contractor with not less than 10 years' experience, 5 years of which shall have been in responsible charge of work.
- 5. Registered design professional with pool or spa experience; or a contractor with not less than 10 years' experience, 5 years of which shall have been in responsible charge of work.

[A] 108.2.2 Alternate members. The chief appointing authority shall is authorized to appoint two alternate members who shall be called by the board chairman chairperson to hear appeals during the absence or disqualification of a member. Alternate members shall possess the qualifications required for board membership, and shall be appointed for 5 years the same term or until a successor has been appointed.

Add new text as follows:

A101.3.3 Vacancies. Vacancies shall be filled for an unexpired term in the same manner in which original appointments are required to be made.

Revise as follows:

[A] 108.2.3 A101.3.4 Chairman. Chairperson. The board shall annually select one of its members to serve as chairman. chairperson.

- [A] 108.2.5 A101.3.5 Secretary. The chief administrative officer appointing authority shall designate a qualified clerk to serve as secretary to the board. The secretary shall file a detailed record of all proceedings in the office of the chief administrative officer, which shall set forth the reasons for the board's decision, the vote of each member, the absence of a member and any failure of a member to vote.
- [A] 108.2.4 A101.3.6 Disqualification Conflict of member. interest. A member shall not hear an appeal in which that member has with any personal, professional or financial interest. Interest in a matter before the board shall declare such interest and refrain from participating in discussions, deliberations and voting on such matters.
- [A] 108.2.6 A101.3.7 Compensation of members. Compensation of members shall be determined by law.

Add new text as follows:

A101.3.8 Removal from the board. A member shall be removed from the board prior to the end of their terms only for cause. Any member with continued absence from regular meeting of the board may be removed at the discretion of the chief appointing authority.

Revise as follows:

- [A] 108.4.1 A101.4 Procedure. Rules and procedures. The board shall adopt and make available to the public through the secretary procedures under which a hearing will be conducted. establish policies and procedures necessary to carry out its duties consistent with the provisions of this code and applicable state law. The procedures shall not require compliance with strict rules of evidence, but shall mandate that only relevant information be received. presented.
- [A] 108.3 A101.5 Notice of meeting. The board shall meet upon notice from the chairman chairperson, within 10 days of the filing of an appeal or at stated periodic meetings. intervals.
- [A] 108.4 A101.5.1 Open hearing. Hearings before the board shall be open to the public. The appellant, the appellant's representative, the code official and any person whose interests are affected shall be given an opportunity to be heard.

Add new text as follows:

A101.5.2 Quorum. Three members of the board shall constitute a guorum.

Revise as follows:

[A] 108.5 A101.5.3 Postponed hearing. When five members are not present to hear an appeal, either the appellant or the appellant's representative shall have the right to request a postponement of the hearing.

Add new text as follows:

A101.6 Legal counsel. The jurisdiction shall furnish legal counsel to the board to provide members with general legal advice concerning matters before them for consideration. Members shall be represented by legal counsel at the jurisdiction's expense in all matters arising from service within the scope of their duties.

Revise as follows:

- [A] 108.6 A101.7 Board decision. The board shall only modify or reverse the decision of the code official by a concurring vote of three or more members.
- [A] 108.6.1 A101.7.1 Resolution. The decision of the board shall be by resolution. Certified copies shall be Every decision shall be promptly filed in writing in the office of the code official within three days and shall be open to the public for inspection. A certified copy shall be furnished to the appellant or the appellant's representative and to the code official.
- [A] 108.6.2 A101.7.2 Administration. The code official shall take immediate action in accordance with the decision of the board.
- [A] 108.7 A101.8 Court review. Any person, whether or not a previous party of the appeal, shall have the right to apply to the appropriate court for a writ of certiorari to correct errors of law. Application for review shall be made in the manner and time required by law following the filing of the decision in the office of the chief administrative officer.

2018 International Wildland-Urban Interface Code

Revise as follows:

SECTION 106 APPEALS

[A] 106.1 General. To determine the suitability of alternative materials and methods and to provide for reasonable interpretations of the provisions of this code, there shall be and hereby is created a board of appeals consisting of five members who are qualified by experience and training to pass judgment on pertinent matters. The code official, building official and fire chief shall be ex officio members, and the code official shall act as secretary of the board. The board of appeals shall be appointed by the legislative body and shall hold office at their discretion. The board shall adopt

reasonable rules and regulations for conducting its investigations and shall render decisions and findings in writing to the code official, with a duplicate copy to the applicant.

Add new text as follows:

<u>A</u> BOARD OF APPEALS

SECTION A101 GENERAL

A101.1 Scope. A board of appeals shall be established within the jurisdiction for the purpose of hearing applications for modification of the requirements of this code pursuant to the provisions of Section 106 (Means of Appeals). The board shall be established and operated in accordance with this section, and shall be authorized to hear evidence from appellants and the building official pertaining to the application and intent of this code for the purpose of issuing orders pursuant to these provisions.

A101.2 Application for appeal. Any person shall have the right to appeal a decision of the code official to the board. An application for appeal shall be based on a claim that the intent of this code or the rules legally adopted hereunder have been incorrectly interpreted, the provisions of this code do not fully apply or an equally good or better form of construction is proposed. The application shall be filed on a form obtained from the code official within 20 days after the notice was served.

- A101.2.1 Limitation of authority. The board shall not have authority to waive requirements of this code or interpret the administration of this code.
- A101.2.2 Stays of enforcement. Appeals of notice and orders, other than Imminent Danger notices, shall stay the enforcement of the notice and order until the appeal is heard by the board.
- A101.3 Membership of board. The board shall consist of five voting members appointed by the chief appointing authority of the jurisdiction. Each member shall serve for [INSERT NUMBER OF YEARS] years or until a successor has been appointed. The board member's terms shall be staggered at intervals, so as to provide continuity. The code official shall be an ex officio member of said board but shall not vote on any matter before the board.
- A101.3.1 Qualifications. The board shall consist of five individuals, who are qualified by experience and training to pass on matters pertaining to building construction and are not employees of the jurisdiction.
- A101.3.2 Alternate members. The chief appointing authority is authorized to appoint two alternate members who shall be called by the board chairperson to hear appeals during the absence or disqualification of a member. Alternate members shall possess the qualifications required for board membership, and shall be appointed for the same term or until a successor has been appointed.
- A101.3.3 Vacancies. Vacancies shall be filled for an unexpired term in the same manner in which original appointments are required to be made.
- A101.3.4 Chairperson. The board shall annually select one of its members to serve as chairperson.
- A101.3.5 Secretary. The chief appointing authority shall designate a qualified clerk to serve as secretary to the board. The secretary shall file a detailed record of all proceedings which shall set forth the reasons for the board's decision, the vote of each member, the absence of a member and any failure of a member to vote.
- A101.3.6 Conflict of interest. A member with any personal, professional or financial interest in a matter before the board shall declare such interest and refrain from participating in discussions, deliberations and voting on such matters.
- A101.3.7 Compensation of members. Compensation of members shall be determined by law.
- A101.3.8 Removal from the board. A member shall be removed from the board prior to the end of their terms only for cause. Any member with continued absence from regular meeting of the board may be removed at the discretion of the chief appointing authority.
- A101.4 Rules and procedures. The board shall establish policies and procedures necessary to carry out its duties consistent with the provisions of this code and applicable state law. The procedures shall not require compliance with strict rules of evidence, but shall mandate that only relevant information be presented.
- A101.5 Notice of meeting. The board shall meet upon notice from the chairperson, within 10 days of the filing of an appeal or at stated periodic intervals.
- A101.5.1 Open hearing. All hearings before the board shall be open to the public. The appellant, the appellant's representative, the code official and any person whose interests are affected shall be given an opportunity to be heard.
- A101.5.2 Quorum. Three members of the board shall constitute a quorum.
- A101.5.3 Postponed hearing. When five members are not present to hear an appeal, either the appellant or the appellant's representative shall have the right to request a postponement of the hearing.

A101.6 Legal counsel. The jurisdiction shall furnish legal counsel to the board to provide members with general legal advice concerning matters before them for consideration. Members shall be represented by legal counsel at the jurisdiction's expense in all matters arising from service within the scope of their duties.

A101.7 Board decision. The board shall only modify or reverse the decision of the code official by a concurring vote of three or more members.

A101.7.1 Resolution. The decision of the board shall be by resolution. Every decision shall be promptly filed in writing in the office of the code official within three days and shall be open to the public for inspection. A certified copy shall be furnished to the appellant or the appellant's representative and to the code official.

A101.7.2 Administration. The code official shall take immediate action in accordance with the decision of the board.

A101.8 Court review. Any person, whether or not a previous party of the appeal, shall have the right to apply to the appropriate court for a writ of certiorari to correct errors of law. Application for review shall be made in the manner and time required by law following the filling of the decision in the office of the chief administrative officer.

Reason: The intent of this proposal is to have a consistent set of requirements for the Board of Appeals. The right for someone to have an appeal is addressed in a separate proposal for Means of Appeals. Currently the IBC and IFC have these requirements in an appendix, while other codes either don't have it at all or have it in the text. It was felt that appendix was a more appropriate place to allow for the jurisdiction to establish their own criteria, or to use this appendix as a template.

The BCAC is working from the philosophy that ICC is a family of codes, so administrative requirements should be consistent across books. Most administrative and enforcement matters are the same for any code. Those matters unique for a specific code remain unchanged. This is one of a series of proposals being submitted relating to technical, editorial and organizational changes proposed for the Administrative chapters (Chapter 1) in all of the I-Codes

While the Administrative Committee will consider each proposal independently, the proposals in this package are a correlated set of companion code change proposals."

The following is the template utilized to create this code change proposal. There may be some differences depending on the unique applications of each code – such as "building/fire/code official".

APPENDIX A

BOARD OF APPEALS

SECTION A101

GENERAL

A101.1 Scope. A board of appeals shall be established within the jurisdiction for the purpose of hearing applications for modification of the requirements of this code pursuant to the provisions of Section XXX (Means of Appeals). The board shall be established and operated in accordance with this section, and shall be authorized to hear evidence from appellants and the *code official* pertaining to the application and intent of this code for the purpose of issuing orders pursuant to these provisions.

A101.2 Application for appeal. Any person shall have the right to appeal a decision of the *code official* to the board. An application for appeal shall be based on a claim that the intent of this code or the rules legally adopted hereunder have been incorrectly interpreted, the provisions of this code do not fully apply or an equally good or better form of construction is proposed. The application shall be filed on a form obtained from the *code official* within 20 days after the notice was served.

A101.2.1 Limitation of authority. The board shall not have authority to waive requirements of this code or interpret the administration of this code.

A101.2.2 Stays of enforcement. Appeals of notice and orders, other than Imminent Danger notices, shall stay the enforcement of the notice and order until the appeal is heard by the board.

A101.3 Membership of board. The board shall consist of five voting members appointed by the chief appointing authority of the jurisdiction. Each member shall serve for **[INSERT NUMBER OF YEARS]** years or until a successor has been appointed. The board member's terms shall be staggered at intervals, so as to provide continuity. The *code official* shall be an ex officio member of said board but shall not vote on any matter before the board.

A101.3.1 Qualifications. The board shall consist of five individuals, who are qualified by experience and training to pass on matters pertaining to building construction and are not employees of the jurisdiction.

A101.3.2 Alternate members. The chief appointing authority may appoint two alternate members who shall be called by the board chairperson to hear appeals during the absence or disqualification of a member. Alternate members shall possess the qualifications required for board membership,

and shall be appointed for the same term or until a successor has been appointed.

- A101.3.3 Vacancies. Vacancies shall be filled for an unexpired term in the same manner in which original appointments are required to be made.
- A101.3.4 Chairperson. The board shall annually select one of its members to serve as chairperson.
- **A101.3.5 Secretary.** The chief appointing authority shall designate a qualified clerk to serve as secretary to the board. The secretary shall file a detailed record of all proceedings which shall set forth the reasons for the board's decision, the vote of each member, the absence of a member and any failure of a member to vote.
- **A101.3.6 Conflict of interest.** A member with any personal, professional or financial interest in a matter before the board shall declare such interest and refrain from participating in discussions, deliberations and voting on such matters.
- A101.3.7 Compensation of members. Compensation of members shall be determined by law.
- **A101.3.8 Removal from the board.** A member shall be removed from the board prior to the end of their terms only for cause. Any member with continued absence from regular meeting of the board may be removed at the discretion of the chief appointing authority.
- **A101.4 Rules and procedures.** The board shall establish policies and procedures necessary to carry out its duties consistent with the provisions of this code and applicable state law. The procedures shall not require compliance with strict rules of evidence, but shall mandate that only relevant information be presented.
- A101.5 Notice of meeting. The board shall meet upon notice from the chairperson, within 10 days of the filing of an appeal or at stated periodic intervals.
- **A101.5.1 Open hearing.** All hearings before the board shall be open to the public. The appellant, the appellant's representative, the *code official* and any person whose interests are affected shall be given an opportunity to be heard.
- A101.5.2 Quorum. Three members of the board shall constitute a quorum.
- **A101.5.3 Postponed hearing.** When five members are not present to hear an appeal, either the appellant or the appellant's representative shall have the right to request a postponement of the hearing.
- **A101.6 Legal counsel.** The jurisdiction shall furnish legal counsel to the board to provide members with general legal advice concerning matters before them for consideration. Members shall be represented by legal counsel at the jurisdiction's expense in all matters arising from service within the scope of their duties.
- **A101.7 Board decision.** The board shall only modify or reverse the decision of the *code official* by a concurring vote of three or more members.
- **A101.7.1 Resolution.** The decision of the board shall be by resolution. Every decision shall be promptly filed in writing in the office of the *code* official within three days and shall be open to the public for inspection. A certified copy shall be furnished to the appellant or the appellant's representative and to the *code official*.
- A101.7.2 Administration. The code official shall take immediate action in accordance with the decision of the board.
- **A101.8 Court review.** Any person, whether or not a previous party of the appeal, shall have the right to apply to the appropriate court for a writ of certiorari to correct errors of law. Application for review shall be made in the manner and time required by law following the filling of the decision in the office of the chief administrative officer.

This proposal is submitted by the ICC Building Code Action Committee (BCAC), the ICC Fire Code Action Committee (FCAC), the ICC Sustainable, Energy and High Performance Code Action Committee (SEHPCAC) and the ICC Plumbing/Mechanical/Gas Code Action Committee (PMG CAC).

BCAC was established by the ICC Board of Directors in July 2011 to pursue opportunities to improve and enhance assigned International Codes or portions thereof. Since 2017 the BCAC has held 6 open meetings. In addition, there were numerous Working Group meetings and conference calls for the current code development cycle, which included members of the committee as well as any interested party to discuss and debate the proposed changes. Related documentation and reports are posted on the BCAC website at: https://www.iccsafe.org/codes-tech-support/codes/codedevelopment-process/building-code-actioncommittee-bcac.

The FCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance assigned International Codes with regard to fire safety and hazardous materials in new and existing buildings and facilities and the protection of life and property in wildland urban interface areas. In 2018 the Fire-CAC has held 3 open meetings. In addition, there were numerous conference calls, Regional Work Group and Task Group meetings for the current code development cycle, which included members of the committees as well as any interested parties, to discuss and

debate the proposed changes. Related documentation and reports are posted on the FCAC website at: https://www.iccsafe.org/codes-tech-support/cs/fire-code-action-committee-fcac/

The SEHPCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance International Codes with regard to sustainability, energy and high performance as it relates to the built environment included, but not limited to, how these criteria relate to the International Green Construction Code (IgCC) and the International Energy Conservation Code (IECC). In 2018-2019, the SEHPCAC has held five two- or three-day open meetings and numerous workgroup calls, to discuss and debate proposed changes and public comments. Attendees at the meetings and calls included members of the SEHPCAC as well as any interested parties. Related documentation and reports are posted on the SEHPCAC website at http://www.iccsafe.org/cs/SEHPCAC/Pages/default.aspx.

The PMG CAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance the International Codes or portions thereof that were under the purview of the PMG CAC. In 2017-2018, the PMG CAC held one face-to-face meeting and 11 conference call meetings. Numerous interested parties attended the committee meetings and offered their input. Related documentation and reports are posted on the PMGCAC website at: https://www.iccsafe.org/codes-tech-support/codes/code-development-process/pmg-code-action-committee-pmgcac.

Cost Impact: The code change proposal will not increase or decrease the cost of construction This is an editorial correlation and an option for jurisdictions to follow.

ADM43-19 Part I

Public Hearing Results

Errata: This proposal includes published errata Added proponent to the code change.

Committee Action: As Submitted

Committee Reason: The committee stated that the reasons for the approval of the proposal were that it standardizes the language across the I-Codes, it provides another tool and it gives appropriate guidance as an appendix to establish a board of appeals. (Vote: 13-0)

Assembly Action: None

ADM43-19 Part I

NOTE: ADM43-19 PART III DID NOT RECEIVE A PUBLIC COMMENT AND IS REPRODUCED FOR INFORMATIONAL PURPOSES ONLY

ADM43-19 Part III

IECC®: APPENDIX CA (New), SECTION CA101 (New), CA101.1 (New), CA101.2 (New), CA101.2.1 (New), CA101.2.2 (New), CA101.3 (New), CA101.3.1 (New), CA101.3.2 (New), CA101.3.3 (New), CA101.3.4 (New), CA101.3.5 (New), CA101.3.6 (New), CA101.3.7 (New), CA101.3.8 (New), CA101.4 (New), CA101.5 (New), CA101.5 (New), CA101.5 (New), CA101.5 (New), CA101.7 (New), CA101.7 (New), CA101.7 (New), CA101.7 (New), CA101.7 (New), CA101.8 (New)

Proposed Change as Submitted

Proponents: Ed Kulik, representing ICC Building Code Action Committee (bcac@iccsafe.org); Pennie Feehan, representing Plumbing, Mechanical, and Fuel Gas Code Action Committee (pmgcac@iccsafe.org); Michael O'Brian, representing FCAC (fcac@iccsafe.org); David Collins, representing SEHPCAC (sehpcac@iccsafe.org)

2018 International Energy Conservation Code

Add new text as follows:

APPENDIX CA BOARD OF APPEALS-COMMERCIAL

SECTION CA101 GENERAL

CA101.1 Scope. A board of appeals shall be established within the jurisdiction for the purpose of hearing applications for modification of the requirements of this code pursuant to the provisions of Section C109 (Means of Appeals). The board shall be established and operated in accordance with this section, and shall be authorized to hear evidence from appellants and the code official pertaining to the application and intent of this code for the purpose of issuing orders pursuant to these provisions.

CA101.2 Application for appeal. Any person shall have the right to appeal a decision of the code official to the board. An application for appeal shall be based on a claim that the intent of this code or the rules legally adopted hereunder have been incorrectly interpreted, the provisions of this code do not fully apply or an equally good or better form of construction is proposed. The application shall be filed on a form obtained from the code official within 20 days after the notice was served.

<u>CA101.2.1</u> <u>Limitation of authority.</u> The board shall not have authority to waive requirements of this code or interpret the administration of this code.

<u>CA101.2.2 Stays of enforcement.</u> Appeals of notice and orders, other than Imminent Danger notices, shall stay the enforcement of the notice and order until the appeal is heard by the <u>board</u>.

CA101.3 Membership of board. The board shall consist of five voting members appointed by the chief appointing authority of the jurisdiction. Each member shall serve for [INSERT NUMBER OF YEARS] years or until a successor has been appointed. The board member's terms shall be staggered at intervals, so as to provide continuity. The code official shall be an ex officio member of said board but shall not vote on any matter before the board.

<u>CA101.3.1 Qualifications.</u> The board shall consist of five individuals, who are qualified by experience and training to pass on matters pertaining to building construction and are not employees of the jurisdiction.

CA101.3.2 Alternate members. The chief appointing authority is authorized to appoint two alternate members who shall be called by the board chairperson to hear appeals during the absence or disqualification of a member. Alternate members shall possess the qualifications required for board membership, and shall be appointed for the same term or until a successor has been appointed.

CA101.3.3 Vacancies. Vacancies shall be filled for an unexpired term in the same manner in which original appointments are required to be made.

CA101.3.4 Chairperson. The board shall annually select one of its members to serve as chairperson.

CA101.3.5 Secretary. The chief appointing authority shall designate a qualified clerk to serve as secretary to the board. The secretary shall file a detailed record of all proceedings which shall set forth the reasons for the board's decision, the vote of each member, the absence of a member and any failure of a member to vote.

<u>CA101.3.6</u> <u>Conflict of interest.</u> A member with any personal, professional or financial interest in a matter before the board shall declare such interest and refrain from participating in discussions, deliberations and voting on such matters.

CA101.3.7 Compensation of members. Compensation of members shall be determined by law.

CA101.3.8 Removal from the board. A member shall be removed from the board prior to the end of their terms only for cause. Any member with continued absence from regular meeting of the board may be removed at the discretion of the chief appointing authority.

<u>CA101.4 Rules and procedures.</u> The board shall establish policies and procedures necessary to carry out its duties consistent with the provisions of this code and applicable state law. The procedures shall not require compliance with strict rules of evidence, but shall mandate that only relevant information be presented.

<u>CA101.5</u> <u>Notice of meeting.</u> The board shall meet upon notice from the chairperson, within 10 days of the filing of an appeal or at stated periodic intervals.

CA101.5.1 Open hearing. All hearings before the board shall be open to the public. The appellant, the appellant's representative, the code official and any person whose interests are affected shall be given an opportunity to be heard.

CA101.5.2 Quorum. Three members of the board shall constitute a quorum.

<u>CA101.5.3</u> <u>Postponed hearing.</u> When five members are not present to hear an appeal, either the appellant or the appellant's representative shall have the right to request a postponement of the hearing.

<u>CA101.6 Legal counsel.</u> The jurisdiction shall furnish legal counsel to the board to provide members with general legal advice concerning matters before them for consideration. Members shall be represented by legal counsel at the jurisdiction's expense in all matters arising from service within the scope of their duties.

CA101.7 Board decision. The board shall only modify or reverse the decision of the code official by a concurring vote of three or more members.

<u>CA101.7.1 Resolution.</u> The decision of the board shall be by resolution. Every decision shall be promptly filed in writing in the office of the code official within three days and shall be open to the public for inspection. A certified copy shall be furnished to the appellant or the appellant's representative and to the code official.

CA101.7.2 Administration. The code official shall take immediate action in accordance with the decision of the board.

<u>CA101.8 Court review.</u> Any person, whether or not a previous party of the appeal, shall have the right to apply to the appropriate court for a writ of certiorari to correct errors of law. Application for review shall be made in the manner and time required by law following the filing of the decision in the office of the chief administrative officer.

Reason: The intent of this proposal is to have a consistent set of requirements for the Board of Appeals. The right for someone to have an appeal is addressed in a separate proposal for Means of Appeals. Currently the IBC and IFC have these requirements in an appendix, while other codes either don't have it at all or have it in the text. It was felt that appendix was a more appropriate place to allow for the jurisdiction to establish their own criteria, or to use this appendix as a template.

The BCAC is working from the philosophy that ICC is a family of codes, so administrative requirements should be consistent across books. Most administrative and enforcement matters are the same for any code. Those matters unique for a specific code remain unchanged. This is one of a series of proposals being submitted relating to technical, editorial and organizational changes proposed for the Administrative chapters (Chapter 1) in all of the I-Codes.

While the Administrative Committee will consider each proposal independently, the proposals in this package are a correlated set of companion code change proposals."

The following is the template utilized to create this code change proposal. There may be some differences depending on the unique applications of each code – such as "building/fire/code official".

APPENDIX A

BOARD OF APPEALS

SECTION A101

GENERAL

A101.1 Scope. A board of appeals shall be established within the jurisdiction for the purpose of hearing applications for modification of the requirements of this code pursuant to the provisions of Section XXX (Means of Appeals). The board shall be established and operated in accordance with this section, and shall be authorized to hear evidence from appellants and the *code official* pertaining to the application and intent of this code for the purpose of issuing orders pursuant to these provisions.

A101.2 Application for appeal. Any person shall have the right to appeal a decision of the *code official* to the board. An application for appeal shall be based on a claim that the intent of this code or the rules legally adopted hereunder have been incorrectly interpreted, the provisions of this code

do not fully apply or an equally good or better form of construction is proposed. The application shall be filed on a form obtained from the *code official* within 20 days after the notice was served.

- A101.2.1 Limitation of authority. The board shall not have authority to waive requirements of this code or interpret the administration of this code.
- **A101.2.2 Stays of enforcement.** Appeals of notice and orders, other than Imminent Danger notices, shall stay the enforcement of the notice and order until the appeal is heard by the board.
- **A101.3 Membership of board.** The board shall consist of five voting members appointed by the chief appointing authority of the jurisdiction. Each member shall serve for **[INSERT NUMBER OF YEARS]** years or until a successor has been appointed. The board member's terms shall be staggered at intervals, so as to provide continuity. The *code official* shall be an ex officio member of said board but shall not vote on any matter before the board.
- **A101.3.1 Qualifications.** The board shall consist of five individuals, who are qualified by experience and training to pass on matters pertaining to building construction and are not employees of the jurisdiction.
- **A101.3.2** Alternate members. The chief appointing authority may appoint two alternate members who shall be called by the board chairperson to hear appeals during the absence or disqualification of a member. Alternate members shall possess the qualifications required for board membership, and shall be appointed for the same term or until a successor has been appointed.
- A101.3.3 Vacancies. Vacancies shall be filled for an unexpired term in the same manner in which original appointments are required to be made.
- A101.3.4 Chairperson. The board shall annually select one of its members to serve as chairperson.
- **A101.3.5 Secretary.** The chief appointing authority shall designate a qualified clerk to serve as secretary to the board. The secretary shall file a detailed record of all proceedings which shall set forth the reasons for the board's decision, the vote of each member, the absence of a member and any failure of a member to vote.
- **A101.3.6 Conflict of interest.** A member with any personal, professional or financial interest in a matter before the board shall declare such interest and refrain from participating in discussions, deliberations and voting on such matters.
- A101.3.7 Compensation of members. Compensation of members shall be determined by law.
- **A101.3.8 Removal from the board.** A member shall be removed from the board prior to the end of their terms only for cause. Any member with continued absence from regular meeting of the board may be removed at the discretion of the chief appointing authority.
- **A101.4 Rules and procedures.** The board shall establish policies and procedures necessary to carry out its duties consistent with the provisions of this code and applicable state law. The procedures shall not require compliance with strict rules of evidence, but shall mandate that only relevant information be presented.
- **A101.5 Notice of meeting.** The board shall meet upon notice from the chairperson, within 10 days of the filling of an appeal or at stated periodic intervals.
- **A101.5.1 Open hearing.** All hearings before the board shall be open to the public. The appellant, the appellant's representative, the *code official* and any person whose interests are affected shall be given an opportunity to be heard.
- **A101.5.2 Quorum.** Three members of the board shall constitute a quorum.
- **A101.5.3 Postponed hearing.** When five members are not present to hear an appeal, either the appellant or the appellant's representative shall have the right to request a postponement of the hearing.
- **A101.6 Legal counsel.** The jurisdiction shall furnish legal counsel to the board to provide members with general legal advice concerning matters before them for consideration. Members shall be represented by legal counsel at the jurisdiction's expense in all matters arising from service within the scope of their duties.
- A101.7 Board decision. The board shall only modify or reverse the decision of the code official by a concurring vote of three or more members.
- **A101.7.1 Resolution.** The decision of the board shall be by resolution. Every decision shall be promptly filed in writing in the office of the *code* official within three days and shall be open to the public for inspection. A certified copy shall be furnished to the appellant or the appellant's representative and to the *code* official.
- A101.7.2 Administration. The code official shall take immediate action in accordance with the decision of the board.

A101.8 Court review. Any person, whether or not a previous party of the appeal, shall have the right to apply to the appropriate court for a writ of certiorari to correct errors of law. Application for review shall be made in the manner and time required by law following the filing of the decision in the office of the chief administrative officer.

This proposal is submitted by the ICC Building Code Action Committee (BCAC), the ICC Fire Code Action Committee (FCAC), the ICC Sustainable, Energy and High Performance Code Action Committee (SEHPCAC) and the ICC Plumbing/Mechanical/Gas Code Action Committee (PMG CAC).

BCAC was established by the ICC Board of Directors in July 2011 to pursue opportunities to improve and enhance assigned International Codes or portions thereof. Since 2017 the BCAC has held 6 open meetings. In addition, there were numerous Working Group meetings and conference calls for the current code development cycle, which included members of the committee as well as any interested party to discuss and debate the proposed changes. Related documentation and reports are posted on the BCAC website at: https://www.iccsafe.org/codes-tech-support/codes/codedevelopment-process/building-code-actioncommittee-bcac.

The FCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance assigned International Codes with regard to fire safety and hazardous materials in new and existing buildings and facilities and the protection of life and property in wildland urban interface areas. In 2018 the Fire-CAC has held 3 open meetings. In addition, there were numerous conference calls, Regional Work Group and Task Group meetings for the current code development cycle, which included members of the committees as well as any interested parties, to discuss and debate the proposed changes. Related documentation and reports are posted on the FCAC website at: https://www.iccsafe.org/codes-tech-support/cs/fire-code-action-committee-fcac/

The SEHPCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance International Codes with regard to sustainability, energy and high performance as it relates to the built environment included, but not limited to, how these criteria relate to the International Green Construction Code (IgCC) and the International Energy Conservation Code (IECC). In 2018-2019, the SEHPCAC has held five two- or three-day open meetings and numerous workgroup calls, to discuss and debate proposed changes and public comments. Attendees at the meetings and calls included members of the SEHPCAC as well as any interested parties. Related documentation and reports are posted on the SEHPCAC website at http://www.iccsafe.org/cs/SEHPCAC/Pages/default.aspx.

The PMG CAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance the International Codes or portions thereof that were under the purview of the PMG CAC. In 2017-2018, the PMG CAC held one face-to-face meeting and 11 conference call meetings. Numerous interested parties attended the committee meetings and offered their input. Related documentation and reports are posted on the PMGCAC website at: https://www.iccsafe.org/codes-tech-support/codes/code-development-process/pmg-code-action-committee-pmgcac.

Cost Impact: The code change proposal will not increase or decrease the cost of construction This is an editorial correlation and an option for jurisdictions to follow.

ADM43-19 Part III

Public Hearing Results

Committee Action: As Submitted

Committee Reason: The appendix allows a jurisdiction to use this appendix on a Board of Appeals. It is optional, not a requirement. There was concern that not all of the parts of ADM43 have been accepted by the various committees. (Vote 11-3)

Assembly Action: None

ADM43-19 Part III

ADM44-19

Appendix O (New)

Proposed Change as Submitted

Proponents: Gary Lewis, City of Summit NJ, representing City of Summit NJ (glewis@cityofsummit.org); Don Havener, representing Self (dhavener@cosentini.com); Raymond Grill, representing Self (ray.grill@arup.com)

2018 International Building Code

Add new text as follows:

APPENDIX O PERFORMANCE-BASED APPLICATION

O101.1 Introduction. The following administrative provisions are excerpted from the ICC Performance Code for Buildings and Facilities. These can be used in conjunction with the Alternate Methods provisions in Chapter 1, or for a review of submittals such as those in Section 909 or elsewhere requiring a rational analysis or performance-based design to provide a recognized framework for the code official in terms of the design expertise needed, the necessary submittals, a review framework and related items. While not every step is required in every instance, these model provisions serve as the starting point for the formulation of an effective submittal and corresponding thorough review.

O101.2 Qualifications. Registered design professionals shall possess the knowledge, skills and abilities necessary to demonstrate compliance with this code.

O101.3 Construction document preparation. Construction documents required by this code shall be prepared in adequate detail and submitted for review and approval in accordance with Section 107.

O101.3.1 Review. Construction documents submitted in accordance with this code shall be reviewed for code compliance with the appropriate code provisions in accordance with Section 107.

O101.4 Construction. Construction shall comply with the approved construction documents submitted in accordance with this code, and shall be verified and approved to demonstrate compliance with this code.

O101.4.1 Facility operating policies and procedures. Policies, operations, training and procedures shall comply with approved documents submitted in accordance with this code, and shall be verified and approved to demonstrate compliance with this code.

O101.4.2 Maintenance. Maintenance of the performance-based design shall be ensured throughout the life of the building or portion thereof.

O101.4.3 Changes. The owner or the owner's authorized agent shall be responsible to ensure that any change to the facility, process, or system does not increase the hazard level beyond that originally designed without approval and that changes shall be documented in accordance with the code.

O101.5 Documentation. The registered design professional shall prepare appropriate documentation for the project that clearly provides the design approach and rationale for design submittal, construction and future use of the building, facility or process.

O101.5.1 Reports and Manuals. The design report shall document the steps taken in the design analysis, clearly identifying the criteria, parameters, inputs, assumptions, sensitivities and limitations involved in the analysis. The design report shall clearly identify bounding conditions, assumptions and sensitivities that clarify the expected uses and limitations of the performance analysis. This report shall verify that the design approach is in compliance with the applicable codes and acceptable methods and shall be submitted for concurrence by the code official prior to the construction documents being completed. The report shall document the design features to be incorporated based on the analysis.

The design report shall address the following:

- 1. Project scope.
- 2. Goals and objectives.
- 3. Performance criteria.
- 4. Hazard scenarios.
- 5. Design fire loads and hazards.
- 6. Final design.
- 7. Evaluation.
- 8. Bounding conditions and critical design assumptions.
- 9. Critical design features.
- 10. System design and operational requirements.
- 11. Operational and maintenance requirements.
- 12. Commissioning testing requirements and acceptance criteria.
- 13. Frequency of certificate renewal.

- 14. Supporting documents and references.
- 15. Preliminary site and floor plans.

O101.5.2 Design Submittal. Applicable construction documents shall be submitted to the code official for review. The documents shall be submitted in accordance with the jurisdiction's procedures and in sufficient detail to obtain appropriate permits.

O101.6 Review. Construction documents submitted in accordance with this code shall be reviewed for code compliance with the appropriate code provisions.

O101.6.1 Peer review. The owner or the owner's authorized agent shall be responsible for retaining and furnishing the services of a registered design professional or recognized expert, who will perform as a peer reviewer, where required and approved by the code official.

O101.6.2 Costs. Costs. The costs of special services, including contract review, where required by the code official, shall be borne by the owner or the owner's authorized agent.

O101.7 Permits. Prior to the start of construction, appropriate permits shall be obtained in accordance with the jurisdiction's procedures and applicable codes.

O101.8 Verification of compliance. Upon completion of the project, documentation shall be prepared that verifies performance and prescriptive code provisions have been met. Where required by the code official, the registered design professional shall file a report that verifies bounding conditions are met.

O101.9 Extent of documentation. Approved construction documents, the operations and maintenance manual, inspection and testing records, and certificates of occupancy with conditions shall be included in the project documentation of the code official's records.

O101.10 Analysis of change. The registered design professional shall evaluate the existing building, facilities, premises, processes, contents and the applicable documentation of the proposed change as it affects portions of the building, facility, premises, processes and contents that were previously designed for compliance under a performance-based code. Prior to any change that was not documented in a previously approved design, the registered design professional shall examine the applicable design documents, bounding conditions, operation and maintenance manuals, and deed restrictions.

Reason: This proposal does not generate any new code requirements, but rather provides an optional design, review and approval framework for use by the code official. Typical uses would include cases of alternate methods in Chapter 1, select areas of the IBC that require a rational analysis such as Section 909 and elsewhere. The proposed Appendix simply extracts the relevant administrative provisions from the ICC Performance Code into a more concise, usable appendix format for a jurisdiction confronted with such a need. Currently there are multiple, varying jurisdictional rules and procedures in many communities regarding procedure and none in even more. The code official is often left alone to reach decisions not just on the merits of a design, but must first also decide on the submittal and review process.

As an Appendix, it is entirely optional to a jurisdiction. It can be adopted, adopted with local modifications, or even used on a case-by-case basis as part of a Memorandum of Understanding or similar legal agreement between the jurisdiction and the owner/design team. It simply represents another tool for the jurisdiction to reach for in cases of need; it neither encourages nor creates any additional opportunity for performance-based design.

Cost Impact: The code change proposal will not increase or decrease the cost of construction

As this provision is an Appendix and, as such, remains optional to the jurisdiction, it imparts no new code requirements and, therefore, no new costs. In fact, by potentially addressing these administrative process issues at the outset, use of the Appendix could realistically result in cost savings.

ADM44-19

Public Hearing Results

Committee Action: As Submitted

Committee Reason: The committee stated the reason for the approval of the proposal was that the addition of the appendix provides another option within the code and the previous action taken on ADM11-19. In opposition it was stated that there is a need for a timeline or qualification for the expert and that more work is needed. (Vote: 8-5)

Assembly Action: None

ADM44-19

Individual Consideration Agenda

Public Comment 1:

IBC®: 0101.1

Proponents:

Gary Lewis, representing Self (glewis@cityofsummit.org)

requests As Modified by Public Comment

Further modify as follows:

2018 International Building Code

O101.1 Introduction. The following administrative provisions are excerpted from the ICC Performance Code for Buildings and Facilities. These and can be used in conjunction with the Alternate Methods provisions in Chapter 1, or for a review of submittals such as those in Section 909 or elsewhere requiring a rational analysis or performance-based design. These provisions to provide a recognized an established framework for the code official in terms of the design expertise needed, the necessary submittals, a review framework and related items. While not every step is required in every instance, these model provisions serve as the starting point for the formulation of an effective submittal and corresponding thorough review.

Commenter's Reason: This change was recommended for Approval as Submitted by the Admin Committee in Albuquerque. The proponents listened to the comments of the testifiers and the committee and agree that the original introduction paragraph was not exactly written in enforceable language. We now propose a modification to simply streamline the Introduction and make it enforceable, and the remaining points will be suggested for the Code Commentary. This modification does not change the scope, intent or application of the original change as was recommended for approval.

Bibliography: None

Cost Impact: The net effect of the public comment and code change proposal will not increase or decrease the cost of construction Streamlining the introduction paragraph has no effect on the cost impact of the original proposal.

Public Comment# 1794

ADM45-19

IBC®: APPENDIX O (New), O101.1, O102.1, O103.1 (New)

Proposed Change as Submitted

Proponents: Ali Fattah, City of San Diego, representing City of San Diego (afattah@sandiego.gov)

2018 International Building Code

Add new text as follows:

APPENDIX O APPROVAL OF PRODUCT EVALUATION AND LISTING AGENCIES

O101.1 Purpose. The purpose of this appendix is to provide the Building Official criteria to assist in the consideration and approval of products and systems supported by product listings and product evaluation reports. The Building Official is authorized to accept research reports and product listings as proof of compliance with the International Building Code under the authority in Section 104.11 and as defined in Section 1703.4.2.

The provisions of this code are not intended to prevent the installation of any material or to prohibit any design or method of construction not specifically prescribed by this code, provided that any such alternative has been approved. An alternative material, design or method of construction shall be approved where the building official finds that the proposed design is satisfactory and complies with the intent of the provisions of this code, and that the material, method or work offered is, for the purpose intended, not less than the equivalent of that prescribed in this code in quality, strength, effectiveness, fire resistance, durability and safety. Where the alternative material, design or method of construction.

O102.1 Definitions. Approved Agency – See Section 202

Approved Listing Agency - Any agency approved by the Building Official which is in the business of listing and labeling and which makes available at least an annual published report of such listings in which specific information is included that the product has been tested to recognized standards and found to comply.

Approved Testing Agency - An agency which is determined by the Building Official to have adequate personnel and expertise to carry out the testing of systems, materials types of construction, fixtures or appliances.

Approved Source See Section 202

Label - See Section 202

Research report – A report published by an approved source to provide technical evaluation that a new or alternative material, product, design or method of construction complies with the intent of the International Building Code and includes supporting data, and where necessary, to assist in the approval of materials or assemblies not specifically provided for in the code.

O103.1 Qualifications. Listing Agencies issuing a product Listing, and Approved Sources issuing a Research Report, shall be accredited by an approved accreditation body as to competence and capability in compliance with Sections 1703.1.1 through 1703.1.3. Approved Product Listing or Approved Sources issuing product evaluation reports satisfy the following requirements:

- 1. Approved agencies shall be accredited by Accreditation by a body that is a signatory to the International Accreditation Forum (IAF) Multilateral Recognition Arrangement (MLA) and is itself accredited to ISO/IEC Standard 17011, General Requirements for accreditation bodies accrediting conformity assessment bodies (CABs).
- 2. The agency shall employ qualified technical personal familiar with the *International Building Code* and the *International Fire Code* and their referenced standards as well as the evaluation criteria and standards used to produce the evaluation report.
- 3. Evaluation Reports shall be issued under the supervision of a licensed professional engineer.
- 4. The agencies shall implement a product labeling and identification program consistent with requirements for labeling in the code.
- 5. The agencies shall publish lists for evaluated or listed materials, assemblies or products.
- 6. The Agencies shall develop and implement quality control programs that shall be satisfied by the product evaluation and listing report holder and shall require follow up in-plant inspections to determine compliance with the approved quality control program.
- 7. The agencies shall publish Research Reports or listings based on, in order of importance, the code; or standards recognized in the codes, and when the product is an alternative material or system recognized under IBC Section 104.11, Acceptance Criteria that have been developed with public input and are acceptable to the Building Official.
- 8. The agencies shall have a process to periodically re-evaluate published product evaluation reports and product listing to address applicable changes in the applicable codes, acceptance criteria or referenced standards used in the evaluation report.
- 9. The Agencies shall develop and implement quality control programs that shall be satisfied by the product evaluation and listing report holder and shall require regular follow up in-plant inspections to verify compliance with the approved quality control program.

Reason: This code change is necessary to address the significant increase in the number of testing agencies and engineering firms as well as

industry associations developing product certification programs. The proposed Appendix offers an option for the Building Official to adopt the rules and criteria necessary criteria to evaluate the qualifications of the listing or product evaluation agency seeking recognition and approval. The Appendix can be applied to the IBC and IRC so a separate code change is not being proposed for the IRC. All jurisdictions adopt a building code in addition to one or more of the other codes that are members of the ICC family of codes so jurisdictions adopting the IBC have the option to adopt the proposed Appendix.

The code change also seeks to lay the ground work the formation of a body to create acceptance criteria used by all agencies. If one is not created then ICC Evaluation Service or IAPMO's Uniform Evaluation Service will be the only agencies we know that develop and publish evaluation criteria. Uniform acceptance criteria prevent venue shopping and improve the integrity of the process so that outcomes of the evaluations are reasonably similar. When the legacy Uniform Building Code published UBC Standards in volume 3 such standards existed and were regularly referenced. Unfortunately this is no longer true in today's completive market place.

ICC created its subsidiaries ICC ES and IAS to service the needs of the Building Official and manufacturers to create an accreditation process for testing agencies and product evaluation agencies producing research reports amongst others. They also created a service that produces research reports on behalf of the Building Official. The outcome of these evaluations and listings need to be accepted by the Building Official to be implemented. The technical reviews are performed on behalf of the Building Official so as not to require each jurisdiction to develop their own internal process for accepting building products.

A healthy competitive market with firms producing product listings and research reports has resulted in the need to create rules that facilitate approval or disapproval of these agencies and to create uniformity in the industry.

Cost Impact: The code change proposal will not increase or decrease the cost of construction

This code change is mainly process related and does not impose new requirements. Most agencies function as proposed in the code change.

ADM45-19

Public Hearing Results

Errata: This proposal includes published errata

Item list 1-9 for the new proposed Section O103.1 Qualifications has been added.

Committee Action: Disapproved

Committee Reason: The committee stated that the reason for the disapproval was that the new proposed section should be in the appropriate location in the body of the code instead of as an appendix and that it needs further work including the proper framework and information for building departments. (Vote: 13-0)

Assembly Action: None

ADM45-19

Individual Consideration Agenda

Public Comment 1:

IBC®: O101.1, O102.1, O103.1 (New), O103.2 (New)

Proponents:

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requests As Modified by Public Comment

Further modify as follows:

2018 International Building Code

O101.1 Purpose. The purpose of this appendix is to provide the Building Official criteria to assist in the consideration and approval of products and systems supported by product *listings* and *product evaluation* reports. The Building Official is authorized to accept <u>product evaluation</u> research reports and <u>product listings</u> as proof of compliance with the *International Building Code* and the *International Residential Code* under the authority in

Section 104.11 and as defined in Section 1703.4.2.

The provisions of this code are not intended to prevent the installation of any material or to prohibit any design or method of construction not specifically prescribed by this code, provided that any such alternative has been approved. An alternative material, design or method of construction shall be approved where the building official finds that the proposed design is satisfactory and complies with the intent of the provisions of this code, and that the material, method or work offered is, for the purpose intended, not less than the equivalent of that prescribed in this code in quality, strength, effectiveness, fire resistance, durability and safety. Where the alternative material, design or method of construction.

O102.1 Definitions. Approved Agency – See Section 202

Approved Listing Agency - Any agency approved by the Building Official which is in the business of listing and labeling and which makes available at least an annual published report of such listings in which specific information is included that the product has been tested to recognized standards and found to comply.

Approved Testing Agency - An agency which is determined by the Building Official to have adequate personnel and expertise to carry out the testing of systems, materials types of construction, fixtures or appliances.

Approved Source See Section 202

Label - See Section 202

Research report – A report published by an approved source to provide technical evaluation that a new or alternative material, product, design or method of construction complies with the intent of the International Building Code and includes supporting data, and where necessary, to assist in the approval of materials or assemblies not specifically provided for in the code.

O103.1 Qualifications. Listing Agencies issuing a product <u>Listing_listing</u>, and <u>Approved Sources_approved sources</u> issuing a <u>product evaluation report Research Report</u>, shall be accredited by an approved accreditation body as to competence and capability in compliance with Sections 1703.1.1 through 1703.1.3. Approved <u>Product listing agencies</u> or <u>Approved Sources_approved sources</u> issuing <u>product evaluation</u> reports <u>shall satisfy the following requirements:</u>

- 1. Approved agencies shall be accredited by <u>an accreditation Accreditation by a body</u> that is a signatory to the International Accreditation Forum (IAF) Multilateral Recognition Arrangement (MLA) and is itself accredited to ISO/IEC Standard 17011, General Requirements for accreditation bodies accrediting conformity assessment bodies (CABs).
- 2. The agency shall employ qualified technical personal familiar with the International Building Code and the International

 Residential International Code and the International Fire Code and their referenced standards as well as the evaluation criteria and standards used to produce the evaluation report.
- 3. <u>Product evaluation reports Evaluation Reports for structural components</u> shall be issued under the supervision of a licensed professional engineer.
- 4. The agencies shall implement a product labeling and identification program consistent with requirements for labeling in the code.
- 5. The agencies shall publish lists for evaluated or listed materials, assemblies or products.
- 6. The Agencies shall develop and implement quality control programs that shall be satisfied by the product evaluation and listing report holder and shall require follow up in plant inspections to determine compliance with the approved quality control program.
- 7. The agencies shall publish Research Reports or listings based on, in order of importance, the code; or standards recognized in the codes, and when the product is an alternative material or system recognized under IBC Section 104.11, Acceptance Criteria that have been developed with public input and are acceptable to the Building Official.
- 8. The agencies shall have a process to periodically re-evaluate published product evaluation reports and product listing to address applicable changes in the applicable codes, acceptance criteria or referenced standards used in the evaluation report.
- 9. The Agencies shall develop and implement quality control programs that shall be satisfied by the product evaluation and listing report holder and shall require regular follow up in-plant inspections to verify compliance with the approved quality control program.

O103.2 Review and Listing Process Listing agencies and approved sources issuing a product evaluation report shall perform their duties in accordance with the limitations of their accreditation as well as the following requirements:

- 1. The agencies shall implement a product labeling and identification program consistent with requirements for labeling in the code.
- 2. The agencies shall publish lists for evaluated or listed materials, assemblies or products.
- The agencies shall develop and implement quality control programs that shall be satisfied by the product evaluation report and listing
 report holder and shall require regular follow up in-plant inspections to determine compliance with the approved quality control program.
- 4. The agencies shall publish *product evaluation* reports or *listings* based on, in order of importance, the code; or standards recognized in the codes.
- 5. When the product is an alternative material or system recognized in the Code under Section 104.11 of the *International Building Code*, acceptance criteria that have been developed with public input and that are acceptable to the *Building Official* shall be the basis of the review.
- 6. The agencies shall have a process to periodically re-evaluate published product evaluation reports and product listing to address applicable changes in the applicable codes, acceptance criteria or referenced standards used in the evaluation report.

Commenter's Reason: The public comment for ADM 45-19 was developed in collaboration the joint effort of several listing agencies, agencies that

issue product evaluation reports (also referred to as code compliance reports, research reports, etc), manufacturers and other interested parties. Input was also solicited from interested parties that spoke in support and in opposition to the code change at the Committee Action Hearings in Albuquerque. A working group was formed and met one time. During our meeting it was apparent that three groups exist: one group that believes that rules need to be developed due to the view that "wild west" has developed where anyone can claim to produce a product evaluation report or listing.

During the CAH some speakers stated that ICC should form an ad-hoc group to evaluate the issues beings addressed in the change to include all providers or product evaluation reports and listings. The Compliance Code Action Committee is such a group however the group was not very well publicized and had limited participation as was stated in the CAH and has proposed ADM 23-19.

The ad-hoc group that participated included representation from:

- 1. Underwriters Laboratories
- 2. Intertek
- 3. Uniform Evaluation Service
- 4. DRJ Engineering
- 5. City of Los Angeles
- 6. Hilti
- 7. Simpson Strong Tie
- 8. Code Consultants, Thomas Meyers
- 9. Intech Consulting, Lorraine Ross
- 10. Preview Group, Steve Winkle.
- 11. ICC ES was contacted and provided input but did not participate directly.
- 12. APA was contacted
- 13. International Code Consultants, Jeff Shapiro was contacted
- 14. Michael Savage, Compliance Code Action Committee was contacted

During the working group meeting it became clear that there were 4 major encampments on the issue:

- 1. The do nothing maintain status quo group.
- 2. The something needs to be done group, but it should the ICC Board's role and not a code change issue.
- 3. There is a need to get some consistency and for competition in the market place to be based on the use of uniform evaluation criteria and customer service. In other words cost, speed of service, technical soundness of the review and not the review outcome.
- 4. Supporters of ADM 45-19 that see it as a middle road that accommodates current practices and raises the bar but does not raise it too high to not be achievable.

The public comment addresses the issues raised by the General committee and the speakers in opposition to the code change.

The appendix is offered as a stand alone option that relies on portions of the chapter 2 definitions to avoid repetition.

The definition of approved source is expanded to directly address accredited product certification agencies to allow test labs or licensed engineers to produce product evaluation reports for specific items.

A listing is defined. It may appear obvious to most code users what it is but a listing really is something in a list but in the context of the code it is prof of compliance with a referenced standard in the code such as a fire resistance rating tested to an ASTM or UL standard.

Research report is changed to a more generic term product evaluation report to reflect the propriety and not a prescriptive nature of the building material.

Product evaluation reports for structural components require supervision by a a licensed engineer. The engineer only needs to be licensed by the State in which he/she practices and is reflective of current practice where an ICC ES staff engineer develops acceptance criteria and publishes evaluation reports in Birmingham for use throughout the United States. Licensure is proof of proficiency in the use of codes and standards by a State and thus higher than obtaining a degree by education. This addresses concerns raised by some speakers in opposition or who submitted floor modifications.

The qualifications sections have been split into two sections one for qualifications and one to describe the process envision in IBC Ch. 17.

The word accreditation is used repeatedly to make clear that testing and product certification agencies are accredited as proof of proficiency as and process in compliance with the ISO/IEC standard 17011. The International Accreditation Service (IAS), an ICC subsidiary, as well as ANSI evaluate the competencies of product certification bodies and testing agencies and issue certificates of accreditation to competencies to test or evaluate to specific standards listed in the accreditation. The term was chosen to coincide with the terminology that the industry utilizes.

Clarification has been added that product evaluations demonstrating equivalence to the code should be based on acceptance criteria developed in similar fashion to the prescribed standards in the code. It is important that evaluation criteria used in the product evaluation be developed in as open and transparent process as possible and the proposed code change maintains that requirement. This is generally reflective of current practice for some providers of product evaluation reports who may or may not produce product evaluation reports. As stated in the original code change reason statement it is hoped at some point that criteria development and it's costs be separated from publication of product evaluation reports and that product evaluations demonstrate proficiency in the evaluation criteria and the code.

An effort has been made to differentiate a product listing from a product evaluation and to make clear what approved means. A product listing is proof of compliance with a standard actually referenced in the code like fire doors, penetration fire stop assemblies etc. A product evaluation report evaluates a product to be equivalent to that which is prescribed in the code. A steel joist hanger for example or strap is not prescribed in the code and therefore a product evaluation report determines it's load carrying capacity based or testing or engineer or both and prescribes conditions of use interior/exterior, the method of fastening, the substrate, etc. Only the Building Official approves the use of the product by approving it on building construction plans.

ADM 45-19 does not conflict with ADM 23-19 and is designed as stand-alone and is non-mandatory in an Appendix to the IBC. As such jurisdictions such as City of Los Angeles, the California State fire Marshal, Miami/Dade, New York City and many others can continue their current practice. Additionally, feedback received has shows that the proposed code change generally reflects current practice.

The proponent has served the ICC membership as chair of the ICC ES Evaluation Committee and as a member for 6 years. Supporters either retired or current Building Officials include past members of the ICC or ICBO ES committees as well. This is not an ICC ES code change and is intended to be as neutral as possible and to look out for the interest of the public and Building Officials.

This code change requires 2/3 of the governmental voting members to support it for the final action to pass. Please support the direction of the Administrative Committee that saw merit in the code change but wanted changes made to reflect the issues raised at the CAH. Please vote for approved as modified by public comment 2.

Cost Impact: The net effect of the public comment and code change proposal will not increase or decrease the cost of construction The proposal implements current practice. New agencies or approved source will incur additional costs reflected in the cost of service provided to the manufacturer or applicant.

Public Comment# 1332

ADM47-19

This is the referenced standards administrative update code change intended to be heard as a single code change. This code change was set up to include all of the ICC codes in an effort to allow for easier review by code users. ADM47-19 will be heard at the PCH as a single code change. ADM47-19 received 19 public comments that procedurally will be dealt with as separate parts in conjunction with the public comment submitted. Also refer to the Discussion Guide for further information related to the CAH results and the public comments related to each standard that received a public comment.

ADM47-IBC-19

Proposed Change as Submitted

AA	Aluminum Association	
Standard Reference Number	Title	Referenced in Code(s):
ADM1—2015ADM1—2020	Aluminum Design Manual: Part 1—A Specification	IBC®
	1—Specification for Aluminum Structures	
AAMA	American Architectural Manufacturers Association	
Standard Reference Number	Title	Referenced in Code(s):
711—16 - <u>711—20</u>	Voluntary Specification for Self Adhering Flashing Used for Installation of Exterior Wall Fenestration Products	IBC®
714—15 - <u>714—20</u>	Voluntary Specification for Liquid Applied Flashing Used to Create a Water-resistive Seal around Exterior Wall Openings in Buildings	IBC®
ACI	American Concrete Institute	
Standard Reference Number	Title	Referenced in Code(s):
318—14 <u>318—19</u>	Building Code Requirements for Structural Concrete	IBC®
AISI	American Iron and Steel Institute	
Standard Reference Number	Title	Referenced in Code(s):
AISI S100—16 <u>/S1-18</u>	North American Specification for the Design of Cold- formed Steel Structural Members, 2016, with Supplement 1, dated 2018	IBC®
AISI S202 15 <u>S202—20</u>	Code of Standard Practice for Cold-formed Steel Structural Framing, 20152020	IBC®
AISI S220 15 <u>S220—20</u>	North American Standard for Cold-formed Steel Framing—Nonstructural Members, 2015/2020	IBC®
AISI \$230—15 <u>\$230—18</u>	Standard for Cold-formed Steel Framing— Prescriptive Method for One- and Two-family Dwellings, 20152018	IBC®
AISI \$240—15 <u>\$240—20</u>	North American Standard for Cold-Formed Steel Structuring Framing, 20152020	IBC®
AISI \$400—15/\$1—16 <u>\$400—</u> 20	North American Standard for Seismic Design of Cold-formed Steel Structural Systems, 2015, with Supplement 1, dated 2016. 2020	IBC®
ANSI	American National Standards Institute	
Standard Reference Number	Title	Referenced in Code(s):

Scheme for the Identification of Piping Systems	IBC®
Installation of Ceramic Tile in the Wet-set Method,	IBC®
with Portland Cement Mortar	
	IBC®
	IBC®
	IBC®
l ·	IBC®
	IBC®
Installation of Ceramic Tile with Modified Epoxy Emulsion Mortar/Grout	IBC®
	IBC®
	IBC®
set Portland Cement Mortar	
American National Standard Specifications for	IBC®
Chemical-resistant, Water-cleanable Tile-setting and	
-grouting Epoxy and Water Cleanable Tile-setting	
Epoxy Adhesive	
American National Standard Specifications for	IBC®
Modified Dry-set Cement Mortar	
American National Standard Specifications for	IBC®
Cement Grouts for Tile Installation	
American National Standard Specifications for the	IBC®
	IDC®
Ceramic Tile	IBC®
APA - Engineered Wood Association	
Title	Referenced
	in Code(s):
Standard Specification for Structural Glued	IBC®
Laminated Timber of Softwood Species	
Structural Glued Laminated Timber	IBC®
Standard for Performance-Rated Engineered Wood	IBC®
	IBC®
	IBC®
Timber	
	IBC®
	IBC®
	IBC®
Timber Beams	שטטו
	IDCO
Glulam in Residential Construction—Western	IBC®
Glulam in Residential Construction—Western EditionBuilding—Construction Guide	IBC®
	IBC®
	Installation of Ceramic Tile in the Wet-set Method, with Portland Cement Mortar Installation of Ceramic Tile, Quarry Tile on a Cured Portland Cement Mortar Setting Bed with Dry-set or Latex-Portland Mortar Installation of Ceramic Tile with Organic Adhesives or Water-cleanable Tile-setting Epoxy Adhesive Installation of Ceramic Tile with Dry-set Portland Cement Mortar or Latex-Portland Cement Mortar Installation of Ceramic Tile with Chemical-resistant, Water Cleanable Tile-setting and -grouting Epoxy Installation of Ceramic Tile with Chemical-resistant Furan Resin Mortar and Grout Installation of Ceramic Tile with Modified Epoxy Emulsion Mortar/Grout Installation of Grout in Tilework American National Standard Specifications for Dry-set Portland Cement Mortar American National Standard Specifications for Chemical-resistant, Water-cleanable Tile-setting and grouting Epoxy and Water Cleanable Tile-setting Epoxy Adhesive American National Standard Specifications for Modified Dry-set Cement Mortar American National Standard Specifications for Cement Grouts for Tile Installation American National Standard Specifications for Cement Grouts for Tile Installation American National Standard Specifications for Cement Grouts for Tile Installation Title Standard Specification for Structural Glued Laminated Timber of Softwood Species Structural Glued Laminated Timber Standard for Performance-Rated Engineered Wood Siding Panel Design Specification Standard for Performance-Rated Engineered Wood Siding Panel Design Specification Standard For Performance-Rated Engineered Wood Siding Panel Design Specification Standard Beams Beam Design Tables Field Notching and Drilling of Glued Laminated Timber Beams

Standard Reference Number	Title	Referenced
		in Code(s):
EP 484.3 MON2016DEC2017	Diaphragm Design of Metal-clad, Wood-frame Rectangular Buildings	IBC®
EP 486.2 OCT 2012ED 486.3 SEP2017	Shallow-post and Pier Foundation Design	IBC®
EP 559.2 MON2016 <u>5</u> 59.1 W/Corr. AUG2010 (R2014)	Design Requirements and Bending Properties for Mechanically Laminated Wood Assemblies	IBC®
ASCE/SEI	American Society of Civil EngineersStructural Engineering Institute	
Standard Reference Number	Title	Referenced in Code(s):
7—16 with Supplement 1	Minimum Design Loads and Associated Criteria for Buildings and Other Structures	IBC®
24—14 24—20	Flood Resistant Design and Construction	IBC®
29 17 <u>29—19</u>	Standard Calculation Methods for Structural Fire Protection	IBC®
49 07 <u>49 12</u>	Wind Tunnel Testing for Buildings and Other Structures	IBC®
ASME	American Society of Mechanical Engineers	
Standard Reference Number	Title	Referenced in Code(s):
ASME/ A17.1—2016 <u>A17.1—</u> 2019/CSA B44—16 <u>B44—19</u>	Safety Code for Elevators and Escalators	IBC®
A17.7—2007/CSA B44— 07(R2012) B44—07(R2019)	Performance-based Safety Code for Elevators and Escalators	IBC®
A18.1—2014A18.1—2020	Safety Standard for Platform Lifts and Stairway Chairlifts	IBC®
A90.1—2015 <u>A90.1—2020</u>	Safety Standard for Belt Manlifts	IBC®
B16.18—2012B16.18—2018	Cast Copper Alloy Solder Joint Pressure Fittings	IBC®
B16.22—2013B16.22—2018	Wrought Copper and Copper Alloy Solder Joint Pressure Fittings	IBC®
B20.1—2015B20.1—2021	Safety Standard for Conveyors and Related Equipment	IBC®
B31.3—2016B31.3—2020	Process Piping	IBC®
ASSE	American Society of Safety Engineers	
Standard Reference Number	Title	Referenced in Code(s):
ANSI/ ASSE Z359.1— 2016 <u>ASSP Z359.1—2019</u>	Requirements for the ANSI/ASSE Z359 The Fall Protection Code	IBC®
ASTM	ASTM International	
Standard Reference Number	Title	Referenced in Code(s):
A6/ A6M 14 <u>A6M—2017A</u>	Standard Specification for General Requirements for Rolled Structural Steel Bars, Plates, Shapes and Sheet Piling	IBC®
A153/ A153M—09 <u>A153M—</u> 2016A	Specification for Zinc Coating (Hot-dip) on Iron and Steel Hardware	IBC®
A240/ A240M—15a <u>A240M—17</u>	Standard Specification for Chromium and Chromium-nickel Stainless Steel Plate, Sheet and Strip for Pressure Vessels and for General Applications	IBC®

A252 10 A252—2010(2018)	Specification for Welded and Seamless Steel Pipe	IBC®
, ,	Piles	
A283/ A283M 13 <u>A283M—</u> <u>2018</u>	Specification for Low and Intermediate Tensile Strength Carbon Steel Plates	IBC®
A416/ A416M 15 <u>A416M—</u> 2017A	Specification for Steel Strand, Uncoated Seven-wire for Prestressed Concrete	IBC®
A572/ A572M 15 <u>A572M—</u> 2018	Specification for High-strength Low-alloy Columbium-Vanadium Structural Steel	IBC®
A653/ A653M 15 <u>A653M—</u> 2017	Specification for Steel Sheet, Zinc-coated Galvanized or Zinc-iron Alloy-coated Galvannealed by the Hot-dip Process	IBC®
A690/ A690M—13a <u>A690M—</u> 13a(2018)	Standard Specification for High-strength Low-alloy Nickel, Copper, Phosphorus Steel H-piles and Sheet Piling with Atmospheric Corrosion Resistance for Use in Marine Environments	IBC®
A706/ A706M—15 <u>A706M—</u> 2016	Specification for Low-alloy Steel Deformed and Plain Bars for Concrete Reinforcement	IBC®
A722/ A722M—15 A722M— 2018	Specification for High-strength Steel Bars for Prestressed Concrete	IBC®
A755/ A755M—15 <u>A755M—</u> 2016E1	Specification for Steel Sheet, Metallic-coated by the Hot-dip Process and Prepainted by the Coil-coating Process for Exterior Exposed Building Products	IBC®
A924/ A924M—14 <u>A924M—</u> 2017A	Standard Specification for General Requirements for Steel Sheet, Metallic-coated by the Hot-dip Process	IBC®
B88-14 B88-2016	Specification for Seamless Copper Water Tube	IBC®
B251—10B251/B251M—2017	Specification for General Requirements for Wrought Seamless Copper and Copper-alloy Tube	IBC®
B280—13 <u>B280—2018</u>	Specification for Seamless Copper Tube for Air Conditioning and Refrigeration Field Service	IBC®
B695—04(2009)B695— 2004(2016)	Standard Specification for Coatings of Zinc Mechanically Deposited on Iron and Steel Strip for Building Construction	IBC®
C5—10 C5—2018	Specification for Quicklime for Structural Purposes	IBC®
C27—98(2013) <u>C27—</u> 1998(2018)	Specification for Classification of Fireclay and High- alumina Refractory Brick	IBC®
C31/ C31M —15 <u>C31M</u> —2018B	Practice for Making and Curing Concrete Test Specimens in the Field	IBC®
C33/ C33M—13 C33M—2018	Specification for Concrete Aggregates	IBC®
C55—2014a C55—2017	Specification for Concrete Building Brick	IBC®
C62—13a <u>C62—2017</u>	Standard Specification for Building Brick (Solid Masonry Units Made from Clay or Shale)	IBC®
C67—14 <u>C67/C67M—2018</u>	Test Methods of Sampling and Testing Brick and Structural Clay Tile	IBC®
C73—14 <u>C73—2017</u>	Specification for Calcium Silicate Brick (Sand-lime Brick)	IBC®
C90—14 <u>C90—2016A</u>	Specification for Loadbearing Concrete Masonry Units	IBC®
C91/ C91M—12 C91M—2018	Specification for Masonry Cement	IBC®
C94/ C94M 15a C94M 2017A	Specification for Ready-mixed Concrete	IBC®
C140/ C140M—15 <u>C140M—</u> 2018	Test Method Sampling and Testing Concrete Masonry Units and Related Units	IBC®
C150/ C150M —15 <u>C150M</u> — 2018	Specification for Portland Cement	IBC®

C172/ C172M 14a <u>C172M—</u> 2017	Practice for Sampling Freshly Mixed Concrete	IBC®
C199 84(2011) C199— 1984(2016)	Test Method for Pier Test for Refractory Mortars	IBC®
C208 12 <u>C208</u> 2012(2017)E1	Specification for Cellulosic Fiber Insulating Board	IBC®
C216 —15 <u>C216</u> —2017A	Specification for Facing Brick (Solid Masonry Units Made from Clay or Shale)	IBC®
C315 07(2011) <u>C315—</u> <u>2007(2016)</u>	Specification for Clay Flue Liners and Chimney Pots	IBC®
C317/ C317M 00(2015) C317M—2000(2015)	Specification for Gypsum Concrete	IBC®
C330/ C330M —14 <u>C330M</u> — 2017A	Specification for Lightweight Aggregates for Structural Concrete	IBC®
C331/ C331M 14 <u>C331M 2017</u>	Specification for Lightweight Aggregates for Concrete Masonry Units	IBC®
C473 15 <u>C473—2017</u>	Test Methods for Physical Testing of Gypsum Panel Products	IBC®
C475/ C475M 15 <u>C475M—</u> 2017	Specification for Joint Compound and Joint Tape for Finishing Gypsum Board	IBC®
C516 08(2014)e1C516— 2008(2013)E1	Specifications for Vermiculite Loose Fill Thermal Insulation	IBC®
C547—15 C547—2017	Specification for Mineral Fiber Pipe Insulation	IBC®
C549—06(2012)	Specification for Perlite Loose Fill Insulation	IBC®
C552—15 <u>C552—2017E1</u>	Standard Specification for Cellular Glass Thermal Insulation	IBC®
C557—03(2009)e01 <u>C557—</u> 2003(2017)	Specification for Adhesives for Fastening Gypsum Wallboard to Wood Framing	IBC®
C578—15 <u>C578—2018</u>	Standard Specification for Rigid, Cellular Polystyrene Thermal Insulation	IBC®
C587—04(2014) <u>C587—</u> 2004(2018)	Specification for Gypsum Veneer Plaster	IBC®
C595/ C595M—14e1 <u>C595M—</u> 2018	Specification for Blended Hydraulic Cements	IBC®
C635/ C635M—13a <u>C635M—</u> 2017	Specification for the Manufacture, Performance and Testing of Metal Suspension Systems for Acoustical Tile and Lay-in Panel Ceilings	IBC®
C652—15 <u>C652—2017A</u>	Specification for Hollow Brick (Hollow Masonry Units Made from Clay or Shale)	IBC®
C726—12 <u>C726—2017</u>	Standard Specification for Mineral Wool Roof Insulation Board	IBC®
C728—15 <u>C728—2017A</u>	Standard Specification for Perlite Thermal Insulation Board	IBC®
C744—14 <u>C744—2016</u>	Specification for Prefaced Concrete and Calcium Silicate Masonry Units	IBC®
C754—15 <u>C754—2018</u>	Specification for Installation of Steel Framing Members to Receive Screw-attached Gypsum Panel Products	IBC®
C836/ C836M —15 <u>C836M</u> — 2018	Specification for High-solids Content, Cold Liquid- applied Elastomeric Waterproofing Membrane for Use with Separate Wearing Course	IBC®
C840—13 <u>C840—2018A</u>	Specification for Application and Finishing of Gypsum Board	IBC®

C841 03(2013) <u>C841 </u>	Specification for Installation of Interior Lathing and	IBC®
2003(2018) C843 99(2012)C843—2017	Furring Specification for Application of Gypsum Veneer	IBC®
	Plaster	17.00
C847 14a <u>C847 - 2018</u>	Specification for Metal Lath	IBC®
C920—14a <u>C920—2018</u>	Standard for Specification for Elastomeric Joint Sealants	IBC®
C926—15b <u>C926—2018B</u>	Specification for Application of Portland Cement-based Plaster	IBC®
C933—14 <u>C933—2018</u>	Specification for Welded Wire Lath	IBC®
C946—10 <u>C946—2018</u>	Specification for Construction of Dry-stacked, Surface-bonded Walls	IBC®
C954—15 <u>C954—2018</u>	Specification for Steel Drill Screws for the Application of Gypsum Panel Products or Metal Plaster Bases to Steel Studs from 0.033 inch (0.84 mm) to 0.112 inch (2.84 mm) in Thickness	IBC®
C957/ C957M 15 <u>C957M—</u> 2017	Specification for High-solids Content, Cold Liquid- applied Elastomeric Waterproofing Membrane with Integral Wearing Surface	IBC®
C1002—14 <u>C1002—2018</u>	Specification for Steel Self-piercing Tapping Screws for the Application of Gypsum Panel Products or Metal Plaster Bases to Wood Studs or Steel Studs	IBC®
C1032—14 <u>C1032—2018</u>	Specification for Woven Wire Plaster Base	IBC®
C1047—14aC1047—2018	Specification for Accessories for Gypsum Wallboard and Gypsum Veneer Base	IBC®
C1063—15a <u>C1063—2018B</u>	Specification for Installation of Lathing and Furring to Receive Interior and Exterior Portland Cement-based Plaster	IBC®
C1088—14C1088—2018	Specification for Thin Veneer Brick Units Made from Clay or Shale	IBC®
C1157/ C1157M—11 <u>C1157M—</u> 2017	Standard Performance Specification for Hydraulic Cement	IBC®
C1167—11 C1167—2011(2017)	Specification for Clay Roof Tiles	IBC®
C1177/ C1177M—13 C1177M— 2017	Specification for Glass Mat Gypsum Substrate for Use as Sheathing	IBC®
C1178/ C1178M—13 <u>C1178M—</u> 2018	Specification for Coated Mat Water-resistant Gypsum Backing Panel	IBC®
C1186—08(2012) <u>C1186—</u> 2008(2016)	Specification for Flat Fiber Cement Sheets	IBC®
C1261—13 <u>C1261—</u> 2013(2017) <u>E1</u>	Specification for Firebox Brick for Residential Fireplaces	IBC®
C1278/ C1278M— 07a(2011) <u>C1278M—2017</u>	Specification for Fiber-reinforced Gypsum Panel	IBC®
C1283—11C1283—2015	Practice for Installing Clay Flue Lining	IBC®
C1288 14 <u>C1288</u> —2017	Standard Specification for Discrete Nonasbestos Fiber-cement Interior Substrate Sheets	IBC®
C1289 15 <u>C1289—2018</u>	Standard Specification for Faced Rigid Cellular Polyisocyanurate Thermal Insulation Board	IBC®
C1325 14 <u>C1325—2018</u>	Standard Specification for Nonasbestos Fiber-mat Reinforced Cement Backer Units	IBC®
C1364—10B <u>C1364—2017</u>	Standard Specification for Architectural Cast Stone	IBC®
C1396/ C1396M —	Specification for Gypsum Board	IBC®
14a C1396M—2017		

C1492 03(2009) <u>C1492—</u> 2003(2016)	Standard Specification for Concrete Roof Tile	IBC®
C1600/ C1600M —11 <u>C1600M</u> — 2017	Standard Specification for Rapid Hardening Hydraulic Cement	IBC®
C1629/ C1629M 15 <u>C1629M—</u> 2018A	Standard Classification for Abuse-resistant Nondecorated Interior Gypsum Panel Products and Fiber-reinforced Cement Panels	IBC®
C1658/ C1658M—13 <u>C1658M—</u> 2018	Standard Specification for Glass Mat Gypsum Panels	IBC®
<u>C1670—16C1670/C1670M—</u> <u>2018</u>	Standard Specification for Adhered Manufactured Stone Masonry Veneer Units	IBC®
C1766—13C1766—2015	Standard Specification for Factory-laminated Gypsum Panel Products	IBC®
D25—12 <u>D25—2012(2017)</u>	Specification for Round Timber Piles	IBC®
D41/ D41M 11 <u>D41M 2011(2016)</u>	Specification for Asphalt Primer Used in Roofing, Dampproofing and Waterproofing	IBC®
D43/ D43M 00(2012)e1 D43M—2000(2018)	Specification for Coal Tar Primer Used in Roofing, Dampproofing and Waterproofing	IBC®
D56 05(2010) <u>D56—2016A</u>	Test Method for Flash Point by Tag Closed Cup Tester	IBC®
D86 15 D86—2017	Test Method for Distillation of Petroleum Products and Liquid Fuels at Atmospheric Pressure	IBC®
D93 15 <u>D93—2018</u>	Test Methods for Flash Point by Pensky-Martens Closed Cup Tester	IBC®
D226/ D226M 09 D226M— 2017	Specification for Asphalt-saturated Organic Felt Used in Roofing and Waterproofing	IBC®
D227/ D227M 03(2011)e1 <u>D227M</u> 2003(2018)	Specification for Coal-tar-saturated Organic Felt Used in Roofing and Waterproofing	IBC®
D312/ D312M—15 <u>D312M—</u> 2016M	Specification for Asphalt Used in Roofing	IBC®
D448—2012 D448—2012(2017)	Standard Classification for Sizes of Aggregate for Road and Bridge Construction	IBC®
D450/ D450M— 07(2013)e1 <u>D450M—</u> 2017(2018)	Specification for Coal-tar Pitch Used in Roofing, Dampproofing and Waterproofing	IBC®
D1143/ D1143M— 07(2013) <u>D1143M—</u> 2007(2013) <u>E1</u>	Test Methods for Deep Foundations Under Static Axial Compressive Load	IBC®
D1863/ D1863M— 05(2011)e1 <u>D1863M—</u> 2005(2018)	Specification for Mineral Aggregate Used on Built-up Roofs	IBC®
D1970/ D1970M— 15a <u>D1970M—2017A</u>	Specification for Self-adhering Polymer Modified Bituminous Sheet Materials Used as Steep Roof Underlayment for Ice Dam Protection	IBC®
D2178/ D2178M—15 <u>D2178M—</u> 15A	Specification for Asphalt Glass Felt Used in Roofing and Waterproofing	IBC®
D2487—11 <u>D2487—2017</u>	Practice for Classification of Soils for Engineering Purposes (Unified Soil Classification System)	IBC®
D2822/ D2822M— 05(2011)e1 <u>D2822M—</u> <u>2005(2011)</u>	Specification for Asphalt Roof Cement, Asbestos Containing	IBC®

D2824/ D2824M—13 D2824M—	Standard Specification for Aluminum-pigmented	IBC®
2018	Asphalt Roof Coatings, Nonfibered and Fibered	1000
	without Asbestos	
D2859—16 D2859—2016	Standard Test Method for Ignition Characteristics of	IBC®
	Finished Textile Floor Covering Materials	
D2898—10 D2898—2010(2017)	Test Methods for Accelerated Weathering of Fire-	IBC®
	retardant-treated Wood for Fire Testing	
D3019—08D3019/D3019M—	Specification for Lap Cement Used with Asphalt Roll	IBC®
<u>2017</u>	Roofing, Nonfibered, Asbestos Fibered and	
	Nonasbestos Fibered	
D3161/ D3161M—15 <u>D3161M—</u>	Test Method for Wind Resistance of Steep Slope	IBC®
<u>2016A</u>	Roofing Products (Fan Induced Method)	
D3200—74(2012) D3200—	Standard Specification and Test Method for	IBC®
<u>1974(2017)</u>	Establishing Recommended Design Stresses for	
	Round Timber Construction Poles	
D3462/ D3462M —	Specification for Asphalt Shingles Made from Glass	IBC®
10a D3462M—2016	Felt and Surfaced with Mineral Granules	·= • •
D3679—13 <u>D3679—2017</u>	Specification for Rigid Poly (Vinyl Chloride) (PVC) Siding	IBC®
D3737—12 D3737—2018E1	Practice for Establishing Allowable Properties for	IBC®
	Structural Glued Laminated Timber (Glulam)	
D3746—	Test Method for Impact Resistance of Bituminous	IBC®
85(2008) D3746/D3746M—	Roofing Systems	
1985(2015)E1		
D3957—09 D3957—2009(2015)	Standard Practices for Establishing Stress Grades	IBC®
	for Structural Members Used in Log Buildings	
D4318—10e1 <u>D4318—2017E1</u>	Test Methods for Liquid Limit, Plastic Limit and Plasticity Index of Soils	IBC®
D4434/ D4434M—12 D4434M—	Specification for Poly (Vinyl Chloride) Sheet Roofing	IBC®
<u>2015</u>		
D4479/ D4479M—	Specification for Asphalt Roof Coatings—Asbestos-	IBC®
07(2012)e1 <u>D4479M—</u>	free	
<u>2007(2018)</u>		
D4586/ D4586M—	Specification for Asphalt Roof Cement—Asbestos-	IBC®
07(2012)e1 D4586M—	free	
<u>2007(2018)</u>		
D4637/ D4637M	Specification for EPDM Sheet Used in Single-ply	IBC®
14e1D4637M—2015	Roof Membrane	15.00
D4869/ D4869M 15 <u>D4869M</u>	Specification for Asphalt-saturated (Organic Felt)	IBC®
2016A	Underlayment Used in Steep Slope Roofing	IDOO
D4897/ D4897M	Specification for Asphalt-coated Glass Fiber Venting	IBC®
01(2009) D4897M—2016	Base Sheet Used in Roofing	IDCE
D4945 12 <u>D4945—2017</u>	Test Method for High-strain Dynamic Testing of Deep Foundations	IBC®
D5055 13e1 <u>D5055—2016</u>	Specification for Establishing and Monitoring Structural Capacities of Prefabricated Wood I-joists	IBC®
D5456 14b <u>D5456—2018</u>	Specification for Evaluation of Structural Composite Lumber Products	IBC®
D5516 09 <u>D5516—2018</u>	Test Method of Evaluating the Flexural Properties of Fire-retardant Treated Softwood Plywood Exposed to Elevated Temperatures	IBC®
D5643/ D5643M— 06(2012)e1 <u>D5643M—</u> 2006(2018)	Specification for Coal Tar Roof Cement, Asbestos- free	IBC®

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D5664—10 <u>D5664—2017</u>	Standard Test Method for Evaluating the Effects of	IBC®
	Fire-retardant Treatment and Elevated	
	Temperatures on Strength Properties of Fire-	
	retardant Treated Lumber	
D6083—	Specification for Liquid Applied Acrylic Coating Used	IBC®
05e01 D6083/D6083M—2018	in Roofing	
D6162/ D6162M—	Specification for Styrene-butadiene-styrene (SBS)	IBC®
00a(2015)e1 <u>D6162M—2016</u>	Modified Bituminous Sheet Materials Using a	
	Combination of Polyester and Glass Fiber	
	Reinforcements	
D6163/ D6163M—	Specification for Styrene-butadiene-styrene (SBS)	IBC®
00(2015)e1 <u>D6163</u> M—2016	Modified Bituminous Sheet Materials Using Glass	
	Fiber Reinforcements	
D6164/ D6164M—11 D6164M—	Specification for Styrene-butadiene-styrene (SBS)	IBC®
2016	Modified Bituminous Sheet Metal Materials Using	
	Polyester Reinforcements	
D6222/ D6222M 11 D6222M—	Specification for Atactic Polypropylene (APP)	IBC®
2016	Modified Bituminous Sheet Materials Using	
<u> </u>	Polyester Reinforcements	
D6223/ D6223M—	Specification for Atactic Polypropylene (APP)	IBC®
02(2009)e1 D6223M—2016	Modified Bituminous Sheet Materials Using a	1500
02(2000)61 <u>D0220W 2010</u>	Combination of Polyester and Glass Fiber	
	Reinforcements	
D6298—13 D6298/D6298M—	Specification for Fiberglass Reinforced Styrene-	IBC®
2016	butadiene-styrene (SBS) Modified Bituminous	1000
2010	Sheets with a Factory Applied Metal Surface	
D6380/ D6380M —	Standard Specification for Asphalt Roll Roofing	IBC®
03(2013)e1 D6380M—	(Organic) Felt	1000
2003(2018)	(Organio) i on	
D6464—03a(2009)e1D6464—	Standard Specification for Expandable Foam	IBC®
2003A(2017)	Adhesives for Fastening Gypsum Wallboard to	1500
2003A(2011)	Wood Framing	
D6509/ D6509M —	Standard Specification for Atactic Polypropylene	IBC®
09(2015) D6509M—2016	(APP) Modified Bituminous Base Sheet Materials	IDO®
00(2010)D0000101 2010	Using Glass Fiber Reinforcements	
D6754/ D6754M—10 D6754M—	Standard Specification for Ketone Ethylene Ester	IBC®
2015	Based Sheet Roofing	IDC®
D6757—2013 D6757/D6757M—	Specification for Underlayment Felt Containing	IBC®
2018	Inorganic Fibers Used in Steep Slope Roofing	שטטו
D6841—08 D6841—2016	Standard Practice for Calculating Design Value	IBC®
20071 00 20041—2010	Treatment Adjustment Factors for Fire-retardant	1000
	Treatment Aujustment Factors for File-Tetatuant	
	Treated Lumber	
D6878/D6878M 12D6070M	Treated Lumber Standard Specification for Thermoplastic Polyolofin	IRC®
D6878/ D6878M—13 <u>D6878M—</u>	Standard Specification for Thermoplastic Polyolefin	IBC®
<u>2017</u>	Standard Specification for Thermoplastic Polyolefin Based Sheet Roofing	
<u>2017</u> D6947/ D6947M—	Standard Specification for Thermoplastic Polyolefin Based Sheet Roofing Standard Specification for Liquid Applied Moisture	IBC®
<u>2017</u>	Standard Specification for Thermoplastic Polyolefin Based Sheet Roofing Standard Specification for Liquid Applied Moisture Cured Polyurethane Coating Used in Spray	
2017 D6947/ D6947M— 07(2013)e1 <u>D6947M—2016</u>	Standard Specification for Thermoplastic Polyolefin Based Sheet Roofing Standard Specification for Liquid Applied Moisture Cured Polyurethane Coating Used in Spray Polyurethane Foam Roofing System	IBC®
<u>2017</u> D6947/ D6947M—	Standard Specification for Thermoplastic Polyolefin Based Sheet Roofing Standard Specification for Liquid Applied Moisture Cured Polyurethane Coating Used in Spray Polyurethane Foam Roofing System Standard Specification for Establishing Performance	
2017 D6947/ D6947M— 07(2013)e1 <u>D6947M—2016</u>	Standard Specification for Thermoplastic Polyolefin Based Sheet Roofing Standard Specification for Liquid Applied Moisture Cured Polyurethane Coating Used in Spray Polyurethane Foam Roofing System Standard Specification for Establishing Performance Ratings for Wood, Plastic Composite Deck Boards	IBC®
2017 D6947/ D6947M— 07(2013)e1 <u>D6947M—2016</u> D7032—14 <u>D7032—2017</u>	Standard Specification for Thermoplastic Polyolefin Based Sheet Roofing Standard Specification for Liquid Applied Moisture Cured Polyurethane Coating Used in Spray Polyurethane Foam Roofing System Standard Specification for Establishing Performance Ratings for Wood, Plastic Composite Deck Boards and Guardrail Systems (Guards or Rails)	IBC®
2017 D6947/ D6947M— 07(2013)e1 <u>D6947M—2016</u>	Standard Specification for Thermoplastic Polyolefin Based Sheet Roofing Standard Specification for Liquid Applied Moisture Cured Polyurethane Coating Used in Spray Polyurethane Foam Roofing System Standard Specification for Establishing Performance Ratings for Wood, Plastic Composite Deck Boards	IBC®

D7158/ D7158M—16 <u>D7158M—</u>	Standard Test Method for Wind Resistance of	IBC®
<u>2019</u>	Asphalt Shingles (Uplift Force/Uplift Resistance	
	Method)	
D7254—15 <u>D7254—2017</u>	Standard Specification for Polypropylene (PP)	IBC®
	Siding	
D7655/ D7655M—12 <u>D7655M—</u>	Standard Classification for Size of Aggregate Used	IBC®
<u>2012(2017)</u>	as Ballast for Roof Membrane Systems	
D7672—14 <u>D7672—14E1</u>	Standard Specification for Evaluating Structural	IBC®
	Capacities of Rim Board Products and Assemblies	
E84—16 E84—2018B	Standard Test Methods for Surface Burning	IBC®
	Characteristics of Building Materials	
E9009 E902009(2016)	Test Method for Laboratory Measurement of	IBC®
<u> </u>	Airborne Sound Transmission Loss of Building	
	Partitions and Elements	
E96/ E96M—15 E96M—2016	Standard Test Methods for Water Vapor	IBC®
	Transmission of Materials	
E108—16 E108—2017	Standard Test Methods for Fire Tests of Roof	IBC®
	Coverings	
E119—16 E119—2018B	Standard Test Methods for Fire Tests of Building	IBC®
	Construction and Materials	
E136—16 E136—2016A	Standard Test Method for Behavior of Materials in a	IBC®
	Vertical Tube Furnace at 750°C	
E283-04(2012)E283-	Standard Test Method for Determining Rate of Air	IBC®
2004(2012)	Leakage through Exterior Windows, Curtain Walls	
	and Doors Under Specified Pressure Differences	
	across the Specimen	
E331—00(2009) <u>E331—</u>	Standard Test Method for Water Penetration of	IBC®
<u>2000(2016)</u>	Exterior Windows, Skylights, Doors and Curtain	
	Walls by Uniform Static Air Pressure Difference	
E492—09 E492—2009(2016)E1	Test Method for Laboratory Measurement of Impact	IBC®
	Sound Transmission Through Floor-ceiling	
	Assemblies Using the Tapping Machine	
E648 15c1 <u>E648</u> —2017A	Standard Test Method for Critical Radiant Flux of	IBC®
· · · · · · · · · · · · · · · · · · ·	Floor-covering Systems Using a Radiant Heat	
	Energy Source	
E736/ E736M—	Test Method for Cohesion/Adhesion of Sprayed	IBC®
00(2015)e1 <u>E736M—2017</u>	Fire-resistive Materials Applied to Structural	
	Members	
E814—2013A <u>E814—</u>	Test Method for Fire Tests of Penetration Firestop	IBC®
2013A(2017)	Systems	
E970—1 4 <u>E970—2017</u>	Standard Test Method for Critical Radiant Flux of	IBC®
	Exposed Attic Floor Insulation Using a Radiant Heat	
	Energy Source	
E1300—12ae1E1300—2016	Practice for Determining Load Resistance of Glass	IBC®
	in Buildings	
E1354—16 <u>E1354—17</u>	Standard Test Method for Heat and Visible Smoke	IBC®
	Release Rates for Materials and Products Using an	
	Oxygen Consumption Calorimeter	
E1592—05(2012) E1592—	Test Method for Structural Performance of Sheet	IBC®
2005(2017)	Metal Roof and Siding Systems by Uniform Static	
	Air Pressure Difference	
E1602—03(2010)e1 <u>E1602—</u>	Guide for Construction of Solid Fuel-burning	IBC®
2003(2017)	Masonry Heaters	

E1886 13A E1886—2013A	Standard Test Method for Performance of Exterior	IBC®
13A <u>E1000 2013A</u>	Windows, Curtain Walls, Doors and Impact	1000
	Protective Systems Impacted by Missile(s) and	
	Exposed to Cyclic Pressure Differentials	
E1996—14a E1996—2017	Specification for Performance of Exterior Windows,	IBC®
	Curtain Walls, Doors and Impact Protective Systems	
	Impacted by Windborne Debris in Hurricanes	
E2174—14b <u>E2174—2018</u>	Standard Practice for On-site Inspection of Installed Fire Stops	IBC®
E2273—03(2011) E2273—2018	Standard Test Method for Determining the Drainage	IBC®
	Efficiency of Exterior Insulation and Finish Systems	
	(EIFS) Clad Wall Assemblies	
E2307—15b <u>E2307—15BE1</u>	Standard Test Method for Determining Fire	IBC®
	Resistance of Perimeter Fire Barriers Using the	
E2252 14E2252 2016	Intermediate-scale, Multistory Test Apparatus	IBC®
E2353—1 4 <u>E2353—2016</u>	Standard Test Methods for Performance of Glazing in Permanent Railing Systems, Guards and	IDC®
	Balustrades	
E2404 15a E2404—2017	Practice for Specimen Preparation and Mounting of	IBC®
	Textile, Paper or Polymeric (Including Vinyl) and	
	Wood Wall or Ceiling Coverings, Facing and	
	Veneers to Assess Surface Burning Characteristics	
E2556/ E2556M—10 E2556M—	Standard Specification for Vapor Permeable Flexible	IBC®
<u>2010(2016)</u>	Sheet Water-resistive Barriers Intended for	
50500 00 450500 00474	Mechanical Attachment	IDOO
E2568—09e1 <u>E2568—2017A</u>	Standard Specification for PB Exterior Insulation and Finish Systems	IBC®
E2570/E2570M—07(2014)e1	Standard Test Method for Evaluating Water-resistive	IBC®
L2076/L2076W 07(2014)61	Barrier (WRB) Coatings Used under Exterior	1000
	Insulation and Finish Systems (EIFS) for EIFS with	
	Drainage	
E2573—12 E2573—2017	Standard Practice for Specimen Preparation and	IBC®
	Mounting of Site-fabricated Stretch Systems to	
	Assess Surface Burning Characteristics	
E2579 13 <u>E2579—2015</u>	Standard Practice for Specimen Preparation and	IBC®
	Mounting of Wood Products to Assess Surface	
E2599—15 E2599—2018	Burning Characteristics Standard Practice for Specimen Preparation and	IBC®
<u> </u>	Mounting of Reflective Insulation, Radiant Barrier	וטטשו
	and Vinyl Stretch Ceiling Materials for Building	
	Applications to Assess Surface Burning	
	Characteristics	
E2634—11(2015) E2634—2018	Standard Specification for Flat Wall Insulating	IBC®
	Concrete Form (ICF) Systems	
E2751/ E2751M—13 <u>E2751M—</u>	Practice for Design and Performance of Supported	IBC®
2017A	Laminated Glass Walkways	IDOS
F547—06(2012) <u>F547—2017</u>	Terminology of Nails for Use with Wood and Woodbase Materials	IBC®
F1667—15 <u>F1667—2018</u>	Specification for Driven Fasteners: Nails, Spikes and Staples	IBC®
F2200—14 F2200—2017	Standard Specification for Automated Vehicular	IBC®
	Gate Construction	
G154—12a G154—2016A	Practice for Operating Fluorescent Light Apparatus	IBC®
Ī	for UV Exposure of Nonmetallic Materials	

AWC	American Wood Council	
Standard Reference Number	Title	Referenced
		in Code(s):
AWC STJR—2015STJR—2021	Span Tables for Joists and Rafters	IBC®
ANSI/AWC PWF—2015 <u>PWF—</u> 2021	Permanent Wood Foundation Design Specification	IBC®
ANSI/AWC SDPWS — 2015 SDPWS—2021	Special Design Provisions for Wind and Seismic	IBC®
AWPA	American Wood Protection Association	
Standard Reference Number	Title	Referenced in Code(s):
M4—16 <u>M4—15</u>	Standard for the Care of Preservative-treated Wood Products	IBC®
U1—16 <u>U1—20</u>	USE CATEGORY SYSTEM: User Specification for Treated Wood Except Commodity Specification H	IBC®
AWS	American Welding Society	
Standard Reference Number	Title	Referenced in Code(s):
D1.4/ D1.4M—2017 <u>D1.4M—</u> 2018	Structural Welding Code—Reinforcing Steel Including Metal Inserts and Connections In Reinforced Concrete ConstructionCode—Steel Reinforcing Bars	IBC®
BHMA	Builders Hardware Manufacturers' Association	
Standard Reference Number	Title	Referenced in Code(s):
A 156.10—2011 156.10—2017	Power Operated Pedestrian Doors	IBC®
A 156.19—2013 <u>156.19—2020</u>	Standard for Power Assist and Low Energy Power Operated Doors	IBC®
A 156.27—2011 <u>156.27—2019</u>	Power and Manual Operated Revolving Pedestrian Doors	IBC®
A 156.38—201 4 <u>156.38—2020</u>	Low Energy Power Operated Sliding and Folding Doors	IBC®
CSA	Canadian Standards Association	
Standard Reference Number	Title	Referenced in Code(s):
ASME <u>A17.1—2016A17.1—</u> 2019/CSA <u>B44—16B44—19</u>	Safety Code for Elevators and Escalators	IBC®
ASME A17.7—2007/CSA B44.7—07B44.7—07(R2017)	Performance-based Safety Code for Elevators and Escalators	IBC®
DASMA	Door & Access Systems Manufacturers Association International	
Standard Reference Number	Title	Referenced in Code(s):
ANSI/DASMA 115—2016 <u>115—</u> 2017	Standard Method for Testing Sectional Garage Doors, Rolling Doors and Flexible Doors: Determination of Structural Performance Under Missile Impact and Cyclic Wind Pressure	IBC®
DOC	U.S. Department of Commerce	
Standard Reference Number	Title	Referenced in Code(s):
PS 1—09 1—19	Structural Plywood	IBC®
PS 2—10 2—18	Performance Standard for Wood-based Structuraluse Wood Structural Panels	IBC®

PS 20—05	American Softwood Lumber Standard	IBC®
FM	FM Approvals	
Standard Reference Number	Title	Referenced in Code(s):
4 880—2015 4880—2017	Approval American National Standard for Class 1 Fire Rating of Building Panels or Evaluating the Fire Performance Insulated Building Panel Assemblies and Interior Finish Materials	IBC®
GA	Gypsum Association	
Standard Reference Number	Title	Referenced in Code(s):
GA 216—2016 216—2018	Application and Finishing of Gypsum Panel Products	IBC®
GA 600—2015 <u>600—2018</u>	Fire-resistance <u>and Sound Control</u> Design Manual, <u>21st 22nd</u> Edition	IBC®
NAAMM	National Association of Architectural Metal Manufacturers	
Standard Reference Number	Title	Referenced in Code(s):
FP 1001—17 1001—18	Guide Specifications for Design of Metal Flag Poles	IBC®
NCMA	National Concrete Masonry Association	
Standard Reference Number	Title	Referenced in Code(s):
TEK 5—84(1996) 5—84(2005)	Details for Concrete Masonry Fire Walls	IBC®
NFPA	National Fire Protection Association	
Standard Reference Number	Title	Referenced in Code(s):
10—18 <u>10—21</u>	Standard for Portable Fire Extinguishers	IBC®
11—16	Standard for Low Low-, Medium, and High Expansion Foam	IBC®
12A—15 12A—18	Standard on Halon 1301 Fire Extinguishing Systems	IBC®
13—16 13—19	Standard for Installation of Sprinkler Systems	IBC®
13D—16 13D—19	Standard for the Installation of Sprinkler Systems in One- and Two-family Dwellings and Manufactured Homes	IBC®
13R—16 13R—19	Standard for the Installation of Sprinkler Systems in Low-rise Residential Occupancies	IBC®
14—16<u>1</u>4—19	Standard for the Installation of Standpipe and Hose System	IBC®
16—15 16—19	Standard for the Installation of Foam-water Sprinkler and Foam-water Spray Systems	IBC®
17—17 <u>17—20</u>	Standard for Dry Chemical Extinguishing Systems	IBC®
17A—17 17A—20	Standard for Wet Chemical Extinguishing Systems	IBC®
20—16 <u>20—19</u>	Standard for the Installation of Stationary Pumps for Fire Protection	IBC®
30—18 <u>30—21</u>	Flammable and Combustible Liquids Code	IBC®
30A—18 <u>30A—21</u>	Code for Motor Fuel Dispensing Facilities and Repair Garages	IBC®
31—16 <u>31—20</u>	Standard for the Installation of Oil-burning Equipment	IBC®
32—16	Standard for Dry Cleaning PlantsDrycleaning Facilities	IBC®
4 0—16 40—19	Standard for the Storage and Handling of Cellulose Nitrate Film	IBC®

45—15 <u>45—19</u>	Standard on Fire Protection Laboratories Using Chemicals (2015 Edition)	IBC®
58 17 58—20	Liquefied Petroleum Gas Code	IBC®
61—17 <u>61—20</u>	Standard for the Prevention of Fires and Dust Explosions in Agricultural and Food Product Facilities	IBC®
72—16 72—19	National Fire Alarm and Signaling Code	IBC®
80—16 <u>80—19</u>	Standard for Fire Doors and Other Opening Protectives	IBC®
82—14 <u>82—19</u>	Standard on Incinerators and Waste and Linen Handling Systems and Equipment	IBC®
85—15 <u>85—19</u>	Boiler and Combustion System Hazards Code	IBC®
92—15 <u>92—18</u>	Standard for Smoke Control Systems	IBC®
99—18 <u>99—21</u>	Health Care Facilities Code	IBC®
101—18 101—21	Life Safety Code	IBC®
105—16 105—19	Standard for Smoke Door Assemblies and Other Opening Protectives	IBC®
110—16 110—19	Standard for Emergency and Standby Power Systems	IBC®
111—13 111—19	Standard on Stored Electrical Energy Emergency and Standby Power Systems	IBC®
120—15 120—20	Standard for Fire Prevention and Control in Coal Mines	IBC®
211—16 211—19	Standard for Chimneys, Fireplaces, Vents and Solid Fuel-burning Appliances	IBC®
221—18 221—21	Standard for High Challenge Fire Walls, Fire Walls and Fire Barrier Walls	IBC®
253—15 <u>253—19</u>	Standard Method of Test for Critical Radiant Flux of Floor Covering Systems Using a Radiant Heat Energy Source	IBC®
265—15 <u>265—19</u>	Standard Methods of Fire Tests for Evaluating Room Fire Growth Contribution of Textile or Expanded Vinyl Wall Coverings on Full Height Panels and Walls	IBC®
286—15 <u>286—19</u>	Standard Methods of Fire Test for Evaluating Contribution of Wall and Ceiling Interior Finish to Room Fire Growth	IBC®
276—15 <u>276—19</u>	Standard Method of Fire Tests for Determining the Heat Release Rate of Roofing Assemblies with Combustible Above-deck Roofing Components	IBC®
285 12 <u>285—19</u>	Standard Fire Test Method for the Evaluation of Fire Propagation Characteristics of Exterior Nonloadbearing Wall Assemblies Containing Combustible Components	IBC®
289—18 <u>289—19</u>	Standard Method of Fire Test for Individual Fuel Packages	IBC®
484—18 <u>484—19</u>	Standard for Combustible Metals	IBC®
652—16 <u>652—19</u>	Standard on the Fundamentals of Combustible Dust	IBC®
654 17 <u>654—20</u>	Standard for the Prevention of Fire and Dust Explosions from the Manufacturing, Processing and	IBC®
664—17 <u>664—20</u>	Handling of Combustible Particulate Solids Standard for the Prevention of Fires and Explosions in Wood Processing and Woodworking Facilities	IBC®

701—15 <u>701—19</u>	Standard Methods of Fire Tests for Flame Propagation of Textiles and Films	IBC®
750 15 750—19	Standard on Water Mist Fire Protection Systems	IBC®
2001—15 2001—18	Standard on Clean Agent Fire Extinguishing	IBC®
2001 10 <u>2001 10</u>	Systems	1000
2010—15 2010—20	Standard for Fixed Aerosol Fire-extinguishing	IBC®
	Systems	
PCI	Precast Prestressed Concrete Institute	
Standard Reference Number	Title	Referenced
		in Code(s):
MNL 124—11PCI 124—18	Design Specification for Fire Resistance of Precast/	IBC®
	Prestressed Concrete	
MNL 128—01PCI 128—19	Recommended Practice Specification for Glass	IBC®
	Fiber Reinforced Concrete Panels	
PTI	Post-Tensioning Institute	
Standard Reference Number	Title	Referenced
DTI DO 40 5 40 5 40	Oten dend Denvinements for Device and Arch. 1	in Code(s):
PTI DC—10.5-12 <u>DC—10.5-19</u>	Standard Requirements for Design and Analysis of	IBC®
	Shallow <u>Post-Tensioned</u> Concrete Foundations on Expansive <u>and Stable</u> Soils	
SBCA	Structural Building Components Association	
Standard Reference Number	Title	Referenced
Standard Reference Number	Tide	in Code(s):
ANSI/FS 100-12 100-12(R2018)	Standard Requirements for Wind Pressure	IBC®
7 11 6 11 6 12 12 12 12 (11 12 1 16)	Resistance of Foam Plastic Insulating Sheathing	
	Used in Exterior Wall Covering Assemblies	
SPRI	Single-Ply Roofing Institute	
Standard Reference Number	Title	Referenced
		in Code(s):
ANSI/SPRI/FM 4435-ES-1—	Wind Test Design Standard for Edge Systems Used	IBC®
<u>114435 ES-1—17</u>	with Low Slope Roofing Systems	
ANSI/SPRI RP-4—13 <u>RP-4—18</u>	Wind Design Guide for Ballasted Single-ply Roofing Systems	IBC®
ANSI/SPRI VF1—10 VF-1—17	External Fire Design Standard for Vegetative Roofs	IBC®
TIA	Telecommunications Industry Association	
Standard Reference Number	Title	Referenced
		in Code(s):
222-H2016 ANSI/TIA 222-H	Structural Standards Standard for Antenna	IBC®
<u>2017</u>	Supporting Structures and Antennas, Antennas and	
	Small Wind Turbine Support Structures	
TMS	The Masonry Society	
Standard Reference Number	Title	Referenced
000 0040000 0040		I in (,040/c).
302—2012 <u>302—2018</u>	Ota de IMalla II. Data de Carta de Carta	in Code(s):
	Standard Method for Determining the Sound	IBC®
111	Transmission Class Rating for Masonry Walls	
UL Standard Reference Number	Transmission Class Rating for Masonry Walls UL LLC	IBC®
UL Standard Reference Number	Transmission Class Rating for Masonry Walls	
	Transmission Class Rating for Masonry Walls UL LLC	IBC® Referenced
Standard Reference Number	Transmission Class Rating for Masonry Walls UL LLC Title Tin Clad Fire Doors—with Revisions through December 2013 July 2018	Referenced in Code(s):
Standard Reference Number	Transmission Class Rating for Masonry Walls UL LLC Title Tin Clad Fire Doors—with Revisions through	Referenced in Code(s):

14B—2008	Sliding Hardware for Standard Horizontally Mounted	IBC®
	Tin Clad Fire Doors—with Revisions through May	
140 06140 2006	2013 July 2017 Surjaging Hardware for Standard Tip Clad Fire	IBC®
14C—06 14C—2006	Swinging Hardware for Standard Tin Clad Fire Doors Mounted Singly and in Pairs—with Revisions	IBC®
	through May 2013 July 2017	
55A—04 55A—2004	Materials for Built-up Roof Coverings	IBC®
103—2010		IBC®
103—2010	Factory-built Chimneys, for Residential Type and Building Heating Appliances—with Revisions	IBC®
407 0044	through July 2012 March 2017	IDOO
127—2011	Factory-built Fireplaces—with Revisions through	IBC®
4005 044005 0004	May 2015 July 2016	IDOS
199E—04 <u>199E—2004</u>	Outline of Investigation for Fire Testing of Sprinklers	IBC®
	and Water Spray Nozzles for Protection of Deep Fat	
	Fryers	15.00
217—06 217—2015	Single and Multiple Station Smoke Alarms—with	IBC®
	Revisions through October 2015 November 2016	15.00
263—11	Fire Tests of Building Construction and Materials—	IBC®
	with Revisions through June 2015 March 2018	
268—09 268—2016	Smoke Detectors for Fire Alarm SystemsSystems-	IBC®
	with revisions through July 2016	
294—1999 294—2018	Access Control System Units—with Revisions	IBC®
	through February 2015October 2018	
300—05(R2010) <u>300—</u>	Fire Testing of Fire Extinguishing Systems for	IBC®
2005(R2010)	Protection of Commercial Cooking Equipment—with	
	Revisions through December 2014	
300A—06 300A—2006	Outline of Investigation for Extinguishing System	IBC®
	Units for Residential Range Top Cooking Surfaces	
305—2012	Panic Hardware—with Revisions through August	IBC®
	2014 March 2017	
325—02 325—2017	Door, Drapery, Gate, Louver and Window	IBC®
	Operations and Systems—with Revisions through	
	May 2015 Systems	
555—2006	Fire Dampers—with Revisions through May	IBC®
	2014 October 2016	
555C—2006 555C—2014	Ceiling Dampers—with Revisions through	IBC®
·	December 2014May 2017	
555S—99 555S—2014	Smoke Dampers—with Revisions through February	IBC®
	2014 October 2016	
580—2006	Test for Uplift Resistance of Roof Assemblies—with	IBC®
	Revisions through October 20132018	
641—2010	Type L Low-temperature Venting Systems—with	IBC®
	Revisions through June 2013 April 2018	
723—2008 723—2018	Test for Surface Burning Characteristics of Building	IBC®
	Materials with Revisions through August	
	2013 Materials	
790 04 790—2004	Standard Test Methods for Fire Tests of Roof	IBC®
	Coverings—with Revisions through July	
	2014October 2018	
793—08 793—2008	Automatically Operated Roof Vents for Smoke and	IBC®
<u></u>	Heat—with Revisions through September	
	2011 March 2017	

	•	
864 03 864—2014	Control Units and Accessories for Fire Alarm	IBC®
	Systems—with Revisions through December	
	2014 March 2018	
924—06 924—2016	Safety Emergency Lighting and Power Equipment—	IBC®
	with Revisions through April 2014May 2018	
1040—96 1040—1996	Fire Test of Insulated Wall Construction—with	IBC®
1040—30 1040—1990		IBC®
1070 00	Revisions through October 2012 April 2017	10.00
1256—02	Fire Test of Roof Deck Construction—with Revisions	IBC®
	through July 2013 August 2018	
1479—03 <u>1479—2015</u>	Fire Tests of Penetration Firestops—with Revisions	IBC®
	through June 2015 Firestops	
1703—02 1703—2002	Flat-plate Photovoltaic Modules and Panels—with	IBC®
	Revisions through October 2015September 2018	
1715—97	Fire Test of Interior Finish Material—with Revisions	IBC®
1710 07	through January 2013 April 2017	1000
1741—2010		IDC®
1741—2010	Inverters, Converters, Controllers and	IBC®
	Interconnection System Equipment for Use with	
	Distributed Energy Resources—with Revisions	
	through January 2015 <u>February 2018</u>	
1777—2007	Chimney Liners—with Revisions through October	IBC®
	2015 April 2014	
1784—01 1784—2015	Air Leakage Tests of Door Assemblies—with	IBC ®
· · · · · · · · · · · · · · · · · · ·	Revisions through February 2015 Assemblies	
1897—12 1897—2015	Uplift Tests for Roof Covering Systems—with	IBC®
<u></u>	Revisions through September 2015Systems	.200
1994—04 1994—2015	Luminous Egress Path Marking Systems—with	IBC®
1994 04 <u>1994 2015</u>	Revisions through May 2015Systems	IDC®
0004 00000004 0047		IDCO
2034—2008 <u>2034—2017</u>	Single- and Multiple-station Carbon Monoxide	IBC®
	Alarms—with Revisions through March	
	2015 <u>September 2018</u>	
2075—2013	Standard for Gas and Vapor Detectors and	IBC®
	SensorsSensors-with revisions through December	
	<u>2017</u>	
2079—04 2079—2015	Tests for Fire Resistance of Building Joint	IBC®
	Systems with Revisions through August	
	2015 Systems	
2196 2001 2196—2017	Tests Standard for Fire Resistive Cables with	IBC®
	Revisions through March 2012Test for Circuit	.200
	Integrity of Fire- Resistive Power, Instrumentation,	
	Control and Data Cables	
2200 2012		IDC®
2200—2012	Stationary Engine Generator Assemblies—with	IBC®
2000 2000	Revisions through July October 2015	IDOC
2202—2009	Electric Vehicle (EV) Charging System	IBC®
	Equipment Equipment-with revisions through	
	February 2018	
2594—2013 <u>2594—2016</u>	Electric Vehicle Supply Equipment	IBC®
2703—2014	Outline of Investigation for Mounting Systems,	IBC®
	Mounting Devices, Clamping/Retention Devices and	
	Ground Lugs for Use with Flat-plate Photovoltaic	
	Modules and Panels Panels-with revisions through	
	December 2019	
ULC	Underwriters Laboratories of Canada	
Standard Reference Number	Title	Referenced
Clandald Neterence Number	TIUG	
	1	in Code(s):

CAN/ULC S 102.2	Standard Method of Test for Surface Burning	IBC®
2010 102.2—2018	Characteristics of Flooring, Floor Coverings and	
	Miscellaneous Materials and Assemblies—with 2000	
	Revisions Assemblies	

ADM47-IFC-19

Proposed Change as Submitted

ANSI	American National Standards Institute	
Standard Reference	Title	Referenced in
Number		Code(s):
ANSI Z21.69/CSA 6.16—	Connectors for Movable Gas Appliances	IFC®
09 6.16—2015		
API	American Petroleum Institute	
Standard Reference	Title	Referenced in
Number		Code(s):
RP 651—3rd <u>651—4th</u>	Cathodic Protection of Aboveground Petroleum Storage	IFC®
Edition (2007)(2014)	Tanks	
Std 653—4th <u>653—5th</u>	Tank Inspection, Repair, Alteration and Reconstruction	IFC®
Edition (2009)(2018)		
Std 2000—6th <u>2000—7th</u>	Venting Atmosphere and Low-pressure Storage Tanks:	IFC®
Edition (2009) (2014)	Nonrefrigerated and Refrigerated	
RP 2003—7th <u>2003—8th</u>	Protection Against Ignitions Arising out of Static, Lightning	IFC®
Edition (2008)(2015)	and Stray Currents	
Std 2015—6th <u>2015—8th</u>	Requirements for Safe Entry and Clearing of Petroleum	IFC®
Edition 2001	Storage Tanks	
(R2006) (2018)		
Publ 2028 3rd Edition—	Flame Arrestors in Piping Systems	IFC®
(2002, R2012) R2010)		
ASCE/SEI	American Society of Civil Engineers	
Standard Reference	Title	Referenced in
Number		Code(s):
ASCE/SEI 24—14 24—20	Flood Resistant Design and Construction	IFC®
ASHRAE	ASHRAE	
Standard Reference	Title	Referenced in
Number		Code(s):
15—2016 <u>15—2019</u>	Safety Standard for Refrigeration Systems	IFC®
ASME	American Society of Mechanical Engineers	
Standard Reference	Title	Referenced in
Number		Code(s):
A13.1—2015 <u>A13.1—</u>	Scheme for the Identification of Piping Systems	IFC®
<u>2020</u>		
ASME A17.1—	Safety Code for Elevators and Escalators	IFC®
2016 A17.1—2019/CSA		
B44—16 <u>B44—19</u>		
A17.3—2015 <u>A17.3—</u>	Safety Code for Existing Elevators and Escalators	IFC®
<u>2020</u>		
B16.18—2012 <u>B16.18—</u>	Cast Copper-Alloy Solder Joint Pressure Fittings	IFC®
<u>2018</u>		
B16.22—2013 <u>B16.22—</u>	Wrought Copper and Copper-alloy Solder-joint Pressure	IFC®
<u>2018</u>	Fittings	

		LIEGO
B31.1 2016B31.1 2020	Power Piping	IFC®
B31.3 2016 <u>B31.3—</u> 2020	Process Piping	IFC®
B31.4 2015 <u>B31.4 </u> 2019	Pipeline Transportation Systems for Liquids and Slurries	IFC®
B31.9 2014 <u>B31.9 2020</u>	Building Services Piping	IFC®
BPVC—2015BPVC— 2019	ASME Boiler and Pressure Vessel Code (Sections I, II, IV, V & VI, VIII)	IFC®
ASSE	American Society of Safety Engineers	
Standard Reference	Title	Referenced in
Number		Code(s):
ANSI/ ASSE Z359.1— 2016ASSP Z359.1—2019	Requirements for the ANSI/ASSE Z359 The Fall Protection Code	IFC®
ASTM	ASTM International	
Standard Reference Number	Title	Referenced in Code(s):
B88—14 B88—2016	Specification for Seamless Copper Water Tube	IFC®
B251—10 B251/B251M—	Specification for General Requirements for Wrought	IFC®
2017	Seamless Copper and Copper-alloy Tube	• •
B280—13B280—2018	Specification for Seamless Copper Tube for Air Conditioning and Refrigeration Field Service	IFC®
D5605(2010) D56	Test Method for Flash Point by Tag Closed Cup Tester	IFC®
2016A	Treet meaned for triadin't entirely ray enessed eap residing	30
D86—15 <u>D86—2017</u>	Test Method for Distillation of Petroleum Products at Atmospheric Pressure	IFC®
D92—12b <u>D92—2018</u>	Test Method for Flash and Fire Points by Cleveland Open Cup Tester	IFC®
D93—15 <u>D93—2018</u>	Test Method for Flash Point by Pensky-Martens Closed Up Tester	IFC®
D2859—16D2859—2016	Standard Test Method for Ignition Characteristics of Finished Textile Floor Covering Materials	IFC®
E84—2016E84—2018B	Standard Test Method for Surface Burning	IFC®
E400 2040E400 2047	Characteristics of Building Materials	IFCO
E108—2016E108—2017	Standard Test Methods for Fire Tests of Roof Coverings	IFC®
<u>E648—15e1E648—</u> <u>2017A</u>	Standard Test Method for Critical Radiant Flux of Floor-covering Systems Using a Radiant Heat Energy Source	IFC®
E1354—2016E1354— 2017	Standard Test Method for Heat and Visible Smoke Release Rates for Materials and Products Using an Oxygen Consumption Calorimeter	IFC®
E1529—14aE1529— 2016E1	Standard Test Method for Determining Effects of Large Hydrocarbon Pool Fires on Structural Members and Assemblies	IFC®
E1537—2015E1537— 2016	Test Method for Fire Testing of Upholstered Furniture	IFC®
E1590—13 E1590—2017	Test Method for Fire Testing of Mattresses	IFC®
E2404—15aE2404— 2017	Standard Practice for Specimen Preparation and Mounting of Textile, Paper or Polymeric (Including Vinyl) and Wood Wall or Ceiling Coverings, Facing and Veneers to Assess Surface Burning Characteristics	IFC®

	I a	.=
E2573 12 E2573—2017	Standard Practice for Specimen Preparation and	IFC®
	Mounting of Site-fabricated Stretch Systems to Assess	
	Surface Burning Characteristics	
E2579—13 E2579—2015	Standard Practice for Specimen Preparation and	IFC®
	Mounting of Wood Products to Assess Surface Burning	
	Characteristics	
F2200—14 F2200—2017	Standard Specification for Automated Vehicular Gate	IFC®
	Construction	
ВНМА	Builders Hardware Manufacturers' Association	
Standard Reference	Title	Referenced in
Number	Title	
	Amaniana National Ctandard for Davian an anatod	Code(s):
A156.10—	American National Standard for Power-operated	IFC®
2011 A156.10—2017	Pedestrian Doors	
A156.19—	American National Standard for Power Assist and Low-	IFC®
2013 A156.19—2020	energy Power-operated Doors	
A156.27—	Power- and Manual-operated Revolving Pedestrian Doors	IFC®
2011 A156.27—2019		
A156.38—	Low-energy Power-operated Sliding and Folding Doors	IFC®
2014 <u>A156.38</u> —2020		
CGA	Compressed Gas Association	
Standard Reference	Title	Referenced in
Number	Title	Code(s):
ANSI/CGA G-13	Characte and Handling of Cilone and Cilone Mistures (an	. ,
	Storage and Handling of Silane and Silane Mixtures (an American National Standard)	IFC®
(2015)G-13—(2016)	/	.
S-1.1—(2017) <u>S-1.1—</u>	Pressure Relief Device Standards—Part 1—Cylinders for	IFC®
<u>(2011)</u>	Compressed Gases	
S-1.3 (2016) <u>S-1.3—</u>	Pressure Relief Device Standards—Part 3—Stationary	IFC®
<u>(2008)</u>	Storage Containers for Compressed Gases	
FM	FM Approvals	
Standard Reference	Title	Referenced in
Number		Code(s):
ANSI/FM 4996—	Approval Standard for Classification of Pallets and Other	IFC®
15 4996—2019	Material Handling Products as Equivalent to Wood Pallets	• •
IIAR	International Institute of Ammonia Refrigeration	
Standard Reference	Title	Referenced in
Number	Title	
	Cafa Danima of Classed Circuit aircuit Assessed	Code(s):
ANSI/IIAR-2—2014,	Safe Design of Closed- <u>Circuit</u> eircuit Ammonia	IFC®
including Addendum A	Refrigeration Refrigerating Systems	1500
<u>ANSI</u> /IIAR-7— 2018 2019	Developing Operating Procedures for Closed-Circuit	IFC®
	circuit Ammonia Refrigeration Mechanical Refrigerating	
	Systems	
<u>ANSI</u> /IIAR-8— 2019 2020	Decommissioning of Closed-Circuit eircuit Ammonia	IFC®
	Refrigeration Refrigerating Systems	
IKECA	International Kitchen Exhaust Cleaning Association	
Standard Reference	Title	Referenced in
Number		Code(s):
ANSI/IKECA C10—2016	IKECA C10, Standard for the Methodology for Cleaning of	IFC®
<u> </u>	Commercial Kitchen Exhaust Systems	50
NEMA	National Electrical Manufacturer's Association	
	I National Lieuthua Manulautulei 5 A5500lation	
I Standard Dafaranaa		Doforonandin
Standard Reference	Title	Referenced in
Number	Title	Code(s):

NFPA	National Fire Protection Association	
Standard Reference	Title	Referenced in
Number		Code(s):
02—16 02—19	Hydrogen Technologies Code	IFC®
04—15 <u>04—21</u>	Standard for Integrated Fire Protection and Life Safety System Testing	IFC®
10—18 10—21	Standard for Portable Fire Extinguishers	IFC®
12—15 12—18	Standard on Carbon Dioxide Extinguishing Systems	IFC®
12A—15 12A—18	Standard on Halon 1301 Fire Extinguishing Systems	IFC®
13—16 13—19	Standard for the Installation of Sprinkler Systems	IFC®
13D 16 13D—19	Standard for the Installation of Sprinkler Systems in One- and Two-family Dwellings and Manufactured Homes	IFC®
13R—16 13R—19	Standard for the Installation of Sprinkler Systems in Low- rise Residential Occupancies	IFC®
14—16 14—19	Standard for the Installation of Standpipe and Hose Systems	IFC®
16—15 16—19	Standard for the Installation of Foam-water Sprinkler and Foam-water Spray Systems	IFC®
17—17 <u>17—20</u>	Standard for Dry Chemical Extinguishing Systems	IFC®
17A—17 17A—20	Standard for Wet Chemical Extinguishing Systems	IFC®
20—16 20—19	Standard for the Installation of Stationary Pumps for Fire Protection	IFC®
24—16 <u>24—19</u>	Standard for Installation of Private Fire Service Mains and Their Appurtenances	IFC®
25—17 <u>25—20</u>	Standard for the Inspection, Testing and Maintenance of Water-based Fire Protection Systems	IFC®
30—18 <u>30—21</u>	Flammable and Combustible Liquids Code	IFC®
30A—18 <u>30A—21</u>	Code for Motor Fuel-dispensing Facilities and Repair Garages	IFC®
30B—15 30B—19	Code for the Manufacture and Storage of Aerosol Products	IFC®
31—16 <u>31—20</u>	Standard for the Installation of Oil-burning Equipment	IFC®
32—16	Standard for Dry Cleaning Plants Drycleaning Facilities	IFC®
33—16 <u>33—18</u>	Standard for Spray Application Using Flammable or Combustible Materials	IFC®
34—15 <u>34—18</u>	Standard for Dipping, Coating and Printing Processes Using Flammable or Combustible Liquids	IFC®
4 0—16 40—19	Standard for the Storage and Handling of Cellulose Nitrate Film	IFC®
4 5—15 45—19	Standard on Fire Protection for Laboratories Using Chemicals (2015 Edition)	IFC®
51—18	Standard for the Design and Installation of Oxygen-fuel Gas Systems for Welding, Cutting and Allied Processes	IFC®
52—16 <u>52</u> —19	Vehicular Gaseous Fuel System Code	IFC®
55 16 <u>55—19</u>	Compressed Gases and Cryogenic Fluids Code	IFC®
56—17 <u>56—20</u>	Standard for Fire and Explosion Prevention during Cleaning and Purging of Flammable Gas Piping Systems	IFC®
58—17 <u>58—20</u>	Liquefied Petroleum Gas Code	IFC®
59A—16 <u>59A—19</u>	Standard for the Production, Storage and Handling of Liquefied Natural Gas (LNG)	IFC®
61—17 <u>61—20</u>	Standard for the Prevention of Fires and Dust Explosions in Agricultural and Food Processing Facilities	IFC®
69—14 69—19	Standard on Explosion Prevention Systems	IFC®

72—16 72—19	National Fire Alarm and Signaling Code	IFC®
80—16 80—19	Standard for Fire Doors and Other Opening Protectives	IFC®
85—15 85—19	Boiler and Combustion System Hazards Code	IFC®
86—15 86—19	Standard for Ovens and Furnaces	IFC®
92—15 92—18	Standard for Smoke Control Systems	IFC®
96—17 96—20	Standard for Ventilation Control and Fire Protection of	IFC®
	Commercial Cooking Operations	
99—18 99—21	Health Care Facilities Code	IFC®
101—18 101—21	Life Safety Code	IFC®
105—16 105—19	Standard for Smoke Door Assemblies and Other Opening	IFC®
	Protectives	
110—16 110—19	Standard for Emergency and Standby Power Systems	IFC®
111—13 111—19	Standard on Stored Electrical Energy Emergency and	IFC®
	Standby Power Systems	
120—15 <u>120—20</u>	Standard for Fire Prevention and Control in Coal Mines	IFC®
160—16 160—21	Standard for the Use of Flame Effects Before an	IFC®
	Audience	
204—15 204—18	Standard for Smoke and Heat Venting	IFC®
211—16 211—19	Standard for Chimneys, Fireplaces, Vents and Solid Fuel-	IFC®
	burning Appliances	
241—18 241—19	Standard for Safeguarding Construction, Alteration and	IFC®
	Demolition Operations	
253—15 253—19	Standard Method of Test for Critical Radiant Flux of Floor	IFC®
	Covering Systems Using a Radiant Heat Energy Source	
260—18 260—19	Methods of Tests and Classification System for Cigarette	IFC®
	Ignition Resistance of Components of Upholstered	
205 45205 40	Furniture	IFC®
265—15 <u>265—19</u>	Standard Methods of Fire Tests for Evaluating Room Fire Growth Contribution of Textile or Expanded Vinyl Wall	IFC®
	Coverings in Full Height Panels and Walls	
286—15 286—19	Standard Methods of Fire Tests for Evaluating	IFC®
200 10200 13	Contribution of Wall and Ceiling Interior Finish to Room	11 00
	Fire Growth	
289—18 289—19	Standard Method of Fire Test for Individual Fuel	IFC®
	Packages	
303—16 303—21	Fire Protection Standard for Marinas and Boatyards	IFC®
326—15 <u>326—20</u>	Standard for the Safeguarding of Tanks and Containers	IFC®
	for Entry, Cleaning or Repair	
400—16 <u>400—19</u>	Hazardous Materials Code	IFC®
410—15 410—20	Standard on Aircraft Maintenance	IFC®
484—15 <u>484—19</u>	Standard for Combustible Metals	IFC®
652—16 <u>652—19</u>	The Fundamentals of Combustible Dust	IFC®
654 17 <u>654—20</u>	Standard for Prevention of Fire and Dust Explosions from	IFC®
	the Manufacturing, Processing and Handling of	
	Combustible Particulate Solids	
664—17 <u>664—20</u>	Standard for the Prevention of Fires and Explosions in	IFC®
	Wood Processing and Woodworking Facilities	
701—15 701—19	Standard Methods of Fire Tests for Flame-propagation of	IFC®
	Textiles and Films	1500
703—18 <u>703—21</u>	Standard for Fire Retardant-Wood and Fire-Retardant	IFC®
750 45750 40	Coatings for Building Materials	1500
750—15 <u>750—19</u>	Standard on Water Mist Fire Protection Systems	IFC®
853—15 <u>853—20</u>	Installation of Stationary Fuel Cell Power Systems	IFC®

914—15 914—19	Code for Fire Protection of Historic Structures	IFC®
1126—16 1126—21	Standard for the Use of Pyrotechnics Before a Proximate Audience	IFC®
1221—16 1221—19	Standard for the Installation, Maintenance and Use of Emergency Services Communications Systems	IFC®
2001—15 2001—18	Standard on Clean Agent Fire Extinguishing Systems	IFC®
2010—15 2010—20	Standard for Fixed Aerosol Fire-extinguishing Systems	IFC®
UL	Underwriters Laboratories LLC	
Standard Reference Number	Title	Referenced in Code(s):
10C—09 10C—2016	Positive Pressure Fire Tests of Door Assemblies—with revisions through February 2015 Assemblies	IFC®
30—95 30—1995	Metal Safety Cans—with revisions through June 2014	IFC®
58—96 <u>58—2018</u>	Steel Underground Tanks for Flammable and Combustible Liquids—with revisions through July 1998Liquids	IFC®
87A—15 <u>87A—2015</u>	Outline of Investigation for Power-operated Dispensing Devices for Gasoline and Gasoline/Ethanol Blends with Nominal Ethanol Concentrations up to 85 Percent Percent-with revisions through June 2017	IFC®
142—06 142—2006	Steel Aboveground Tanks for Flammable and Combustible Liquids—with revisions through August 2014	IFC®
199E—04 <u>199E—2004</u>	Outline of Investigation for Fire Testing of Sprinklers and Water Spray Nozzles for Protection of Deep Fat Fryers	IFC®
217—06 217—2015	Single and Multiple Station Smoke Alarms—with revisions through October 2015 November 2016	IFC®
268—09 268—2016	Smoke Detectors for Fire Alarm Systems-Systems-with revisions through July 2016	IFC®
294—1999 <u>294—2018</u>	Access Control System Units—with revisions through February 2015October 2018	IFC®
300—05(R2010)300— <u>2005</u>	Fire Testing of Fire Extinguishing Systems for Protection of Commercial Cooking Equipment—with revisions through December 2014	IFC®
300A—06 <u>300A—2006</u>	Outline of Investigation for Extinguishing System Units for Residential Range Top Cooking Surfaces	IFC®
305—2012	Panic Hardware—with revisions through August 2014March 2017	IFC®
325—02 <u>325—2017</u>	Door, Drapery, Gate, Louver and Window Operators and Systems—with revisions through May 2015Systems	IFC®
499—05 <u>499—2014</u>	Standard for Electrical Heating Appliances—with revisions through November 2014 February 2017	IFC®
647—93 <u>647—1993</u>	Standard for Unvented Kerosene-fired Room Heaters and Portable Heaters—with revisions through April 2010	IFC®
710—2012	Exhaust Hoods for Commercial Cooking Equipment—with revisions through November 2013 June 2018	IFC®
723—08 <u>723—18</u>	Standard for Test for Surface Burning Characteristics of Building Materials with revisions through August 2013Materials	IFC®
790 04 <u>790—2004</u>	Standard Test Methods for Fire Tests of Roof Coverings—with revisions through July 2014October 2018	IFC®
793—08 <u>793—2008</u>	Automatically Operated Roof Vents for Smoke and Heat—with revisions through September 2011March 2017	IFC®

817—2015	Standard for Cord Sets and Power-supply Cords—with revisions through March 2015 August 2018	IFC®
864 03 <u>864 2014</u>	Control Units and Accessories for Fire Alarm Systems—with revisions through December 2014March 2018	IFC®
900 04 900—2015	Air Filter Units with revisions through April 2015Units	IFC®
924—06 924—2016	Standard for Safety Emergency Lighting and Power Equipment—with revisions through April 2014May 2018	IFC®
1037—99 1037—2016	Antitheft Alarms and Devices—with revisions through December 2009September 2017	IFC®
1046—2010	Grease Filters for Exhaust Ducts—with revisions through January 2012 April 2017	IFC®
1275—05 1275—2014	Flammable Liquid Storage Cabinets—with revisions through November 2014 February 2018	IFC®
1313—93 <u>1313—2015</u>	Standard for Nonmetallic Safety Cans for Petroleum Products with revisions through November 2012Products	IFC®
1315 95 1315—2017	Standard for Safety for Metal Waste Paper Containers with revisions through September 2012Containers	IFC®
1363 07 <u>1363—2018</u>	Relocatable Power Taps with revisions through September 2015 Taps	IFC®
1564—2015	Industrial Battery Chargers-Chargers-with revisions through August 2017	IFC®
1741 2015 1741—2010	Inverters, Converters, Controllers and Interconnection System Equipment for Use with Distributed Energy Resources with revisions through February 2018	IFC®
1805—2002	Standard for Laboratory Hoods and Cabinets-Cabinets- with revisions through June 2006	IFC®
1973—13 <u>1973—2018</u>	Standard for Batteries for Use in Stationery, Vehicle Auxiliary Power and Light Electric Rail (LER) Applications and Stationary Applications	IFC®
1994—04 <u>1994—2015</u>	Standard for Luminous Egress Path Marking Systems—with revisions through May 2015Systems	IFC®
2017—08 2017—2008	General-purpose Signaling Devices and Systems—with revisions through May 2011 January 2016	IFC®
2034—08 2034—2017	Single and Multiple Station Carbon Monoxide Alarms—with revisions through March 2015 September 2018	IFC®
2075—2013	Standard for Gas and Vapor Detectors and Sensors Sensors-with revisions through December 2017	IFC®
2079—04 <u>2079—2015</u>	Tests for Fire Resistance of Building Joint Systems—with revisions through August 2015Systems	IFC®
2085—97 <u>2085—1997</u>	Protected Above-ground Tanks for Flammable and Combustible Liquids—with revisions through September 2010	IFC®
2152—15 2152—2016	Outline of Investigation for Special Purpose Nonmetallic Containers and Tanks for Specific Combustible or Noncombustible Liquids	IFC®
2196—2001 <u>2196—2017</u>	Tests for Fire Resistive Cables—with revisions through March 2012Standard for Fire Test for Circuit Integrity of Fire-Resistive Power, Instrumentation, Control and Data Cables	IFC®
2200—2012	Stationary Engine Generator Assemblies—with revisions through July October 2015	IFC®
2245 06 2245—2006	Below-grade Vaults for Flammable Liquid Storage Tanks	IFC®

2335 102335—2010	Fire Tests of Storage Pallets—with revisions through September 2012 August 2017	IFC®
2360 00 2360—2000	Test Methods for Determining the Combustibility Characteristics of Plastics Used in Semi-Conductor Tool Construction— with revisions through May 2013October 2017	IFC®
9540—14 <u>9540—2016</u>	Outline of Investigation Standard for Energy Storage Systems and Equipment	IFC®

ADM47-IMC-19

Proposed Change as Submitted

ACCA	Air Conditioning Contractors of America	
Standard Reference	Title	Referenced
Number		in Code(s):
ANSI/ACCA 1 Manual	Residential Duct Systems	IMC®
D-2016		
AHRI	Air-Conditioning, Heating & Refrigeration Institute	
Standard Reference	Title	Referenced
Number		in Code(s):
700—2015 <u>700—2017</u>	with Addendum 1: Specifications for Refrigerants	IMC®
AMCA	Air Movement and Control Association International	
Standard Reference	Title	Referenced
Number		in Code(s):
ANSI/AMCA 210-	Laboratory Methods of Testing Fans for Aerodynamic	IMC® IMC®
ANSI210-16/ASHRAE	Performance Rating	
51—07 <u>51—16</u>		
ANSI/AMCA 550—09	Test Method for High Velocity Wind Driven Rain Resistant	IMC®
(Rev. 09/18)	Louvers	
ANSI	American National Standards Institute	
Standard Reference	Title	Referenced
Number		in Code(s):
Z21.1—2010 Z21.1/CSA	Household Cooking Gas Appliances	IMC®
<u>1.1—2016</u>		
Z21.8—1994	Installation of Domestic Gas Conversion Burners	IMC®
(R2002) (R2012)		
ASHRAE	ASHRAE	
Standard Reference	Title	Referenced
Number		in Code(s):
ANSI/AMCA 210-	Laboratory Methods of Testing Fans for Aerodynamic	IMC® IMC®
ANSI/ASHRAE 51—	Performance Rating	
07 51—16		
ASHRAE—	ASHRAE Fundamentals Handbook	IMC®
2017 ASHRAE—2021		
15—2016 15—2019	Safety Standard for Refrigeration Systems	IMC®
34—2016 <u>34—2019</u>	Designation and Safety Classification of Refrigerants	IMC®
62.1—2016 <u>62.1—2019</u>	Ventilation for Acceptable Indoor Air Quality	IMC®
180—2012 180—2018	Standard Practice for Inspection and Maintenance of	IMC® IMC®
	Commercial Building HVAC Systems	
ASME	American Society of Mechanical Engineers	

Standard Reference	Title	Referenced
Number		in Code(s):
A112.4.1	Water Heater Relief Valve Drain Tubes	IMC®
2009 A112.4.1—		
2009(R2019)		
B1.20.1—2013B1.20.1—	Pipe Threads, General Purpose (Inch)	IMC®
2019		
B16.3—2016 B16.3—2021	Malleable Iron Threaded Fittings, Classes 150 & 300	IMC®
B16.5 2015 B16.5—2019	Pipe Flanges and Flanged Fittings NPS 1/2 through NPS	IMC®
5.6.6 26.6 <u>5.6.6 26.6</u>	24	
B16.9 2012 B16.9—2018	Factory Made Wrought Steel Buttwelding Fittings	IMC®
B16.11—2016 B16.11—	Forged Fittings, Socket-welding and Threaded	IMC®
2021	The second state of the second state of the second	
B16.15—2013 B16.15—	Cast Alloy Threaded Fittings: Classes 125 and 250	IMC®
2018	Cust / moy / mouded / mmgs. Oldoses 125 and 250	
B16.18—2012 B16.18—	Cast Copper Alloy Solder Joint Pressure Fittings	IMC®
2018	Cast copper Alloy Solder Sollit i Tessure i Ittiligs	IIVIO
	Wrought Copper and Copper Alloy Solder Joint Pressure	IMC®
B16.22—2013B16.22—	1 , ,	IIVIC®
<u>2018</u>	Fittings	11.100
B16.24—2016B16.24—	Cast Copper Alloy Pipe Flanges and Flanged Fittings:	IMC®
2021	Class 150, 300, 400, 600, 900, 1500 and 2500	
B16.26—2016 B16.26—	Cast Copper Alloy Fittings for Flared Copper Tubes	IMC®
<u>2018</u>		
B16.51—2013 <u>B16.51—</u>	Copper and Copper Alloy Press-connect Pressure Fittings	IMC®
<u>2018</u>		
B31.5—2016 <u>B31.5—2019</u>	Refrigeration Piping and Heat Transfer Components	IMC®
B31.9—2014 B31.9—2020	Building Services Piping	IMC®
BPVC—2015BPVC—	ASME Boiler & Pressure Vessel Code–07 Edition	IMC®
2019		
CSD-1—2016 CSD-1—	Controls and Safety Devices for Automatically Fired	IMC®
2021	Boilers	
ASSE	American Society of Safety Engineers	
Standard Reference	Title	Referenced
Number	Tide	in Code(s):
ANSI/ASSE Z359.1—	Requirements for ANSI/ASSE Z359 The Fall Protection	IMC®
	Code	IIVIC®
2016ASSP Z359.1—2019		
ASSE	ASSE International	D (
Standard Reference	Title	Referenced
Number		in Code(s):
1017—2010 1017—2009	Performance Requirements for Temperature Actuated	IMC®
	Mixing Values for Hot Water Distribution Systems	
ASTM	ASTM International	
Standard Reference	Title	Referenced
Number		in Code(s):
A53/ A53M—12 A53M—	Specification for Pipe, Steel, Black and Hot-dipped, Zinc-	IMC®
<u>2018</u>	coated, Welded and Seamless	
A106/ A106M	Specification for Seamless Carbon Steel Pipe for High-	IMC®
14 A106M—2018	temperature Service	
A234/ A234M	Standard Specification for Piping Fittings of Wrought	IMC®
15 A234M—18A	Carbon Steel and Alloy Steel for Moderate and High	
	Temperature Service	
A254—12 A254—	Specification for Copper Brazed Steel Tubing	IMC®
2010(2018)	Opening	INIO
2010(2010)	<u>l</u>	

A420/ A420M	Specification for Piping Fittings of Wrought Carbon Steel	IMC®
14A420M—2016	and Alloy Steel for Low-temperature Service	IIVIC
B88 14 B88—2016	Specification for Seamless Copper Water Tube	IMC®
B135—10 B135/B135M—	Specification for Seamless Brass Tube	IMC®
<u>2017</u>	· ·	
B251—10 B251/B251M—	Specification for General Requirements for Wrought	IMC®
<u>2017</u>	Seamless Copper and Copper-alloy Tube	
B280—13 B280—2018	Specification for Seamless Copper Tube for Air	IMC®
	Conditioning and Refrigeration Field Service	
B302—12 B302—2017	Specification for Threadless Copper Pipe, Standard Sizes	IMC®
B813—10 <u>B813—2016</u>	Specification for Liquid and Paste Fluxes for Soldering of	IMC®
	Copper and Copper Alloy Tube	
B819—00(R2011) <u>B819—</u>	Standard Specification for Seamless Copper Tube for	IMC®
2018	Medical Gas Systems	
B828—02(2010)B828—	Practice for Making Capillary Joints by Soldering of	IMC®
2016	Copper and Copper Alloy Tube and Fittings	11.400
C315—07(2011) <u>C315—</u>	Specification for Clay Flue Liners and Chimney Pots	IMC®
<u>2007(2016)</u>	Toot Mothed for Llot ourface Derformance of Ligh	IMC®
C411—11 <u>C411—2017</u>	Test Method for Hot-surface Performance of High-	IMC®
D5605(2010) <u>D56</u>	temperature Thermal Insulation Test Method for Flash Point by Tag Closed Cup Tester	IMC®
2016A	Test Method for Flash Follit by Tag Closed Cup Tester	IIVIC®
D93—15 D93—18	Test Method for Flash Point of Pensky-Martens Closed	IMC®
10 <u>000 10</u>	Cup Tester	IIVIO
D1785—15 D1785—15E1	Specification for Poly (Vinyl Chloride) (PVC) Plastic Pipe,	IMC®
	Schedules 40, 80 and 120	
D2235—	Specifications for Solvent Cement for Acrylonitrile-	IMC®
04(2011) D2235—	Butadiene-Styrene (ABS) Plastic Pipe and Fittings	
2004(2016)	, , , ,	
D2412—11 <u>D2412—</u>	Test Method for Determination of External Loading	IMC®
<u>2011(2018)</u>	Characteristics of Plastic Pipe by Parallel-plate Loading	
D2466—15 <u>D2466—2017</u>	Specification for Poly (Vinyl Chloride) (PVC) Plastic Pipe	IMC®
	Fittings, Schedule 40	
D2564—12 <u>D2564—</u>	Specification for Solvent Cements for Poly (Vinyl Chloride)	IMC®
<u>2012(2018)</u>	(PVC) Plastic Piping Systems	
D2657—07 <u>D2657—</u>	Standard Practice for Heat Fusion Joining of Polyolefin	IMC®
2007(2015)	Pipe and Fittings	
D2846/ D2846M—	Specification for Chlorinated Poly (Vinyl Chloride) (CPVC)	IMC®
14D2846M—2017BE1	Plastic Hot- and Cold-water Distribution Systems	11.400
D2996—	Specification for Filament-wound Fiberglass (Glass Fiber	IMC®
01(2007)e01 <u>D2996—</u> 2017	Reinforced Thermosetting Resin) Pipe	
D3261—12e1 D3261—	Specification for Butt Heat Fusion Polyethylene (PE)	IMC®
2016	Plastic Fittings for Polyethylene (PE) Plastic Pipe and	IIVIC®
2010	Tubing	
E84—2016 E84—2018B	Standard Test Method for Surface Burning Characteristics	IMC®
2010 <u>2010</u>	of Building Materials	111100
E119—2016 E119—	Test Method for Fire Tests of Building Construction and	IMC®
<u>2018B</u>	Materials	
E136—16 E136—2016A	Standard Test Method for Behavior of Materials in a	IMC®
	Vertical Tube Furnace at 750 Degrees C	
E814—13a <u>E814—</u>	Standard Test Method for Fire Tests of Penetration	IMC®
2013A(2017)	Firestop Systems	

E1509 12 <u>E1509</u> 2012(2017)	Specification for Room Heaters, Pellet Fuel-burning Type	IMC®
E2231 —15 <u>E2231—2018</u>	Standard Practice for Specimen Preparation and Mounting of Pipe and Duct Insulation Materials to Assess Surface Burning Characteristics	IMC®
F438—15F438—2017	Specification for Socket Type Chlorinated Poly (Vinyl Chloride) (CPVC) Plastic Pipe Fittings, Schedule 40	IMC®
F876—15A F876—2018A	Specification for Cross-linked Polyethylene (PEX) Tubing	IMC®
F877 11a <u>F877—2018A</u>	Specification for Cross-linked Polyethylene (PEX) Plastic Hot- and Cold-water Distribution Systems	IMC®
F1055 —13 <u>F1055</u> —2016A	Specification for Electrofusion Type Polyethylene Fittings for Outside Diameter Controlled Polyethylene and Cross linked Polyethylene (PEX) Pipe and Tubing	IMC®
F1281—11F1281—2017	Specification for Cross-linked Polyethylene/Aluminum/Crosslinked Polyethylene (PEX-AL-PEX) Pressure Pipe	IMC®
F1282—10 <u>F1282—2017</u>	Standard Specification for Polyethylene/Aluminum/Polyethylene (PE-AL-PE) Composite Pressure Pipe	IMC®
F1548—01(2012)F1548— 2001(2018)	Standard Specification for the Performance of Fittings for Use with Gasketed Mechanical Couplings Used in Piping Applications	IMC®
F1807—15 <u>F1807—2018</u>	Standard Specification for Metal Insert Fittings Utilizing a Copper Crimp Ring for SDR9 Cross-linked Polyethylene (PEX) Tubing and SDR9 Polethylene of Raised Temperature (PE-RT) Tubing	IMC®
F1960 15 <u>F1960—2018</u>	Specification for Cold-expansion Fittings with PEX Reinforcing Rings for Use with Cross-linked Polyethylene (PEX) Tubing	IMC®
F2080—15 <u>F2080—16</u>	Specification for Cold-expansion Fittings with Metal Compression-sleeves for Cross-linked Polyethylene (PEX) Pipe	IMC®
F2098—08 <u>F2098—2015</u>	Standard Specification for Stainless Steel Clamps for Securing SDR9 Cross-linked Polyethylene (PEX) Tubing to Metal Insert and Plastic Insert Fittings	IMC®
F2159—14F2159—2018	Standard Specification for Plastic Insert Fittings Utilizing a Copper Crimp Ring for SDR9 Cross-linked Polyethylene (PEX) Tubing and SDR9 Polyethylene of Raised Temperature (PE-RT) Tubing	IMC®
F2389—15 <u>F2389—2017A</u>	Specification for Pressure-rated Polypropylene Piping Systems	IMC®
F2735—09 <u>F2735—</u> <u>2009(2016)</u>	Standard Specification for Plastic Insert Fittings for SDR9 Cross-linked Polyethylene (PEX) and Polyethylene of Raised Temperature (PE-RT) Tubing	IMC®
F2769 14 <u>F2769—2018</u>	Polyethylene of Raised Temperature (PE-RT) Plastic Hotand Cold-water Tubing and Distribution Systems	IMC®
AWS	American Welding Society	
Standard Reference	Title	Referenced
Number	Specifications for Filler Metals for Brazing and Braze	in Code(s):
A5.8MA5.8/A5.8—	Specifications for Filler Metals for Brazing and Braze	IMC®
2011 <u>A5.8: 2011-AMD1</u> AWWA	Welding American Water Work Association	
Standard Reference	Title	Referenced
Number	Tiuo	in Code(s):

C151/ A21.51	Standard for Ductile-iron Pipe, Centrifugally Cast for	IMC®
09 A21.51—17	Water	
CSA	CSA Group	
Standard Reference	Title	Referenced
Number		in Code(s):
B137.2—16B137.2—17	Polyvinylchloride (PVC) Injection-moulded Gasketed Fittings for Pressure Applications	IMC®
B137.3—16B137.3—17	Rigid Poly (Vinyl Chloride) (PVC) Pipe for Pressure Applications	IMC®
B137.6—16B137.6—17	Chlorinated Polyvinylchloride (CPVC) Pipe, Tubing and Fittings for Hot- and Cold-water Distribution Systems	IMC®
B137.9—16B137.9—17	Polyethylene/Aluminum/Polyethylene (PE-AL-PE) Composite Pressure-pipe Systems	IMC®
B137.10—16B137.10—17	Cross-linked Polyethylene/Aluminum/Cross-linked Polyethylene (PEX-AL-PEX) Composite Pressure-pipe Systems	IMC®
ANSI/CSA/IGSHPA C448 Series—16	Design and Installation of Earth Energy Systemsinstallation of ground source heat pump systems for commercial and residential buildings	IMC®
CSA C22.2 No. 218.1 – M89(R2011) <u>218.1 – 13</u> (R2017)	Spas, Hot Tubs and Associated Equipment	IMC®
CSA C22.2 No. 236— 11 236—15	Heating and Cooling Equipment	IMC®
CSA B137.1— 16 B137.1—17	Polyethylene (PE) Pipe, Tubing and Fittings for Coldwater Pressure Services	IMC®
CSA B137.5— 16 B137.5—17	Cross-linked Polyethylene (PEX) Tubing Systems for Pressure Applications	IMC®
CSA B137.11— 16 B137.11—17	Polypropylene (PP-R) Pipe and Fittings for Pressure Applications	IMC®
CSA B137.18— 13 B137.18—17	Polyethylene of Raised Temperature Resistance (PE-RT) Tubing Systems for Pressure Applications	IMC®
America FC1— 2012ANSI/CSA FC1— 2014	Stationary Fuel Cell Power Systems Fuel cell technologies - Part 3-100: Stationary fuel cell power systems-Safety	IMC®
IIAR	International Institute of Ammonia Refrigeration	
Standard Reference Number	Title	Referenced in Code(s):
ANSI/IIAR 22014, including Addendum A	Safe Design of Closed- <u>Circuit</u> circuit Ammonia <u>Refrigeration</u> Refrigerating Systems	
ANSI/IIAR 320123-2017	Ammonia Refrigeration Valves	
ANSI/IIAR 4— 2015 — <u>2020</u>	Installation of Closed- <u>Circuit</u> eircuit Ammonia <u>Refrigeration</u> Mechanical Refrigerating Systems	IMC®
ANSI/IIAR 5— 2013 2019	Startup Start-up of Closed- Circuit eircuit Ammonia Refrigeration Systems	IMC®
MSS	Manufacturers Standardization Society of the Valve and Fittings Industry, Inc.	
Standard Reference	Title	Referenced
Number 200059 2019	Dina Hangara and Cumporta Matariala Dasign and	in Code(s):
SP 58—2009 <u>58—2018</u>	Pipe Hangers and Supports—Materials Design and Manufacture, Selection, Application and Installation	IMC®
NBBI	National Board of Boiler and Pressure Vessel Inspectors	

Standard Reference	Title	Referenced
Number		in Code(s):
NBIC 2011 NBIC 2017	National Board Inspection Code, Part 3	IMC®
NFPA	National Fire Protection Association	
Standard Reference	Title	Referenced
Number		in Code(s):
2—16 2—19	Hydrogen Technologies Code	IMC®
30A—18 30A—21	Code for Motor Fuel-dispensing Facilities and Repair	IMC®
	Garages	
31—16 31—20	Standard for the Installation of Oil-burning Equipment	IMC®
58—17 58—20	Liquefied Petroleum Gas Code	IMC®
69—14 69—19	Standard on Explosion Prevention Systems	IMC®
72—16 72—19	National Fire Alarm and Signaling Code	IMC®
82—14 82—19	Standard on Incinerators and Waste and Linen Handling	IMC®
<u> </u>	Systems and Equipment	
85—15 85—19	Boiler and Combustion Systems Hazards Code	IMC®
91—15 91—20	Standard for Exhaust Systems for Air Conveying of	IMC®
00 <u>0. 20</u>	Vapors, Gases, Mists and Noncombustible Particulate	
	Solids	
92—15 92—18	Standard for Smoke Control Systems	IMC®
96—17 96—20	Standard for Ventilation Control and Fire Protection of	IMC®
00 11 <u>00 20</u>	Commercial Cooking Operations	IIII C
211—16 211—19	Standard for Chimneys, Fireplaces, Vents and Solid Fuel-	IMC®
211 10 <u>211 10</u>	burning Appliances	IIII C
262—15 262—19	Standard Method of Test for Flame Travel and Smoke of	IMC®
	Wires and Cables for Use in Air-handling Spaces	
286—15 286—19	Standard Methods of Fire Tests for Evaluating	IMC®
	Contribution of Wall and Ceiling Interior Finish to Room	5
	Fire Growth	
853—15 853—20	Standard on Installation of Stationary Fuel Cell Power	IMC®
	Plants Systems	
NSF	NSF International	
Standard Reference	Title	Referenced
Number		in Code(s):
NSF 358-1—2014 358-1—	Polyethylene Pipe and Fittings for Water-based Ground-	IMC®
2017	source "Geothermal" Heat Pump Systems	
NSF 358-2—2012 <u>358-2—</u>	Polypropylene Pipe and Fittings for Water-based Ground-	IMC®
2017	source "Geothermal" Heat Pump Systems	
SMACNA	Sheet Metal and Air Conditioning Contractors' National	
	Association, Inc.	
Standard Reference	Title	Referenced
Number		in Code(s):
SMACNA—10	Fibrous Glass Duct Construction Standards 7th Edition	IMC®
SMACNA/ANSI—2016	HVAC Duct Construction Standards-Metal and Flexible	IMC®
	4th Edition (ANSI) 2016	
SMACNA 2015	SMACNA Phenolic Duct Construction Standard - 1st	IMC®
	Edition (ANSI)	
UL	UL LLC	
Standard Reference	Title	Referenced
Number		in Code(s):
103—2010	Factory-built Chimneys, Residential Type and Building	IMC®
	Heating Appliance—with Appliances—with revisions	
	through July 2012 March 2017	
	1	1

127—2011	Factory-built Fireplaces—with revisions through May 2015 July 2016	IMC®
174—04	Household Electric Storage Tank Water Heaters—with revisions through April 2015 December 2016	IMC®
180—2012	Liquid-level Indicating Gauges for Oil Burner Fuels and Other Combustible LiquidsLiquids-with revisions through May 2017	IMC® IMC®
181—05	Factory-made Air Ducts and Air Connectors—with revisions through October 2008 April 2017	IMC®
181A—2013	Closure Systems for Use with Rigid Air Ducts and Air Connectors - with revisions through March 2017	IMC®
181B—2013	Closure Systems for Use with Flexible Air Ducts and Air Connectors - with revisions through March 2017	IMC®
197—10	Commercial Electric Cooking Appliances—with revisions through September 2014 January 2018	IMC®
263—2011	Standard for Fire Test of Building Construction and Materials—with revisions through June 2015 March 2018	IMC®
268—2009 <u>268—2016</u>	Smoke Detectors for Fire Alarm SystemsSystems-with revisions through July 2016	IMC®
268A—2008	Smoke Detectors for Duct Application—with revisions through October 2014August 2016	IMC®
343—2008 <u>343—2017</u>	Pumps for Oil-burning Appliances—with revisions through June 2013Appliances	IMC®
378—06 <u>378—2006</u>	Draft Equipment—with revisions through June 12, 2014September 2013	IMC®
412—2011	Refrigeration Unit Coolers—with revisions through September 2013August 2018	IMC®
471—2010	Commercial Refrigerators and Freezers—with revisions through December 2012November 2018	IMC®
4 99—05 499—2014	Electric Heating Appliances—with revisions through November 2014February 2017	IMC®
507—2014 <u>507—2017</u>	Standard for Electric FansElectric Fans-with revisions through August 2018	IMC®
508—99 <u>508—2018</u>	Industrial Control Equipment—with revisions through October 2013Equipment	IMC®
536—97 <u>536—2014</u>	Flexible Metallic Hose—with revisions through December 2014Hose	IMC®
555—06	Fire Dampers—with revisions through May 2014October 2016	IMC®
555C—06 <u>555C—2014</u>	Ceiling Dampers—with revisions through December 2014May 2017	IMC®
555S—99 <u>555S—2014</u>	Smoke Dampers—with revisions through February 2014October 2018	IMC®
586—2009	High-efficiency, Particulate, Air Filter Units—with revisions through September 2014December 2017	IMC®
641—2010	Type L Low-temperature Venting Systems—with revisions through June 2013April 2018	IMC®
705—2004 <u>705—2017</u>	Standard for Power Ventilators—with revisions through December 2013October 2018	IMC®
710—2012	Exhaust Hoods for Commercial Cooking Equipment—with revisions through November 2013 June 2018	IMC®
723—2008 <u>723—2018</u>	Standard for Test for Surface Burning Characteristics of Building Materials—with revisions through August 2013Materials	IMC®

727 06 727—2018	Oil-fired Central Furnace with revisions through October	IMC®
	2013 Furnace	
729 03 729—2003	Oil-fired Floor Furnaces—with revisions through October 2013 November 2016	IMC®
730 03 730—2003	Oil-fired Wall Furnaces—with revisions through October 2013 November 2016	IMC®
731—95 731—2018	Oil-fired Unit Heaters with revisions through October 2013 Heaters	IMC®
732 95 732—2018	Oil-fired Storage Tank Water Heaters with revisions through October 2013Heaters	IMC®
737—2011	Fireplace Stoves with revisions through August 2015Stoves	IMC®
762 2010 <u>762 2013</u>	Outline of Investigation for Power Ventilators for Restaurant Exhaust Appliances—with revisions through October 2013Appliances	IMC®
791—06 <u>791—2006</u>	Residential Incinerators—with revisions through November 2014	IMC®
834—04	Heating, Water Supply and Power Boilers Electric—with revisions through December 2013September 2018	IMC®
842—07 <u>842—2015</u>	Valves for Flammable Fluids—with revisions through May 2015	IMC®
858—05 <u>858—2014</u>	Household Electric Ranges—with revisions through June 20152018	IMC®
867—2011	Electrostatic Air Cleaners—with revisions through August 20132018	IMC®
875—09 <u>875—2009</u>	Electric Dry Bath Heater—with revisions through December 2013September 2017	IMC®
896—93 <u>896—1993</u>	Oil-burning Stoves—with revisions through November 20132016	IMC®
900—04 <u>900—2015</u>	Air Filter Units—with revisions through April 2015Units	IMC®
907—94 <u>907—2016</u>	Fireplace Accessories with revisions through June 2014 Accessories	IMC®
923—2013	Microwave Cooking Appliances—with revisions through June 2015 July 2017	IMC®
1046—2010	Grease Filters for Exhaust Ducts—with revisions through January 2012April 2017	IMC®
1240 2012 <u>1240—2005</u>	Electric Commercial Clothes—Drying Equipment—with revisions through October 2012March 2018	IMC®
1261—01	Electric Water Heaters for Pools and Tubs—with revisions through July 2012September 2017	IMC®
1453 04 <u>1453—2016</u>	Electric Booster and Commercial Storage Tank Water Heaters—with revisions through July 2011 May 2018	IMC®
1479 03 1479—2015	Fire Tests of Through penetration Firestops with revisions through June 2015Penetration Firestops	IMC®
1482—2011	Solid-fuel Type Room Heaters—with revisions through August 2015	IMC®
1563—2009	Standard for Electric Spas, Hot Tubs and Associated Equipment—with revisions through March 2015October 2017	IMC®
1618—09 1618—2015	Wall Protectors, Floor Protectors and Hearth Extensions—with revisions through October 2015 January 2018	IMC®
1777—2007	Chimney Liners—with revisions through October 2015April 2014	IMC®

1812—2013	Standard for Ducted Heat Recovery Ventilators—with revisions through April 2014 July 2018	IMC®
1815—2012	Standard for Nonducted Heat Recovery—with revisions through April 2014 July 2018	IMC®
1820 04<u>1820—2004</u>	Fire Test of Pneumatic Tubing for Flame and Smoke Characteristics—with revisions through May 2013 July 2017	IMC®
1887—04 <u>1887—2004</u>	Fire Tests of Plastic Sprinkler Pipe for Visible Flame and Smoke Characteristics—with revisions through May 2013 July 2017	IMC®
1978—2010	Grease Ducts—with revisions through September 2013April 2017	IMC®
1995—2011 <u>1995—2015</u>	Heating and Cooling Equipment—with revisions through July 2015 August 2018	IMC®
1996—2009	Electric Duct Heaters—with revisions through June 2014 July 2016	IMC®
2024—2011 <u>2024—2014</u>	Standard for Safety Optical-fiber and Communications Cable Raceway—with revisions through August 2015	IMC®
2043—2008 <u>2043—2013</u>	Fire Test for Heat and Visible Smoke Release for Discrete Products and Their Accessories Installed in Air-handling Spaces—with revisions through October 2013 July 2018	IMC®
2075—2013	Standard for Gas and Vapor Detectors and Sensors-Sensors-with revisions through December 2017	IMC®
2158—97 2158—2018	Electric Clothes Dryers—with revisions through March 2009 <u>Dryers</u>	IMC®
2158A—2010 2158A— 2013	Outline of Investigation for Clothes Dryer Transition DuctDuct-with revisions through April 2017	IMC®
2162—01 2162—2014	Outline of Investigation for Commercial Wood-fired Baking Ovens-Refractory Type	IMC®
2200—2012	Stationary Engine Generator Assemblies—with revisions through July October 2015	IMC®
2518—05 2518—2016	Air Dispersion System Materials Systems	IMC®
2523—09 2523—2009	Solid Fuel-fired Hydronic Heating Appliances—with Appliances, Water Heaters, and Boilers-with revisions through February 2013March 2018	IMC®
2846—14 2846—2014	Fire Test of Plastic Water Distribution Plumbing Pipe for Visible Flame and Smoke CharacteristicsCharacteristicswith revisions through December 2016	IMC®

ADM47-IPC-19

Proposed Change as Submitted

ASME	American Society of Mechanical Engineers	
Standard Reference Number	Title	Referenced in Code(s):
A112.1.2—2012A112.1.2—2022	Air Gaps in Plumbing Systems (For Plumbing Fixtures and Water Connection Receptors)	IPC®
A112.1.3—2000 (R2015) (R2020)	Air Gap Fittings for Use with Plumbing Fixtures, Appliances and Appurtenances	IPC®

A112.3.1—2007 (R2012) (R2022)	Stainless Steel Drainage Systems for Sanitary,	IPC®
	DWV, Storm and Vacuum Applications Above and	
	Below Ground	
ASME A112.3.4—	Macerating Toilet Systems and Related	IPC®
2013 A112.3.4—2020/CSA	Components	
B45.9—2013B45.9—2020	I W C II C D E CV I D : T I	IDOO
A112.4.1—2009A112.4.1—	Water Heater Relief Valve Drain Tubes	IPC®
2009(R2019)	Water Claset Devend I hydiana Davidas	IDC®
A112.4.2—2015A112.4.2— 2020/CSA B45.16—15B45.16—	Water Closet Personal Hygiene Devices	IPC®
2020/CSA B43.10—13 B43.16— 20		
A112.4.3—1999 (R2010) (R2020)	Plastic Fittings for Connecting Water Closets to the Sanitary Drainage System	IPC®
A112.4.14—2004	Manually Operated , Quarter-turn Shutoff Valves	IPC®
(R2016) (R2019)	for Use in Plumbing Systems	
A112.6.2—2000	Framing-affixed Supports for Off-the-floor Water	IPC®
(R2016) A112.6.2—2022	Closets with Concealed Tanks	
A112.6.3—2001	Floor and Trench Drains	IPC®
(R2016)A112.6.3—2019		
A112.6.4—2003 (R2012) (R2020)	Roof, Deck, and Balcony Drains	IPC®
A112.6.7—2010 (R2015)(R2020)	Sanitary Floor Sinks	IPC®
A112.6.9—	Siphonic Roof Drains	IPC®
2005(R2015) A112.6.9—		
2005(R2020)		IDOO
A112.14.1—2003	Backwater Valves	IPC®
(R2012)(R2022)	Cross Interceptors	IDC®
A112.14.3—2016 <u>A112.14.3—</u> 2021	Grease Interceptors	IPC®
A112.14.4—2001	Grease Removal Devices	IPC®
(R2012)(R2022)		
A112.14.6—2010	FOG (Fats, Oils and Greases) Disposal Systems	IPC®
(R2015) (R2020)		
A112.18.1—2017 <u>A112.18.1—</u>	Plumbing Supply Fittings	IPC®
2020/CSA B125.1—		
2017 B125.1—2020		
A112.18.2—2015A112.18.2—	Plumbing Waste Fittings	IPC®
2019/CSA B125.2—15B125.2—		
19 A112.18.3—2002	Performance Requirements for Backflow	IPC®
(R2012) A112.18.3M—2002	Protection Devices and Systems in Plumbing	1F 0®
(R2020)	Fixture Fittings	
A112.18.6—2017 A112.18.6—	Flexible Water Connectors	IPC®
2021/CSA B125.6 17 B125.6—		•
21		
A112.18.9 2011 <u>A112.18.9</u>	Protectors/Insulators for Exposed Waste and	IPC®
2011(R2022)	Supplies on Accessible Fixtures	
A112.19.1 2013 <u>A112.19.1</u>	Enameled Cast Iron and Enameled Steel Plumbing	IPC®
2020/CSA B45.2—2013 B45.2—	Fixtures	
2020		17.05
A112.19.2—2013A112.19.2—	Ceramic Plumbing Fixtures	IPC®
2020/CSA B45.1—13B45.1—20	Outstand Outst Blood to Et a	IDOS
A112.19.3—2008A112.19.3—	Stainless Steel Plumbing Fixtures	IPC®
2021/CSA B45.4— 0 8(R2013) B45.4—2021		
00(1120 10) 040.4—2021	l	

A112.19.5 2017 A112.19.5—	Flush Values and Chude for Water algority Uringle	IPC®
2021/CSA B45.15 —	Flush Valves and Spuds for Water-closets, Urinals, and Tanks	IPC®
2017B45.15—2021	and ranks	
A112.19.7M—2017 A112.19.7—	Hydromassage Bathtub Systems	IPC®
2012/CSA B45.10—17B45.10—	Trydromassage Daintub Systems	11 00
2012(2021)		
A112.19.12—2014A112.19.12—	Wall Mounted and Pedestal Mounted, Adjustable,	IPC®
2019	Elevating, Tilting and Pivoting Lavatory, Sink and	11 00
2010	Shampoo Bowl Carrier Systems and Drain Waste	
	Systems	
A112.19.14—2013 (R2018)	Six-liter Water Closets Equipped with a Dual	IPC®
	Flushing Device	
A112.19.15—2012 (R2017)	Bathtub/Whirlpool Bathtubs with Pressure Sealed	IPC®
	Doors	
A112.19.19—	Vitreous China Nonwater Urinals	IPC®
2006(R2011) A112.19.19—2021		
A112.21.3—	Hydrants for Utility and Maintenance Use	IPC®
1985(R2007) A112.21.3—		
1985(R2017)		
A112.36.2M—	Cleanouts	IPC®
1991(R2012) A112.36.2M—		
<u>1991(R2017)</u>		
ASSE 1002—2015 1002—	Anti-Siphon Fill Valves	IPC® IPC®
2020/ASME A112.1002—		
2015 A112.1002—2020/CSA		
B125.12—15B125.12—20		
ASSE 1016—2017 1016—	Performance Requirements for Individual	IPC® IPC®
2020/ASME A112.1016—	Thermostatic, Pressure Balancing and	
2017 A112.1016—2020/CSA	Combination Control Valves for Individual Fixture	
B125.16—2017B125.16—2020	Fittings	IDOS
ASSE 1070—2015 <u>1070—</u>	Water Temperature Limiting Devices	IPC®
2020/ASME A112.1070—		
2015 <u>A112.1070</u> —2020/CSA <u>B125.1070</u> —15 <u>B125.1070</u> —20		
B1.20.1—2013B1.20.1—2019	Pipe Threads, General Purpose (inch)	IPC®
B16.3—2016 B16.3—2021	Malleable Iron Threaded Fittings Classes 150 and	IPC®
B10.3 2010 B10.3 2021	300	IF Co
B16.4—2016 B16.4—2021	Gray Iron Threaded Fittings Classes 125 and 250	IPC®
B16.9—2012 B16.9—2018	Factory-made Wrought Steel Buttwelding Fittings	IPC®
B16.11—2016B16.11—2021	Forged Fittings, Socket-welding and Threaded	IPC®
B16.12—2009 (R2014)(R2019)	Cast-iron Threaded Drainage Fittings	IPC®
B16.15—2013 B16.15—2018	Cast Alloy Threaded Fittings: Class 125 and 250	IPC®
B16.18 2012 B16.18 2018	Cast Copper Alloy Solder Joint Pressure Fittings	IPC®
B16.22—2013 B16.22—2018	Wrought Copper and Copper Alloy Solder Joint	IPC®
1	Pressure Fittings	-
B16.23—2016 B16.23—2021	Cast Copper Alloy Solder Joint Drainage Fittings	IPC®
	DWV	
B16.26—2016B16.26—2018	Cast Copper Alloy Fittings for Flared Copper	IPC®
	Tubes	
B16.29—2012B16.29—2017	Wrought Copper and Wrought Copper Alloy Solder	IPC®
	Joint Drainage Fittings (DWV)	
B16.34—2015B16.34—2020	Valves Flanged, Threaded and Welding End	IPC®
B16.51—2013B16.51—2018	Copper and Copper Alloy Press-connect Pressure	IPC®
	Fittings	

ASSE	ASSE International	
Standard Reference Number	Title	Referenced in Code(s):
1001—2016 1001—2017	Performance Requirements for Atmospheric Type Vacuum Breakers	IPC®
ASSE 1002—2015/ASME A112.1002—2015/CSA B125.12—15	Antisiphon Anti-siphon Fill Valves	IPC® IPC®
1013 2017 <u>1013—2011</u>	Performance Requirements for Reduced Pressure Principle Backflow Preventers and Reduced Pressure Principle Fire Protection Backflow Preventers	IPC®
1017—2010 1017—2009	Performance Requirements for Temperature Actuated Mixing Valves for Hot Water Distribution Systems	IPC®
1018—2017 1018—2001	Performance Requirements for Trap Seal Primer Valves; Potable Water Supplied	IPC®
1019—2016 1019—2011 (R2016)	Performance Requirements for Vacuum Breaker Wall Hydrants, Freeze Resistant, Automatic Draining Type	IPC®
1022—2016 1022—2017	Performance Requirements for Backflow Preventer for Beverage Dispensing Equipment	IPC®
1024—2016 1024—2017	Performance Requirements for Dual Check Valve Type Backflow Preventers, Anti-siphon-type, Residential Applications	IPC®
1044—2010 1044—2015	Performance Requirements for Trap Seal Primer Devices - Drainage Types and Electronic Design Types	IPC®
1047 2017 <u>1047—2011</u>	Performance Requirements for Reduced Pressure Detector Fire Protection Backflow Prevention Assemblies	IPC®
1048—2017 <u>1048—2011</u>	Performance Requirements for Double Check Detector Fire Protection Backflow Prevention Assemblies	IPC®
1055—2016 <u>1055—2018</u>	Performance Requirements for Chemical Dispensing Systems with Integral Backflow Protection	IPC®
1060—2016 1060—2017	Performance Requirements for Outdoor Enclosures for Fluid Conveying Components	IPC®
1062—2016 1062—2017	Performance Requirements for Temperature Actuated, Flow Reduction (TAFR) Valves to Individual Supply Fittings	IPC®
1066—2016 1066—1997	Performance Requirements for Individual Pressure Balancing In-line Valves for Individual Fixture Fittings	IPC®
ASTM	ASTM International	
Standard Reference Number	Title	Referenced in Code(s):
A53/ A53M—12 <u>A53M—2018</u>	Specification for Pipe, Steel, Black and Hot-dipped, Zinc-coated Welded and Seamless	IPC®
A74—15 <u>A74—17</u>	Specification for Cast-iron Soil Pipe and Fittings	IPC®
A312/ A312M—15a <u>A312M—2018</u>	Specification for Seamless, Welded, and Heavily Cold Worked Austenitic Stainless Steel Pipes	IPC®

A733 15 <u>A733—16</u>	Specification for Welded and Seamless Carbon Steel and Austenitic Stainless Steel Pipe Nipples	IPC®
A778/ A778M 15 <u>A778M—16</u>	Specification for Welded Unannealed Austenitic Stainless Steel Tubular Products	IPC®
A888 15A888—2018	Specification for Hubless Cast-iron Soil Pipe and Fittings for Sanitary and Storm Drain, Waste, and Vent Piping Application	IPC®
B88—14 <u>B88—2016</u>	Specification for Seamless Copper Water Tube	IPC®
B251 10 B251/B251M—2017	Specification for General Requirements for Wrought Seamless Copper and Copper-alloy Tube	IPC®
B302 12 <u>B302—17</u>	Specification for Threadless Copper Pipe, Standard Sizes	IPC®
B687 99(2011) <u>B687—</u> 1999(2016)	Specification for Brass, Copper and Chromium- plated Pipe Nipples	IPC®
B813 10 <u>B813—16</u>	Specification for Liquid and Paste Fluxes for Soldering of Copper and Copper Alloy Tube	IPC®
B828 02(2010) B828—2016	Practice for Making Capillary Joints by Soldering of Copper and Copper Alloy Tube and Fittings	IPC®
C4 04(2014) <u>C4 04(2018)</u>	Specification for Clay Drain Tile and Perforated Clay Drain Tile	IPC®
C76 15a <u>C76—2018A</u>	Specification for Reinforced Concrete Culvert, Storm Drain and Sewer Pipe	IPC®
C425 04(2013) <u>C425—</u> 2004(2018)	Specification for Compression Joints for Vitrified Clay Pipe and Fittings	IPC®
C443 12 <u>C443—2012 (2017)</u>	Specification for Joints for Concrete Pipe and Manholes, Using Rubber Gaskets	IPC®
C700 13 <u>C700—2018</u>	Specification for Vitrified Clay Pipe, Extra Strength, Standard Strength, and Perforated	IPC®
C1053 00(2010) <u>C1053—</u> 2000(2015)	Specification for Borosilicate Glass Pipe and Fittings for Drain, Waste, and Vent (DWV) Applications	IPC®
C1173—10(2014) <u>C1173—2018</u>	Specification for Flexible Transition Couplings for Underground Piping System	IPC®
C1277—15 <u>C1277—2018</u>	Specification for Shielded Coupling Joining Hubless Cast-iron Soil Pipe and Fittings	IPC®
C1440—08(2013) <u>C1440—2017</u>	Specification for Thermoplastic Elastomeric (TPE) Gasket Materials for Drain, Waste, and Vent (DWV), Sewer, Sanitary and Storm Plumbing Systems	IPC®
C1460—2012 <u>C1460—2017</u>	Specification for Shielded Transition Couplings for Use with Dissimilar DWV Pipe and Fittings Above Ground	IPC®
C1461—08(2013)C1461— 208(2017)	Specification for Mechanical Couplings Using Thermoplastic Elastomeric (TPE) Gaskets for Joining Drain, Waste and Vent (DWV) Sewer, Sanitary and Storm Plumbing Systems for Above and Below Ground Use	IPC®
C1540—15 <u>C1540—2018</u>	Specification for Heavy Duty Shielded Couplings Joining Hubless Cast-iron Soil Pipe and Fittings	IPC®
C1563—08(2013) <u>C1563—</u> 2008(2017)	Standard Test Method for Gaskets for Use in Connection with Hub and Spigot Cast Iron Soil Pipe and Fittings for Sanitary Drain, Waste, Vent and Storm Piping Applications	IPC®

D1785 15 D1785—2015E1	Specification for Poly (Vinyl Chloride) (PVC) Plastic Pipe, Schedules 40, 80 and 120	IPC®
D2235 04(2011) D2235— 2004(2016)	Specification for Solvent Cement for Acrylonitrile- Butadiene-Styrene (ABS) Plastic Pipe and Fittings	IPC®
D2466 15 D2466—2017	Specification for Poly (Vinyl Chloride) (PVC) Plastic Pipe Fittings, Schedule 40	IPC®
D2564 12 D2564—2012 (2018)	Specification for Solvent Cements for Poly (Vinyl Chloride) (PVC) Plastic Piping Systems	IPC®
D2657 07 D2657—2007 (2015)	Practice for Heat Fusion-joining of Polyolefin Pipe and Fitting Waste, and Vent Pipe and Fittings	IPC®
D2661—14 <u>D2661—14E1</u>	Specification for Acrylonitrile-Butadiene-Styrene (ABS) Schedule 40 Plastic Drain, Waste, and Vent Pipe and Fittings	IPC®
D2665—14 <u>D2665—2014</u>	Specification for Poly (Vinyl Chloride) (PVC) Plastic Drain, Waste, and Vent Pipe and Fittings	IPC®
D2729—11 <u>D2729—17</u>	Specification for Poly (Vinyl Chloride) (PVC) Sewer Pipe and Fittings	IPC®
D2846/ D2846M—1 4 <u>D2846M—</u> 2017BE1	Specification for Chlorinated Poly (Vinyl Chloride) (CPVC) Plastic Hot- and Cold-Water Distribution Systems	IPC®
D2855—96(2010) D2855—2015	Standard Practice for Making Solvent-cemented Joints with Poly (Vinyl Chloride) (PVC) Pipe and Fittings	IPC®
D3034—14a <u>D3034—2016</u>	Specification for Type PSM Poly (Vinyl Chloride) (PVC) Sewer Pipe and Fittings	IPC®
D3138—04(2011) <u>D3138—</u> 2004(2016)	Standard Specification for Solvent Cements for Transition Joints Between Acrylonitrile-Butadiene-Styrene (ABS) and Poly (Vinyl Chloride) (PVC) Non-pressure Piping Components	IPC®
D3261—12e1 <u>D3261—2016</u>	Specification for Butt Heat Fusion Polyethylene (PE) Plastic Fittings for Polyethylene (PE) Plastic Pipe and Tubing	IPC®
D3311—11 <u>D3311—2017</u>	Specification for Drain, Waste and Vent (DWV) Plastic Fittings Patterns	IPC®
D4068 15 <u>D4068—2017</u>	Specification for Chlorinated Polyethlene (CPE) Sheeting for Concealed Water-containment Membrane	IPC®
D4551—12 <u>D4551—2017</u>	Specification for Poly (Vinyl Chloride) (PVC) Plastic Flexible Concealed Water-containment Membrane	IPC®
E2727—10e1E2727—2018	Standard Practice for the Assessment of Rainwater Quality	IPC®
F409—12F409—2017	Specification for Thermoplastic Accessible and Replaceable Plastic Tube and Tubular Fittings	IPC®
F438—15F438—2017	Specification for Socket-type Chlorinated Poly (Vinyl Chloride) (CPVC) Plastic Pipe Fittings, Schedule 40	IPC®
F628—12e1 <u>F628—2012E2</u>	Specification for Acrylonitrile-Butadiene-Styrene (ABS) Schedule 40 Plastic Drain, Waste, and Vent Pipe with a Cellular Core	IPC®
F656—15 <u>F656—2015</u>	Specification for Primers for Use in Solvent Cement Joints of Poly (Vinyl Chloride) (PVC) Plastic Pipe and Fittings	IPC®

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F667 12 <u>F667/F667M—2016</u>	Standard Specification for 3 through 24 in. Corrugated Polyethylene Pipe and Fittings	IPC®
F876 15a F876—2017	Specification for Cross-linked Polyethylene (PEX) Tubing	IPC®
F877—11a <u>F877—2018A</u>	Specification for Cross-linked Polyethylene (PEX) Hot- and Cold-water Distribution Systems	IPC®
F891—10 <u>F891—2016</u>	Specification for Coextruded Poly (Vinyl Chloride) (PVC) Plastic Pipe with a Cellular Core	IPC®
F1055 13 F1055—2016A	Standard Specification for Electrofusion Type Polyethylene Fittings for Outside Diameter Controlled Polyethylene and Cross-linked Polyethylene Pipe and Tubing	IPC®
F1281—11 <u>F1281—2017</u>	Specification for Cross-linked Polyethylene/Aluminum/ Cross-linked Polyethylene (PEX-AL-PEX) Pressure Pipe	IPC®
F1282—10 F1282—2017	Specification for Polyethylene (PE-AL-PE) Composite Pressure Pipe	IPC®
F1412—09 F1412—2016	Specification for Polyolefin Pipe and Fittings for Corrosive Waste Drainage	IPC®
F1488—14 F1488—2014E1	Specification for Coextruded Composite Pipe	IPC®
F1548—01(2012) F1548—	Standard Specification for the Performance of	IPC®
2001(2018)	Fittings for Use with Gasketed Mechanical Couplings Used in Piping Applications	
F1673—10 F1673—2010 (2016)	Standard Specification for Polyvinylidene Fluoride (PVDF) Corrosive Waste Drainage Systems	IPC®
F1807—15 F1807—2018	Specification for Metal Insert Fittings Utilizing a Copper Crimp Ring for SDR9 Cross-linked Polyethylene (PEX) Tubing and SDR9 Polyethylene of Raised Temperature (PE-RT) Tubing	IPC®
F1866—13 <u>F1866—2018</u>	Specification for Poly (Vinyl Chloride) (PVC) Plastic Schedule 40 Drainage and DWV Fabricated Fittings	IPC®
F1960—15 <u>F1960—2018</u>	Specification for Cold Expansion Fittings with PEX Reinforcing Rings for Use with Cross-linked Polyethylene (PEX) Tubing	IPC®
F1986—01(2011)F1986— 2001(2011)	Specification for Multilayer Pipe, Type 2, Compression Fittings and Compression Joints for Hot and Cold Drinking Water Systems	IPC®
F2080—15 <u>F2080—16</u>	Specifications for Cold-expansion Fittings with Metal Compression-sleeves for Cross-linked Polyethylene (PEX) Pipe	IPC®
F2098—08 F2098—2015	Standard Specification for Stainless Steel Clamps for Securing SDR9 Cross-linked Polyethylene (PEX) Tubing to Metal Insert and Plastic Fittings	IPC®
F2159 14 <u>F2159—2018</u>	Specification for Plastic Insert Fittings Utilizing a Copper Crimp Ring for SDR9 Cross-linked Polyethylene (PEX) Tubing and SDR9 Polyethylene of Raised Temperature (PE-RT) Tubing	IPC®
F2306/ F2306M—14e1 <u>F2306M—</u> 2018	12" to 60" Annular Corrugated Profile-wall Polyethylene (PE) Pipe and Fittings for Gravity	IPC®

	Flow Storm Sewer and Subsurface Drainage	
	Applications	
F2389 15 F2389—2017A	Specification for Pressure-rated Polypropylene (PP) Piping Systems	IPC®
F2648/ F2648M 13 <u>F2648M—</u> 2017	Standard Specification for 2 to 60 inch [50 to 1500 mm] Annular Corrugated Profile Wall Polyethylene (PE) Pipe and Fittings for Land Drainage Applications	IPC®
F2735—09 <u>F2735—2009(2016)</u>	Standard Specification for Plastic Insert Fittings for SDR9 Cross-linked Polyethylene (PEX) and Polyethylene of Raised Temperature (PE-RT) Tubing	IPC®
F2764/ F2764M—11ae2 <u>F2764M—</u> 2018	Standard Specification for 30 to 60 in. [750 to 1500 mm] Polypropylene (PP) Triple Wall Pipe and Fittings for Non-pressure Sanitary Sewer Applications	IPC®
F2769 14 <u>F2769—2018</u>	Polyethylene or Raised Temperature (PE-RT) Plastic Hot- and Cold-water Tubing and Distribution Systems	IPC®
F2831—12 <u>F2831—2012 (2017)</u>	Standard Practice for Internal Non Structural Epoxy Barrier Coating Material Used in Rehabilitation of Metallic Pressurized Piping Systems	IPC®
F2881—11 <u>F2881/F2881M—2018</u>	Standard Specification for 12 to 60 in. [300 to 1500 mm] Polypropylene (PP) Dual Wall Pipe and Fittings for Non-pressure Storm Sewer Applications	IPC®
AWS	American Welding Society	
Standard Reference Number	Title	Referenced in Code(s):
A5.8MA5.8/A5.8—2011A5.8:	Specifications for Filler Metals for Brazing and	IPC®
2011-AMD1	Braze Welding	
AWWA Standard Reference Number	American Water Works Association Title	Referenced
Standard Reference Number	Title	in Code(s):
C104/ A21.4—13 <u>A21.4—16</u>	Cement-mortar Lining for Ductile-iron Pipe and Fittings	IPC®
C111/ A21.11—12 A21.11—17	Rubber-gasket Joints for Ductile-iron Pressure Pipe and Fittings	IPC®
C151/ A21.51—09 <u>A21.51—17</u>	Ductile-iron Pipe, Centrifugally Cast for Water	IPC®
C504—10C504—15	Standard for Rubber-Seated Butterfly Valves	IPC®
C510—07 <u>C510—17</u>	Double Check Valve Backflow Prevention Assembly	IPC®
C511—07 <u>C511—17</u>	Reduced-pressure Principle Backflow Prevention Assembly	IPC®
CISPI	Cast Iron Soil Pipe Institute	
Standard Reference Number	Title	Referenced in Code(s):
301 12 301—18	Specification for Hubless Cast-iron Soil Pipe and Fittings for Sanitary and Storm Drain, Waste and Vent Piping Applications	IPC®
310—12 <u>310—18</u>	Specification for Coupling for Use in Connection with Hubless Cast-iron Soil Pipe and Fittings for	IPC®

	Sanitary and Storm Drain, Waste and Vent Piping	
	Applications	
CSA	CSA Group	
Standard Reference Number	Title	Referenced
Standard Reference Humber	Tide	in Code(s):
A257.1M—14 A257.1—14	Non-reinforced Circular Concrete Culvert, Storm	IPC®
7.207.1W 11 <u>7.207.1 11</u>	Drain, Sewer Pipe and Fittings	" 00
A257.2M—14 A257.2—14	Reinforced Circular Concrete Culvert, Storm Drain,	IPC®
	Sewer Pipe and Fittings	
A257.3M—14 A257.3—14	Joints for Circular Concrete Sewer and Culvert	IPC®
	Pipe, Manhole Sections and Fittings Using Rubber	
	Gaskets	
ASME A112.18.1 —	Plumbing Supply Fittings	IPC®
2017 A112.18.1—2018/CSA		
B125.1—17B125.1—18		
ASME A112.19.1—	Enameled Cast-iron and Enameled Steel Plumbing	IPC®
2013 A112.19.1—2018/CSA	Fixtures	
B45.2—2013 B45.2—2018		
ASME A112.19.2—	Ceramic Plumbing Fixtures	IPC®
2013 A112.19.2—2018/B45.1—		
2013 B45.1—2018		15.00
ASME A112.19.3—	Stainless-steel Plumbing Fixtures	IPC®
2008A112.19.3—2017/CSA		
B45.4—08(R2013)B45.4—17 ASME A112.19.7—	Lludromogogo Dothtub Cyctomo	IPC®
2017A112.19.7—2012/CSA	Hydromassage Bathtub Systems	IPC®
B45.10 17 <u>B45.10—12 (R2017)</u>		
ASME A112.3.4—	Macerating Toilet Systems and Related	IPC®
2013 A112.3.4—2018/CSA	ComponentsWaste Pumping Systems for	11 00
B45.9—13 B45.9—18	Plumbing Fixtures	
B64.1.1—16 <u>B64.1.1—11(R2016)</u>	Vacuum Breakers, Atmospheric Type (AVB)	IPC®
B64.1.2—16B64.1.2—11(R2016)	Pressure Vacuum Breakers, (PVB)	IPC®
B64.1.3—16 B64.1.3—11(R2016)	Spill Resistant Pressure Vacuum Breakers	IPC®
	(SRPVB)	
B64.2—16B64.2—11(R2016)	Vacuum Breakers, Hose Connection Type (HCVB)	IPC®
B64.2.1—16B64.2.1—11(R2016)	Vacuum Breakers, Hose Connection (HCVB) with	IPC®
	Manual Draining Feature	
B64.2.1.1—16 <u>B64.2.1.1—</u>	Hose Connection Dual Check Vacuum Breakers	IPC®
<u>11(R2016)</u>	(HCDVB)	
B64.2.2—16B64.2.2—11(R2016)	Vacuum Breakers, Hose Connection Type (HCVB)	IPC®
	with Automatic Draining Feature	
B64.3—16 <u>B64.3—11(R2016)</u>	Backflow Preventers, Dual Check Valve Type with	IPC®
	Atmospheric Port (DCAP)	
B64.4—16 B64.4—11(R2016)	Backflow Preventers, Reduced Pressure Principle	IPC®
	Type (RP)	
B64.4.1—16 <u>B64.4.1—11(R2016)</u>	Reduced Pressure Principle for Fire Sprinklers	IPC®
D045 40D045 44/20010	(RPF)	IDOC
B64.5—16B64.5—11(R2016)	Double Check Backflow Preventers (DCVA)	IPC®
B64.5.1—16B64.5.1—11(R2016)	Double Check Valve Backflow Preventer for Fire	IPC®
D04.0 40D04.0 44/D0040	Systems (DCVAF)	IDO®
B64.6—16B64.6—11(R2016)	Dual Check Valve (DuC) Backflow Preventers	IPC®
B64.7—16 <u>B64.7—11 (R2016)</u>	Laboratory Faucet Vacuum Breakers (LFVB)	IPC®

B64.10—16 B64.10—17	Manual for the Selection and Installation of	IPC®
	Backflow Prevention Devices	
B64.10.1—11 <u>B64.10.1—17</u>	Maintenance and Field Testing of Backflow Preventers	IPC®
B79 08(R2013) B79—08(R2018)	Commercial and Residential Drains and Cleanouts	IPC®
B125.3—2012B125.3—2018	Plumbing Fittings	IPC®
B137.1—16B137.1—17	Polyethylene (PE) Pipe, Tubing and Fittings for Cold-water Pressure Services	IPC®
B137.2—16B137.2—17	Polyvinylchloride, PVC, Injection-moulded Gasketed Fittings for Pressure Applications	IPC®
B137.3—16B137.3—17	Rigid Poly (Vinyl Chloride) (PVC) Pipe for Pressure Applications	IPC®
B137.5—16B137.5—17	Cross-linked Polyethylene (PEX) Tubing Systems for Pressure Applications	IPC®
B137.6—16 <u>B137.6—17</u>	CPVC Pipe, Tubing and Fittings for Hot- and Coldwater Distribution Systems	IPC®
B137.9—16 <u>B137.9—17</u>	Polyethylene Aluminum/Polyethylene (PE-AL-PE) Composite Pressure-pipe Systems	IPC®
B137.10—16B137.10—17	Cross-linked Polyethylene/Aluminum/Cross-linked Polyethylene (PEX-AL-PEX) Composite Pressure-pipe Systems	IPC®
B137.11—16B137.11—17	Polypropylene (PP-R) Pipe and Fittings for Pressure Applications	IPC®
B137.18—13 <u>B137.18—17</u>	Polyethylene of Raised Temperature Resistance (PE-RT) Tubing Systems for Pressure Applications	IPC®
B181.1—15B181.1—18	Acrylonitrile-Butadiene-Styrene ABS Drain, Waste and Vent Pipe and Pipe Fittings	IPC®
B181.2—15B181.2—18	Polyvinylchloride PVC and Chlorinated Polyvinylchloride (CPVC) Drain, Waste, and Vent Pipe and Pipe Fittings	IPC®
B181.3 15 B181.3—18	Polyolefin and Polyvinylidene Fluoride (PVDF) Laboratory Drainage Systems	IPC®
B182.1—11 <u>B182.1—18</u>	Plastic Drain and Sewer Pipe and Pipe Fittings	IPC®
B182.2—11B182.2—18	PSM Type Polyvinylchloride PVC Sewer Pipe and Fittings	IPC®
B182.4—15B182.4—18	Profile Polyvinylchloride PVC Sewer Pipe and Fittings	IPC®
B182.6—15 <u>B182.6—18</u>	Profile Polyethylene (PE) Sewer Pipe and Fittings for Leak-proof Sewer Applications	IPC®
B182.8—15B182.8—18	Profile Polyethylene (PE) Storm Sewer and Drainage Pipe and Fittings	IPC®
B182.13—11B182.13—18	Profile Polypropylene (PP) Sewer Pipe and Fittings for Leak-proof Sewer Applications	IPC®
B356—10 (R2015)	Water Pressure Reducing Valves for Domestic Water Systems	IPC®
B481.1—12 (R2017)	Testing and Rating of Grease Interceptors Using Lard	IPC®
B481.3—12 (R2017)	Sizing, Selection, Location and Installation of Grease Interceptors	IPC®
B483.1—07(R2012)CAN/CSA B483.1—07(R2017)	Drinking Water Treatment UnitsSystems	IPC®
B602—15 <u>B602—16</u>	Mechanical Couplings for Drain, Waste and Vent Pipe and Sewer Pipe	IPC®

IAPMO	IAPMO Group	
Standard Reference Number	Title	Referenced
		in Code(s):
Z1001—2014 Z1001—2016	Prefabricated Gravity Grease Interceptors	IPC®
CSA B45.5—17/IAPMO Z124—	Plastic Plumbing Fixtures	IPC® IPC®
2017 with errata dated August	_	
<u>2017</u>		
IAPMO/ANSI Z1157—	Ball Valves	IPC®
2014 <u>Z1157—2014e1</u>		
MSS	Manufacturers Standardization Society of the Valve and Fittings Industry, Inc.	
Standard Reference Number	Title	Referenced in Code(s):
SP-71—2013 <u>SP-71—2018</u>	Gray Iron Swing Check Valves, Flanged and Threaded Ends	IPC®
SP-78—2013 <u>SP-78—2011</u>	Cast Iron Plug Valves, Flanged and Threaded Ends	IPC®
SP-110—2010a <u>SP-110—2010</u>	Ball Valves, Threaded, Socket Welding, Solder Joint, Grooved and Flared Ends (incl. a 2010 Errata Sheet)	IPC®
SP-122 2012 <u>SP-122—2017</u>	Plastic Industrial Ball Valves	IPC®
NFPA	National Fire Protection Association	
Standard Reference Number	Title	Referenced
		in Code(s):
55—16 <u>55</u> —19	Compressed Gases and Cryogenic Fluids Code	IPC®
99—18 99—21	Health Care Facilities Code	IPC®
NSF	NSF International	
Standard Reference Number	Title	Referenced in Code(s):
3—2012 3—2017	Commercial Warewashing Equipment	IPC®
14 2015 14—2017	Plastic Piping System Components and Related Materials	IPC®
18 2012 <u>18—2016</u>	Manual Food and Beverage Dispensing Equipment	IPC®
42 2015 42—2017	Drinking Water Treatment Units-Aesthetic Effects	IPC®
44—2015 44—2017	Residential Cation Exchange Water Softeners	IPC®
50-2015 <u>50-2017</u>	Equipment for Swimming Pools, Spas, Hot Tubs and Other Recreational Facilities	IPC®
53-2015 53-2017	Drinking Water Treatment Units—Health Effects	IPC®
58-2015 <u>58-2017</u>	Reverse Osmosis Drinking Water Treatment Systems	IPC®
61—2015 <u>61—2017</u>	Drinking Water System Components—Health Effects	IPC®
62—2015 62—2017	Drinking Water Distillation Systems	IPC®
350—2014 <u>350—2017a</u>	Onsite Residential and Commercial Water Reuse	IPC®
359—2011 <u>359—2011(R2016)</u>	Treatment Systems Valves for Cross-linked Polyethylene (PEX) Water Distribution Tubing Systems	IPC®
372—2011 <u>372—2016</u>	Drinking Water Systems Components—Lead Content	IPC®
TCNA	Tile Council of North America	
Standard Reference Number	Title	Referenced
Standard Norototile Nutribel	THIC	in Code(s):

TCNA/ANSI A118.10 — 99 <u>A118.10—14</u>	Specifications for Load Bearing, Bonded, Waterproof Membranes for Thin Set Ceramic Tile and Dimension Stone Installation	IPC®
UL	UL LLC	
Standard Reference Number	Title	Referenced in Code(s):
399 2008 <u>399</u> —2017	Drinking-Water Coolers—with revisions through October 2013 August 2018	IPC®
430 2009 <u>430</u> —2015	Waste Disposers—with revisions through September 2015 February 2018	IPC®
508 99 <u>508—2018</u>	Industrial Control Equipment with revisions through October 2013 Equipment	IPC®
1795 2009 1795—2016	Hydromassage Bathtubs—with revisions through January 2015 December 2017	IPC®

ADM47-IRC-19

Proposed Change as Submitted

AAMA	American Architectural Manufacturers Association	
Standard Reference Number	Title	Referenced
		in Code(s):
450—10 <u>450—20</u>	Voluntary Performance Rating Method for Mulled	IRC®
	Fenestration Assemblies	
711—16 711—20	Voluntary Specification for Self-adhering Flashing	IRC®
	Used for Installation of Exterior Wall Fenestration	
	Products	
714—15 714—20	Voluntary Specification for Liquid Applied	IRC®
	Flashing Used to Create a Water-resistive Seal	
	around Exterior Wall Openings in Buildings	
AAMA/ NPEA/ NSA 2100—	Specifications for Sunrooms	IRC®
12 2100—20		
ACCA	Air Conditioning Contractors of America	
Standard Reference Number	Title	Referenced
		in Code(s):
ANSI/ACCA 1 Manual D—2016	Residential Duct Systems	IRC®
ANSI/ACCA Manual J—2016	Residential Load Calculation—Eighth	IRC®
	EditionCalculation	
ANSI/ACCA 3 Manual S—2014	Residential Equipment Selection	IRC®
ACI	American Concrete Institute	
Standard Reference Number	Title	Referenced
		in Code(s):
318—14 318—19	Building Code Requirements for Structural	IRC®
	Concrete	
332—14 332—20	Residential Code Requirements for Structural	IRC®
	Concrete	
AISI	American Iron and Steel Institute	
Standard Reference Number	Title	Referenced
		in Code(s):
AISI S100—16/S1-18	North American Specification for the Design of	IRC®
	Cold-formed Steel Structural Members, 2016,	
	with Supplement 1, dated 2018	

T		l
AISI S220 15 <u>S220—20</u>	North American Standard for Cold-formed Steel Framing—Nonstructural Members, 2015/2020	IRC®
AISI S230 15 <u>S230—18</u>	Standard for Cold-formed Steel Framing— Prescriptive Method for One- and Two-family Dwellings, 20152018	IRC®
AISI \$240—15 <u>\$240—20</u>	North American Standard for Cold-Formed Steel Structural Framing, 2020	IRC®
AMCA	Air Movement and Control Association International	
Standard Reference Number	Title	Referenced in Code(s):
ANSI/AMCA 210-ANSI/ASHRAE <u>51—0751—16</u>	Laboratory Methods of Testing Fans for Aerodynamic Performance Rating	IRC®
ANCE	Association of the Electric Sector	
Standard Reference Number	Title	Referenced in Code(s):
NMX-J-521/ 2-40-ANCE 2014 2- 40-ANCE—2019/CAN/CSA-22.2 No. 60335-2-40—12 60335-2-40— 19/UL 60335-2-406 0335-2-40-2019	Safety of Household and Similar Electric Appliances, Part 2-402-40-Safety: Particular Requirements for Electric Heat Pumps, Air- Conditioners and Dehumidifiers	IRC®
ANSI	American National Standards Institute	
Standard Reference Number	Title	Referenced in Code(s):
A108.1A—16A108.1A—17	Installation of Ceramic Tile in the Wet-set Method, with Portland Cement Mortar	IRC®
A108.1B—99A108.1B—2017	Installation of Ceramic Tile, Quarry Tile on a Cured Portland Cement Mortar Setting Bed with Dry-set or Latex Portland Mortar	IRC®
A108.4—99A108.4—09	Installation of Ceramic Tile with Organic Adhesives or Water-Cleanable Tile-setting Epoxy Adhesive	IRC®
A108.5—99A108.5—19	Installation of Ceramic Tile with Dry-set Portland Cement Mortar or Latex Portland Cement Mortar	IRC®
A108.6—99 <u>A108.6—19</u>	Installation of Ceramic Tile with Chemical- resistant, Water-cleanable Tile-setting and - grouting Epoxy	IRC®
A108.11—99A108.11—10	Interior Installation of Cementitious Backer Units	IRC®
ANSI 117—2015 117—2020	Standard Specifications for Structural Glued Laminated Timber of Softwood Species	IRC®
A118.1—16A118.1—18	American National Standard Specifications for Dry-set Portland Cement Mortar	IRC®
A118.3—13A118.3—20	American National Standard Specifications for Chemical-resistant, Water-cleanable Tile-setting and -grouting Epoxy, and Water-cleanable Tilesetting Epoxy Adhesive	IRC®
A118.4—16A118.4—18	American National Standard Specifications for Modified Dry-Set Cement Mortar	IRC®
A118.10—99A118.10—14	Specification for Load-bearing, Bonded, Waterproof Membranes for Thin-set Ceramic Tile and Dimension Stone Installation	IRC®
A136.1—08A136.1—19	American National Standard Specifications for Organic Adhesives for Installation of Ceramic Tile	IRC®
A137.1 17 <u>A137.1—19</u>	American National Standard Specifications for Ceramic Tile	IRC®

LC1/CSA 6.26 13 6.26—2016	Fuel Gas Piping Systems Using Corrugated	IRC®
13 <u>0.20 2010</u>	Stainless Steel Tubing (CSST)	11.00
Z21.1 2010 Z21.1/CSA 1.1—2016	Household Cooking Gas Appliances	IRC®
Z21.5.1/CSA 7.1—14 7.1—2017	Gas Clothes Dryers—Volume I—Type I Clothes Dryers	IRC®
Z21.8—94 (R2002) (R2012)	Installation of Domestic Gas Conversion Burners	IRC®
Z21.10.1/CSA 4.1—124.1—2012	Gas Water Heaters—Volume I—Storage Water Heaters with Input Ratings of 75,000 Btu per hour or Less	IRC®
Z21.10.3/CSA 4.3—114.3—2017	Gas Water Heaters—Volume III—Storage Water Heaters with Input Ratings above 75,000 Btu per hour, Circulating and Instantaneous	IRC®
Z21.11.2 11 <u>Z21.11.2—2016</u>	Gas-fired Room Heaters—Volume II—Unvented Room Heaters	IRC®
Z21.13/CSA 4.9 114.9 2017	Gas-fired Low-pressure Steam and Hot Water Boilers	IRC®
Z21.15/CSA 9.1 09 9.1— 09(R2014)	Manually Operated Gas Valves for Appliances, Appliance Connector Valves and Hose End Valves	IRC®
Z21.24/CSA 6.10—06 6.10—2015	Connectors for Gas Appliances	IRC®
Z21.40.1/CSA 2.91—96 (R2011)(R2017)	Gas-fired, Heat-activated Air-conditioning and Heat Pump Appliances	IRC®
Z21.40.2/CSA 2.92—96 (R2011) (R2017)	Gas-fired, Work Activated Air-conditioning and Heat Pump Appliances (Thermal (Internal Combustion)	IRC®
Z21.42—2014 <u>Z21.42—2013</u>	Gas-fired Illuminating Appliances	IRC®
Z21.47/CSA 2.3 12 2.3—2016	Gas-fired Central Furnaces	IRC®
Z21.50/CSA 2.22—16 2.22—2016	Vented <u>Decorative</u> Gas Fireplaces	IRC®
Z21.54—2009 <u>Z21.54—2014</u>	Gas Hose Connectors for Portable Outdoor Gas- fired Appliances	IRC®
Z21.58—95/CSA 1.6—13 1.6— 2015	Outdoor Cooking Gas Appliances	IRC®
Z21.60/CSA 2.26—12 2.26—2017	Decorative Gas Appliances for Installation in Solid Fuel-burning Fireplaces	IRC®
Z21.69/CSA 6.16—09 <u>6.16—2015</u>	Connectors for Movable Gas Appliances	IRC®
Z21.75/CSA 6.27—07 <u>6.27—2016</u>	Connectors for Outdoor Gas Appliances and Manufactured Homes	IRC®
Z21.80/CSA 6.22—11 <u>6.22—</u> 2011(R2016)	Line Pressure Regulators	IRC®
ANSI/CSA FC 1—12 1—2014	Stationary Fuel Cell Power SystemsFuel cell technologies - Part 3-100: Stationary fuel cell power systems - Safety	IRC®
Z21.84—12 <u>Z21.84—2017</u>	Manually <u>ListedLighted</u> , Natural Gas Decorative Gas Appliances for Installation in Solid Fuelburning Fireplaces <u>Solid-Fuel Burning Appliances</u>	IRC®
Z21.86/CSA 2.32—08 2.32—2016	Vented Gas-fired Vented Space Heating Appliances	IRC®
Z21.91—07 <u>Z21.91—2017</u>	Ventless Firebox Enclosures for Gas-fired Unvented Decorative Room Heaters	IRC®
	Universed Decorative Room Fleaters	
Z21.93/CSA 6.30—13 <u>6.30—2017</u>	Excess Flow Valves for Natural <u>Gas</u> and LP <u>Propane</u> Gas with Pressures up to 5 psig	IRC®

Z83.8/CSA 2.6 09 2.6—2016	Gas-fired Gas Unit Heaters, Gas Packaged Heaters, Gas Utility Heaters, and Gas-fired Duct Furnaces	IRC®
Z83.19—01 (R2009) <u>Z83.19—2009</u> (R2014)	Gas-fuel Gas-fired High-intensity Infrared Heaters	IRC®
Z83.20—08 <u>Z83.20—2016</u>	Gas-fired <u>Tubular and</u> Low-intensity Infared Heaters Outdoor Decorative Appliances	IRC®
APA	APA—The Engineered Wood Association	
Standard Reference Number	Title	Referenced in Code(s):
ANSI/APA PRP 210 2014 210 2019	Standard for Performance-rated Engineered Wood Siding	IRC®
ANSI/APA PRG 320 2017 <u>320 </u> 2019	Standard for Performance-rated Cross Laminated Timber	IRC®
ANSI/APA PRS 610.1 — 2013 610.1—2018	Standard for Performance-Rated Structural Insulated Panels in Wall Applications	IRC®
APA E30 15 E30—19	Engineered Wood Construction Guide	IRC®
APSP	The Association of Pool & Spa Professionals	
Standard Reference Number	Title	Referenced in Code(s):
ANSI/APSP/ICC 14—2014 14— 2019	American National Standard for Portable Electric Spa Energy Efficiency	IRC®
ANSI/APSP/ICC 15a—2011 <u>15—</u> 2020	American National Standard for Residential Swimming Pool and Spa Energy Efficiency includes Appendix A Approved January 9, 2013Efficiency	IRC®
ASCE/SEI	American Society of Civil Engineers	
Standard Reference Number	Title	Referenced in Code(s):
7—16 with Supplement 1	Minimum Design Loads and Associated Criteria for Buildings and Other Structures	IRC®
24—14 24—20	Flood-resistant Design and Construction	IRC®
ASHRAE	ASHRE	
Standard Reference Number	Title	Referenced in Code(s):
ASHRAE—2017ASHRAE—2021	ASHRAE Handbook of Fundamentals	IRC®
34—2016 <u>34—2019</u>	Designation and Safety Classification of Refrigerants	IRC®
ASME	American Society of Mechanical Engineers	
Standard Reference Number	Title	Referenced in Code(s):
ASME A17.1—2016 <u>A17.1—</u> 2019/CSA B44—16 <u>B44—2019</u>	Safety Code for Elevators and Escalators	IRC®
A18.1—2014A18.1—2020	Safety Standard for Platforms and Stairway Chair Lifts	IRC®
A112.1.2—2012 (R2022)	Air Gaps in Plumbing Systems (For Plumbing Fixtures and Water Connected Receptors)	IRC®
A112.1.3—2000 (Reaffirmed 2015)2020)	Air Gap Fittings for Use with Plumbing Fixtures, Appliances and Appurtenances	IRC®
A112.3.1— 2007(R2012)A112.3.1— 2007(R2022)	Stainless Steel Drainage Systems for Sanitary, DWV, Storm and Vacuum Applications Above and Below Ground	IRC®

A112.3.4 2013 <u>A112.3.4 </u> 2020/CSA B45.9 13 B45.9 20	Macerating Toilet Systems and Related Components	IRC®
A112.4.1—2009 (R2019)	Water Heater Relief Valve Drain Tubes	IRC®
ASME A112.4.2—2015A112.4.2— 2020/CSA B45.16—15B45.16—20	Water-closet Personal Hygiene Devices	IRC® IRC®
A112.4.3—1999 (R2010) (R2020)	Plastic Fittings for Connecting Water Closets to the Sanitary Drainage System	IRC®
A112.4.14—2004 (R2016)A112.4.14/CSA B125.14- 2019	Manually Operated , Quarter-turn Shutoff Valves for Use in Plumbing Systems	IRC®
A112.6.2—2000 (R2016)A112.6.2—2022	Framing-affixed Supports for Off-the-floor Water Closets with Concealed Tanks	IRC®
A112.6.3 2001 (R2016) A112.6.3—2019	Floor and Trench Drains	IRC®
A112.14.1 03(2012) <u>A112.14.1—</u> 2003(2022)	Backwater Valves	IRC®
A112.18.1—2017A112.18.1— 2020/CSA B125.1—2017B125.1— 2020	Plumbing Supply Fittings	IRC®
A112.18.2—2015A112.18.2— 2019/CSA B125.2—2015B125.2— 2019	Plumbing Waste Fittings	IRC®
A112.18.3— 2002(R2012)A112.18.3M— 2002(R2020)	Performance Requirements for Backflow Protection Devices and Systems in Plumbing Fixture Fittings	IRC®
A112.18.6—2017A112.18.6— 2021/CSA B125.6—17B125.6—21	Flexible Water Connectors	IRC®
A112.19.1—2013A112.19.1— 2020/CSA B45.2—2013B45.2— 2020	Enameled Cast-iron and Enameled Steel Plumbing Fixtures	IRC®
A112.19.2—2013A112.19.2— 2020/CSA B45.1—2013B45.1— 2020	Ceramic Plumbing Fixtures	IRC®
A112.19.3—2008A112.19.3— 2021/CSA B45.4—08 (R2013)B45.4—2021	Stainless Steel Plumbing Fixtures	IRC®
A112.19.5 2017A112.19.5 2021/CSA B45.15 2017B45.15 2021	Flush Valves and Spuds for Water-closets, Urinals and Tanks	IRC®
A112.19.7—2017A112.19.7— 2021/CSA B45.10—2017B45.10— 2021	Hydromassage Bathtub Systems	IRC® IRC®
A112.19.12—2014A112.19.12— 2019	Wall-mounted and Pedestal-mounted, Adjustable, Elevating, Tilting, and Pivoting Lavatory and Sink, and Shampoo Bowl Carrier Systems and Drain Waste Systems	IRC®
A112.19.14—2013 (R2018)	Six-Liter Water Closets Equipped with Dual Flushing Device	IRC®
A112.19.15—2012 (R2017)	Bathtub/Whirlpool Bathtubs with Pressure-sealed Doors	IRC®
A112.36.2m—1991 (R2012)A112.36.2M—1991 (R2017)	Cleanouts	IRC®

1005 1000 00151000	LARCON CONTRACTOR	IDOS IDOS
ASSE 1002 2015 1002 —	Anti-Siphon Fill Valves	IRC® IRC®
2020/ASME A112.1002—		IRC®
2015 A112.1002—2020/CSA B125.12—15 B125.12—20		
B1.20.1—2013B1.20.1—2019	Pipe Threads, General-purpose (Inch)	IRC®
B16.3—2016 B16.3—2021	Malleable-iron-threaded Fittings, 150 and 300	IRC®
B16.4 - 2016B16.4 - 2021	Gray-iron-threaded Fittings	IRC®
B16.9—2012 B16.9—2018	Factory-made, Wrought-steel Buttwelding Fittings	IRC®
B16.11—2016 B16.11—2021	Forged Fittings, Socket-welding and Threaded	IRC®
	0 0,	
B16.12—2009 (R2014)(R2019)	Cast-iron-threaded Drainage Fittings	IRC®
B16.15—2013B16.15—2018	Cast-Alloy-threaded Fittings: Classes 125 and 250	IRC®
B16.18—2012B16.18—2018	Cast-copper-alloy Solder Joint Pressure Fittings	IRC®
B16.22—2013B16.22—2018	Wrought-copper and Copper-alloy Solder Joint Pressure Fittings	IRC®
B16.23—2016B16.23—2021	Cast-copper-alloy Solder Joint Drainage Fittings (DWV)	IRC®
B16.26—2016B16.26—2018	Cast-copper-alloy Fittings for Flared Copper Tubes	IRC®
B16.29—2012B16.29—2017	Wrought-copper and Wrought-copper-alloy Solder Joint Drainage Fittings (DWV)	IRC®
B16.33—2012 (R2017)	Manually Operated Metallic Gas Valves for Use in Gas Piping Systems up to 125 psig (Sizes 1/2 through 2)	IRC®
B16.34—2015 B16.34—2020	Valves—Flanged, Threaded and Welding End	IRC®
B16.44—2012 (R2017)	Manually Operated Metallic Gas Valves for Use in	IRC®
B10.44—2012 (1(2017)	Above-ground Piping Systems up to 5 psi	II.Co
B16.51—2013 B16.51—2018	Copper and Copper Alloy Press-Connect	IRC®
B10.01 2010 <u>B10.01 2010</u>	Pressure Fittings	
B36.10M—	Welded and Seamless Wrought-steel Pipe	IRC®
2004(R2015) B36.10M—2018	The same and a common throught a second specific	
BPVC—2015BPVC—2019	ASME Boiler and Pressure Vessel Code	IRC®
	(Sections I, II, IV, V, VI and VIII)	
CSD-1—2016CSD-1—2021	Controls and Safety Devices for Automatically Fired Boilers	IRC®
ASSE 1016—2017 1016—	Performance Requirements for Automatic	IRC® IRC®
2020/ASME 112.1016—	Compensating Valves for Individual Showers and	IRC®
2017 112.1016—2020/CSA	Tub/Shower Combinations	
B125.16—2017 B125.16—2020		
ASSE 1070—2015 1070—	Performance Requirements for Water-	IRC® IRC®
2020/ASME A112.1070—	temperature-limiting Devices	IRC®
2015 A112.1070—2020/CSA		
B125.70 15 <u>B125.70—20</u>		
ASSE	ASSE International	
Standard Reference Number	Title	Referenced
		in Code(s):
1001—2016 1001—2017	Performance Requirements for Atmospheric-type Vacuum Breakers	IRC®
ASSE 1002—2015 1002—	Anti-Siphon Fill Valves	IRC® IRC®
2020/ASME A112.1002—		IRC®
2015 A112.1002—2020/CSA		
B125.12—15 B125.12—20		

	T	
1013 2017 1013—2011	Performance Requirements for Reduced Pressure Principle Backflow Preventers and Reduced Pressure Principle Fire Protection Backflow Preventers	IRC®
ASSE <u>1016—2017</u> 1016— <u>2020</u> /ASME <u>112.1016—</u> <u>2017</u> 112.1016—2020/CSA <u>B125.16—2017</u> B125.16—2020	Performance Requirements for Automatic Compensating Valves for Individual Showers and Tub/Shower Combinations	IRC® IRC® IRC®
1017—2010 <u>1017—2009</u>	Performance Requirements for Temperature- actuated Mixing Valves for Hot Water Distribution Systems	IRC®
1018—2017 <u>1018—2001</u>	Performance Requirements for Trap Seal Primer Valves; Potable Water Supplied	IRC®
1019—2016 1019—2011 (R2016)	Performance Requirements for Freeze-resistant, Wall Hydrants, Vacuum Breaker, Draining Types	IRC®
1023—2016 <u>1023—1979</u>	Performance Requirements for Hot Water Dispensers, Household-storage-type—Electrical	IRC®
1024—2016 <u>1024—2017</u>	Performance Requirements for Dual Check Backflow Preventers, Anti-siphon-type, Residential Applications	IRC®
1044 2010 1044—2015	Performance Requirements for Trap Seal Primer Devices - Drainage Types and Electronic Design Types	IRC®
1047—2017 <u>1047—2011</u>	Performance Requirements for Reduced Pressure Detector Fire Protection Backflow Prevention Assemblies	IRC®
1048—2017 <u>1048—2011</u>	Performance Requirements for Double Check Detector Fire Protection Backflow Prevention Assemblies	IRC®
1062—2016 <u>1062—2017</u>	Performance Requirements for Temperature- actuated, Flow Reduction (TAFR) Valves for Individual Supply Fittings	IRC®
1066—2016 <u>1066—1997</u>	Performance Requirements for Individual Pressure Balancing In-line Valves for Individual Fixture Fittings	IRC®
ASSE <u>1070—20151070—</u> <u>2020</u> /ASME <u>A112.1070—</u> <u>2015A112.1070—2020</u> /CSA <u>B125.70—15B125.70—20</u>	Performance Requirements for Water-temperature-limiting Devices	IRC® IRC® IRC®
ASTM	ASTM International	
Standard Reference Number	Title	Referenced in Code(s):
A53/ A53M 12 <u>A53M—2018</u>	Specification for Pipe, Steel, Black and Hot- dipped, Zinc-coated Welded and Seamless	IRC®
A74 15 <u>A74—2017</u>	Specification for Cast-iron Soil Pipe and Fittings	IRC®
A106/ A106M —14 <u>A106M</u> —2018	Specification for Seamless Carbon Steel Pipe for High-temperature Service	IRC®
A123/ A123M—15 <u>A123M—2017</u>	Standard Specification for Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products	IRC®
A153/ A153M—09 <u>A153M—2016A</u>	Specification for Zinc Coating (Hot Dip) on Iron and Steel Hardware	IRC®
A240/ A240M—15A <u>A240M—17</u>	Standard Specification for Chromium and Chromium-nickel Stainless Steel Plate, Sheet and	IRC®

	Strip for Pressure Vessels and for General Applications	
A254 12 A254—2010(2018)	Specification for Copper Brazed Steel Tubing	IRC®
A268—2010 A268/A268M—	Standard Specification for Seamless and Welded	IRC®
2010(16)	Ferritic and Martensitic Stainless Steel Tubing for General Service	
A269 2015 <u>A269/A269M—2015A</u>	Standard Specification for Seamless and Welded Austenitic Stainless Steel Tubing for General Service	IRC®
A307—14A307—2014E1	Specification for Carbon Steel Bolts and Studs, 60,000 psi Tensile Strength	IRC®
A312/ A312M—15A <u>A312M—2018</u>	Specification for Seamless, Welded and Heavily Cold Worked Austenitic Stainless Steel Pipes	IRC®
A653/ A653M—15 <u>A653M—2017</u>	Specification for Steel Sheet, Zinc-coated (Galvanized) or Zinc-iron Alloy-coated (Galvannealed) by the Hot-dip Process	IRC®
A706/ A706M—15 <u>A706M—2016</u>	Specification for Low-alloy Steel Deformed and Plain Bars for Concrete Reinforcement	IRC®
A755/ A755M—2015 <u>A755M—</u> 2016E1	Specification for Steel Sheet, Metallic Coated by the Hot-dip Process and Prepainted by the Coil- coating Process for Exterior Exposed Building Products	IRC®
A778/ A778M—15 <u>A778M—2016</u>	Specification for Welded Unannealed Austenitic Stainless Steel Tubular Products	IRC®
A888—15A888—2018	Specification for Hubless Cast Iron Soil Pipe and Fittings for Sanitary and Storm Drain, Waste and Vent Piping Application	IRC®
A924/ A924M—14 <u>A924M—2017A</u>	Standard Specification for General Requirements for Steel Sheet, Metallic-coated by the Hot-dip Process	IRC®
A996/ A996M 15 <u>A996M—2016</u>	Specifications for Rail-steel and Axle-steel Deformed Bars for Concrete Reinforcement	IRC®
B88 14 <u>B88—2016</u>	Specification for Seamless Copper Water Tube	IRC®
B135—10B135/B135M—2017	Specification for Seamless Brass Tube	IRC®
B251—10B251/B251M—2017	Specification for General Requirements for Wrought Seamless Copper and Copper-alloy Tube	IRC®
B302—12B302—2017	Specification for Threadless Copper Pipe, Standard Sizes	IRC®
B695—04(2009)B695— 2004(2016)	Standard Specification for Coatings of Zinc Mechanically Deposited on Iron and Steel	IRC®
B813—10B813—2016	Specification for Liquid and Paste Fluxes for Soldering Applications of Copper and Copper Alloy Tube	IRC®
B828 02(2010)B828—2016	Practice for Making Capillary Joints by Soldering of Copper and Copper Alloy Tube and Fittings	IRC®
C4 04(2014) <u>C4 2004(2018)</u>	Specification for Clay Drain Tile and Perforated Clay Drain Tile	IRC®
C5 10 <u>C5 2018</u>	Specification for Quicklime for Structural Purposes	IRC®
C27 98(2013) <u>C27—1998(2018)</u>	Specification for Standard Classification of Fireclay and High-alumina Refractory Brick	IRC®
C33/ C33M 13 C33M—2018	Specification for Concrete Aggregates	IRC®

C34 13 <u>C34 2017</u>	Specification for Structural Clay Load-bearing Wall Tile	IRC®
C55 2014A C55—2017	Specification for Concrete Building Brick	IRC®
C56—13 <u>C56—2013(2017)</u>	Standard Specification for Structural Clay Nonloadbearing Tile	IRC®
C62—13A <u>C62—2017</u>	Standard Specification for Building Brick (Solid Masonry Units Made from Clay or Shale)	IRC®
C73—14 <u>C73—2017</u>	Specification for Calcium Silicate Face Brick (Sand Lime Brick)	IRC®
C76—15 A <u>C76—2018A</u>	Specification for Reinforced Concrete Culvert, Storm Drain and Sewer Pipe	IRC®
C90—14 <u>C90—2016A</u>	Specification for Load-bearing Concrete Masonry Units	IRC®
C91/ C91M—12 C91M—2018A	Specification for Masonry Cement	IRC®
C94/ C94M—15A <u>C94M—2017A</u>	Standard Specification for Ready-mixed Concrete	IRC®
C126—15 <u>C126—2017</u>	Standard Specification for Ceramic Glazed Structural Clay Facing Tile, Facing Brick, and Solid Masonry Units	IRC®
C129—14A <u>C129—2017</u>	Specification for Nonload-bearing Concrete Masonry Units	IRC®
C143/ C143M—15 <u>C143M—15A</u>	Test Method for Slump of Hydraulic Cement Concrete	IRC®
C150/ C150M—15 <u>C150M—2018</u>	Specification for Portland Cement	IRC®
C199—84(2011) <u>C199—</u> 1984(2016)	Test Method for Pier Test for Refractory Mortar	IRC®
C203—05a(2012) <u>C203—</u> 2005A(2017)	Standard Test Methods for Breaking Load and Flexural Properties of Block-type Thermal Insulation	IRC®
C207—06(2011) <u>C207—2018</u>	Specification for Hydrated Lime for Masonry Purposes	IRC®
C208—12 C208—2012(2017)E1	Specification for Cellulosic Fiber Insulating Board	IRC®
C212—14 <u>C212—2017</u>	Standard Specification for Structural Clay Facing Tile	IRC®
C216—15 <u>C216—2017A</u>	Specification for Facing Brick (Solid Masonry Units Made from Clay or Shale)	IRC®
C315—07(2011) <u>C315—</u> 2007(2016)	Specification for Clay Flue Liners and Chimney Pots	IRC®
C411—11C411—2017	Test Method for Hot-surface Performance of High-temperature Thermal Insulation	IRC®
C425—04(2013)C425— 2004(2018)	Specification for Compression Joints for Vitrified Clay Pipe and Fittings	IRC®
C443—12C443—2012(2017)	Specification for Joints for Concrete Pipe and Manholes, Using Rubber Gaskets	IRC®
C475/ C475M—15 <u>C475M—2017</u>	Specification for Joint Compound and Joint Tape for Finishing Gypsum Wallboard	IRC®
C476—10 <u>C476—2018</u>	Specification for Grout for Masonry	IRC®
C503/ C503M —2010 <u>C503M</u> —2015	Standard Specification for Marble Dimension Stone	IRC®
C552—15 <u>C552—2017E1</u>	Standard Specification for Cellular Glass Thermal Insulation	IRC®
C557—03(2009)e01 <u>C557—</u> <u>2003(2017)</u>	Specification for Adhesives for Fastening Gypsum Wallboard to Wood Framing	IRC®

C568/ C568M 2010 <u>C568M—2015</u>	Standard Specification for Limestone Dimension Stone	IRC®
C578 15 <u>C578—2018</u>	Specification for Rigid, Cellular Polystyrene Thermal Insulation	IRC®
C587 04(2014) <u>C587 </u> 2004(2018)	Specification for Gypsum Veneer Plaster	IRC®
C595/ C595M 14E1 C595M 2018	Specification for Blended Hydraulic Cements	IRC®
C615/ C615M —11 <u>C615M</u> —2018E1	Standard Specification for Granite Dimension Stone	IRC®
C616/ C616M—10 <u>C616M—2015</u>	Standard Specification for Quartz-based Dimension Stone	IRC®
C629/ C629M—10 C629M—2015	Standard Specification for Slate Dimension Stone	IRC®
C645—14 <u>C645—2018</u>	Specification for Nonstructural Steel Framing Members	IRC®
C652—15 <u>C652</u> —2017A	Specification for Hollow Brick (Hollow Masonry Units Made from Clay or Shale)	IRC®
C685/ C685M— 14 <u>C685M—2017</u>	Specification for Concrete Made by Volumetric Batching and Continuous Mixing	IRC®
C700—13 <u>C700—2018</u>	Specification for Vitrified Clay Pipe, Extra Strength, Standard Strength and Perforated	IRC®
C726—12 <u>C726—2017</u>	Standard Specification for Mineral Wool Roof Insulation Board	IRC®
C728—15 <u>C728—2017A</u>	Standard Specification for Perlite Thermal Insulation Board	IRC®
C744—14 <u>C744—2016</u>	Standard Specification for Prefaced Concrete and Calcium Silicate Masonry Units	IRC®
C836/ C836M—15 <u>C836M—2018</u>	Specification for High Solids Content, Cold Liquid- applied Elastomeric Waterproofing Membrane for Use with Separate Wearing Course	IRC®
C841—03(2013) <u>C841—</u> <u>2003(2018)</u>	Standard Specification for Installation of Interior Lathing and Furring	IRC®
C843—99(2012) <u>C843—2017</u>	Specification for Application of Gypsum Veneer Plaster	IRC®
C847—14A C847—2018	Specification for Metal Lath	IRC®
C920—14A <u>C920—2018</u>	Standard Specification for Elastomeric Joint Sealants	IRC®
C926—15B <u>C926—2018B</u>	Specification for Application of Portland Cement- based Plaster	IRC®
C933—14 <u>C933—2018</u>	Specification for Welded Wire Lath	IRC®
C946—10 <u>C946—2018</u>	Standard Practice for Construction of Dry- Stacked, Surface-Bonded Walls	IRC®
C954—15 <u>C954—2018</u>	Specification for Steel Drill Screws for the Application of Gypsum Panel Products or Metal Plaster Bases to Steel Studs from 0.033 in (0.84 mm) or to 0.112 in. (2.84 mm) in Thickness	IRC®
C957/ C957M—15 <u>C957M—2017</u>	Specification for High-solids Content, Cold Liquid- applied Elastomeric Waterproofing Membrane for Use with Integral Wearing Surface	IRC®
C1002 14 <u>C1002—2018</u>	Specification for Steel Self-piercing Tapping Screws for the Application of Gypsum Panel Products or Metal Plaster Bases to Wood Studs or Steel Studs	IRC®
C1032—14 <u>C1032—2018</u>	Specification for Woven Wire Plaster Base	IRC®

04000 45404000 00400	0	IDOO
C1063 15 A <u>C1063—2018B</u>	Specification for Installation of Lathing and Furring to Receive Interior and Exterior Portland	IRC®
	Cement-based Plaster	
C1088—14 C1088—2018	Standard Specification for Thin Veneer Brick	IRC®
91000 14 <u>01000 2010</u>	Units Made from Clay or Shale	11.00
C1107/ C1107M—14A C1107M—	Standard Specification for Packaged Dry,	IRC®
2017	Hydraulic-cement Grout (Nonshrink)	
C1157—11/ C1157M—	Standard Performance Specification for Hydraulic	IRC®
11 C1157M—2017	Cement	
C1167—11 <u>C1167—2011(2017)</u>	Specification for Clay Roof Tiles	IRC®
C1173 10(2014) C1173—2018	Specification for Flexible Transition Couplings for	IRC®
	Underground Piping Systems	
C1177/ C1177M—13 C1177M—	Specification for Glass Mat Gypsum Substrate for	IRC®
2017	Use as Sheathing	
C1178/ C1178M 13 C1178M—	Specification for Glass Mat Water-resistant	IRC®
<u>2018</u>	Gypsum Backing Panel	
C1186 08(2012) <u>C1186—</u>	Specification for Flat Fiber Cement Sheets	IRC®
2008(2016)	•	
C1261—13 <u>C1261—2013(2017)E1</u>	Specification for Firebox Brick for Residential	IRC®
	Fireplaces	
C1277 15 C1277—2018	Specification for Shielded Couplings Joining	IRC®
	Hubless Cast Iron Soil Pipe and Fittings	
C1278/ C1278M —	Specification for Fiber-reinforced Gypsum Panels	IRC®
07a(2011) C1278M—2017		
C1283 11 <u>C1283—2015</u>	Practice for Installing Clay Flue Lining	IRC®
C1288—1 4 <u>C1288—2017</u>	Standard Specification for Discrete Nonasbestos	IRC®
	Fiber-cement Interior Substrate Sheets	
C1289—15 <u>C1289—2018</u>	Standard Specification for Faced Rigid Cellular	IRC®
	Polyisocyanurate Thermal Insulation Board	
C1325—14 <u>C1325—2018</u>	Standard Specification for Nonasbestos Fiber-mat	IRC®
	Reinforced Cement Interior Substrate Sheets	
04004 40004004 0047	Backer Units	IDOC
C1364—10B <u>C1364—2017</u>	Standard Specification for Architectural Cast Stone	IRC®
C420C/C420CN4 2044AC420CN4		IRC®
C1396/ C1396M 2014A <u>C1396M</u> 2017	Specification for Gypsum Board	IRC®
C1405—15C1405—2016	Standard Specification for Glazed Brick (Single	IRC®
 01405 13 <u>01405 2016</u> 	Fired, Brick Units)	IKC®
C1440 08(2013) C1440—2017	Specification for Thermoplastic Elastomeric (TPE)	IRC®
01440 00(2013) <u>C1440-2017</u>	Gasket Materials for Drain, Waste and Vent	II.Co
	(DWV), Sewer, Sanitary and Storm Plumbing	
	Systems	
C1460—2012C1460—2017	Specification for Shielded Transition Couplings for	IRC®
	Use with Dissimilar DWV Pipe and Fittings Above	
	Ground	
C1461—08(2013)C1461—	Specification for Mechanical Couplings Using	IRC®
2008(2017)	Thermoplastic Elastomeric (TPE) Gaskets for	
	Joining Drain, Waste and Vent (DWV) Sewer,	
	Sanitary and Storm Plumbing Systems for Above	
	and Below Ground Use	
C1492 03(2009) <u>C1492—</u>	Specification for Concrete Roof Tile	IRC®
<u>2003(2016)</u>		
C1513 2013 <u>C1513—2018</u>	Standard Specification for Steel Tapping Screws	IRC®
	for Cold-formed Steel Framing Connections	

C1540 15 C1540—2018	Specification for Heavy Duty Shielded Couplings	IRC®
01040 10 <u>01040 2010</u>	Joining Hubless Cast-iron Soil Pipe and Fittings	11.00
C1634 15 <u>C1634—2017</u>	Standard Specification for Concrete Facing Brick	IRC®
C1658/ C1658M—13 <u>C1658M—</u>	Standard Specification for Glass Mat Gypsum	IRC®
2018	Panels	
C1670/ 1670M—16 1670M—2018	Standard Specification for Adhered Manufactured	IRC®
	Stone Masonry Veneer Units	
C1691—11 <u>C1691—2011(2017)</u>	Standard Specification for Unreinforced	IRC®
	Autoclaved Aerated Concrete (AAC) Masonry	
0.1000 1.101000 0011/0017	Units	15.00
C1693 11 <u>C1693—2011(2017)</u>	Standard Specification for Autoclaved Aerated	IRC®
04700 4004700 0045	Concrete (AAC)	IDOS
C1766 13 <u>C1766—2015</u>	Standard Specification for Factory-Laminated	IRC®
D44/D44M 2044D44M	Gypsum Panel Products Specification for Asphalt Primer Used in Roofing,	IRC®
D41/ D41M 2011 <u>D41M—</u> 2011(2016)	Dampproofing and Waterproofing	IKC®
D43/ D43M	Specification for Coal Tar Primer Used in Roofing,	IRC®
2000(2012)E1D43M—2000(2018)	Dampproofing and Waterproofing	11100
D226/ D226M 	Specification for Asphalt-saturated (Organic Felt)	IRC®
DZZOWI OO <u>DZZOWI ZOTT</u>	Used in Roofing and Waterproofing	
D227/ D227M —	Specification for Coal Tar Saturated (Organic	IRC®
03(2011)e1 D227M—2003(2018)	Felt) Used in Roofing and Waterproofing	
D312/ D321M—15 D321M—2016M	Specification for Asphalt Used in Roofing	IRC®
D449/ D449M—	Specification for Asphalt Used in Dampproofing	IRC®
03(2014)E1 D449M—	and Waterproofing	
2003(2014)E1		
D450/ D450M —	Specification for Coal-tar Pitch Used in Roofing,	IRC®
07(2013)E1 D450M—2017(2018)	Dampproofing and Waterproofing	
D1248 12 D1248—2016	Specification for Polyethylene Plastics Extrusion	IRC®
	Materials for Wire and Cable	
D1785—15 <u>D1785—15E1</u>	Specification for Poly (Vinyl Chloride) (PVC)	IRC®
D 4000 /D 400014	Plastic Pipe, Schedules 40, 80 and 120	15.00
D1863/ D1863M	Specification for Mineral Aggregate Used in Built-	IRC®
05(2011)e1D1863M—2005(2018)	up Roofs	IDOS
D1970/ D1970M 2015 A <u>D1970M</u>	Specification for Self-adhering Polymer Modified	IRC®
<u>2017A</u>	Bitumen Sheet Materials Used as Steep Roofing Underlayment for Ice Dam Protection	
D2178/ D2178M—15 D2178M—15A	Specification for Asphalt Glass Felt Used in	IRC®
D2170/ D2170M 10 D2170M—13A	Roofing and Waterproofing	11.00
D2235—04(2011) D2235—	Specification for Solvent Cement for Acrylonitrile-	IRC®
2004(2016)	butadiene-styrene (ABS) Plastic Pipe and Fittings	
D2412—11 D2412—2011(2018)	Test Method for Determination of External	IRC®
	Loading Characteristics of Plastic Pipe by	
	Parallel-plate Loading	
D2466—15 <u>D2466—2017</u>	Specification for Poly (Vinyl Chloride) (PVC)	IRC®
	Plastic Pipe Fittings, Schedule 40	
D2513—2014e1D2513—2018A	Specification for Gas Pressure Pipe, Tubing and	IRC®
	Fittings	
D2564—12 D2564—2012(2018)	Specification for Solvent Cements for Poly (Vinyl	IRC®
	Chloride) (PVC) Plastic Piping Systems	
D2657—07 <u>D2657—2007(2015)</u>	Standard Practice for Heat Fusion-joining of	IRC®
	Polyolefin Pipe Fittings	

D2664 14D2664 2014E4	Charification for Agridanitrila butadiana aturana	IRC®
D2661—14D2661—2014E1	Specification for Acrylonitrile-butadiene-styrene (ABS) Schedule 40 Plastic Drain, Waste, and	IKC®
	Vent Pipe and Fittings	
D2729—11 D2729—2017	Specification for Poly (Vinyl Chloride) (PVC)	IRC®
B2723 17 <u>D2723 2017</u>	Sewer Pipe and Fittings	11.00
D2822/ D2822M—	Specification for Asphalt Roof Cement, Asbestos	IRC®
05(2011)e1 <u>D2822M</u> —2005(2011)	Containing	11.00
D2824/ D2824M—2013 D2824M—	Specification for Aluminum-pigmented Asphalt	IRC®
2018	Roof Coatings, Nonfibered, Asbestos Fibered and	11.00
2010	Fibered without Asbestos	
D2846/ D2846M—14 D2846M—	Specification for Chlorinated Poly (Vinyl Chloride)	IRC®
2017BE1	(CPVC) Plastic Hot- and Cold-water Distribution	
	Systems	
D2855—96(2010) D2855—2015	Standard Practice for Making Solvent-cemented	IRC®
	Joints with Poly (Vinyl Chloride) (PVC) Pipe and	
	Fittings	
D2898—10 D2898—2010(2017)	Test Methods for Accelerated Weathering of Fire-	IRC®
	retardant-treated Wood for Fire Testing	
D3019—08 <u>D3019/D3019—2017</u>	Specification for Lap Cement Used with Asphalt	IRC®
	Roll Roofing, Nonfibered, Asbestos Fibered and	
	Nonasbestos Fibered	
D3034—14a D3034—2016	Specification for Type PSM Poly (Vinyl Chloride)	IRC®
	(PVC) Sewer Pipe and Fittings	
D3138—04(2011) <u>D3138—</u>	Standard Specification for Solvent Cements for	IRC®
<u>2004(2016)</u>	Transition Joints Between Acrylonitrile-Butadiene-	
	Styrene (ABS) and Poly (Vinyl Chloride) (PVC)	
	Non-Pressure Piping Components	
D3161/ D3161M—15 <u>D3161M—</u>	Test Method for Wind-Resistance of Steep Slope	IRC®
2016A	Roofing Products (Fan Induced Method)	IDOO
D3261—12E1 <u>D3261—2016</u>	Specification for Butt Heat Fusion Polyethylene	IRC®
	(PE) Plastic Fittings for Polyethylene (PE) Plastic Pipe and Tubing	
D3311—11 D3311—2017	Specification for Drain, Waste and Vent (DWV)	IRC®
 	Plastic Fittings Patterns	II.Co
D3462/ D3462M—10A D3462M—	Specification for Asphalt Shingles Made From	IRC®
2016	Glass Felt and Surfaced with Mineral Granules	11.00
D3679—13 D3679—2017	Specification for Rigid Poly (Vinyl Chloride) (PVC)	IRC®
	Siding	
D3737—2012 D3737—2018E1	Practice for Establishing Allowable Properties for	IRC®
	Structural Glued Laminated Timber (Glulam)	
D4068—15 <u>D4068—2017</u>	Specification for Chlorinated Polyethylene (CPE)	IRC®
	Sheeting for Concealed Water Containment	
	Membrane	
D4318—10E1 <u>D4318—2017E1</u>	Test Methods for Liquid Limit, Plastic Limit and	IRC®
	Plasticity Index of Soils	
D4434/ D4434M—12 <u>D4434M—</u>	Specification for Poly (Vinyl Chloride) Sheet	IRC®
<u>2015</u>	Roofing	
D4479/ D4479M—	Specification for Asphalt Roof Coatings—	IRC®
07(2012)e1 D4479M—2007(2018)	asbestos-free	
D4551—12 <u>D4551—2017</u>	Specification for Poly (Vinyl Chloride) (PVC)	IRC®
	Plastic Flexible Concealed Water-containment	
D 4500/D 4500M	Membrane	ID OO
D4586/ D4586M —	Specification for Asphalt Roof Cemen—asbestos-	IRC®
07(2012)e1 D4586M—2007(2018)	free	

D4637/ D4637M 14E1 <u>D4637M</u> 2015	Specification for EPDM Sheet Used in Single-ply Roof Membrane	IRC®
D4869/ D4869M 15 <u>D4869M—</u> 2016A	Specification for Asphalt-saturated (Organic Felt) Underlayment Used in Steep Slope Roofing	IRC®
D4897/ D4897M — 01(2009) D4897M—2016	Specification for Asphalt Coated Glass-fiber Venting Base Sheet Used in Roofing	IRC®
D5055 13E1 <u>D5055—2016</u>	Specification for Establishing and Monitoring Structural Capacities of Prefabricated Wood I- joists	IRC®
D5456—14B <u>D5456—2018</u>	Standard Specification for Evaluation of Structural Composite Lumber Products	IRC®
D5516—09 <u>D5516—2018</u>	Test Method for Evaluating the Flexural Properties of Fire-retardant-treated Softwood Plywood Exposed to the Elevated Temperatures	IRC®
D5643/ D5643M— 06(2012)e1 D5643M—2006(2018)	Specification for Coal Tar Roof Cement Asbestos- free	IRC®
D5664—10 <u>D5664—2017</u>	Test Methods For Evaluating the Effects of Fire- retardant Treatments and Elevated Temperatures on Strength Properties of Fire-retardant-treated Lumber	IRC®
D6083—05e01 <u>D6083/D6083M—</u> <u>2018</u>	Specification for Liquid-applied Acrylic Coating Used in Roofing	IRC®
D6162/ D6162M— 2000a(2015)E 1 <u>D6162M—2016</u>	Specification for Styrene Butadiene Styrene (SBS) Modified Bituminous Sheet Materials Using a Combination of Polyester and Glass Fiber Reinforcements	IRC®
D6163/ D6163M — 2000(2015) E1 <u>D6163M</u> —2016	Specification for Styrene Butadiene Styrene (SBS) Modified Bituminous Sheet Materials Using Glass Fiber Reinforcements	IRC®
D6164/ D6164M—11 <u>D6164M—</u> 2016	Specification for Styrene Butadiene Styrene (SBS) Modified Bituminous Sheet Materials Using Polyester Reinforcements	IRC®
D6222/ D6222M—11 <u>D6222M—</u> 2016	Specification for Atactic Polypropylene (APP) Modified Bituminous Sheet Materials Using Polyester Reinforcements	IRC®
D6223/ D6223M— 02(2009)E 1 <u>D6223M—2016</u>	Specification for Atactic Polypropylene (APP) Modified Bituminous Sheet Materials Using a Combination of Polyester and Glass Fiber Reinforcement	IRC®
D6298—13 <u>D6298/D6298M—2016</u>	Specification for Fiberglass-reinforced Styrene Butadiene Styrene (SBS) Modified Bituminous Sheets with a Factory Applied Metal Surface	IRC®
D6380/ D6380 03(2013) E1 <u>D6380</u> M—2003(2018)	Standard Specification for Asphalt Roll Roofing (Organic Felt)	IRC®
D6464 03a(2009)e1 <u>D6464</u> 2003A(2017)	Standard Specification for Expandable Foam Adhesives for Fastening Gypsum Wallboard to Wood Framing	IRC®
D6694/ D6694M— 08(2013)E1 <u>D6694M—2015</u>	Standard Specification for Liquid-applied Silicone Coating Used in Spray Polyurethane Foam Roofing Systems	IRC®
D6754/ D6754M—10 <u>D6754M—</u> 2015	Standard Specification for Ketone-ethylene-ester- based Sheet Roofing	IRC®
D6757—2013 <u>D6757/D6757M—</u> <u>2018</u>	Specification for Underlayment Felt Containing Inorganic Fibers Used with Steep Slope Roofing	IRC®

D6841 08 <u>D6841—2016</u>	Standard Practice for Calculating Design Value Treatment Adjustment Factors for Fire-retardant-	IRC®
	treated Lumber	
D6878/ D6878M—13 <u>D6878M—</u> 2017	Standard Specification for Thermoplastic- polyolefin-based Sheet Roofing	IRC®
D6947/ D6947M—	Standard Specification for Liquid Applied Moisture	IRC®
07(2013)E1 <u>D6947M—2016</u>	Cured Polyurethane Coating Used in Spray	11.00
07 (2010)£1 <u>20047W 2010</u>	Polyurethane Foam Roofing System	
D7032—14 D7032—2017	Standard Specification for Establishing	IRC®
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Performance Ratings for Wood-plastic Composite	
	Deck Boards and Guardrail Systems (Guards or	
	Handrails)	
D7158—D7158M—	Standard Test Method for Wind Resistance of	IRC®
2016 D7158/D7158M—2019	Asphalt Shingles (Uplift Force/Uplift Resistance	
	Method)	
D7254—15 D7254—2017	Standard Specification for Polypropylene (PP)	IRC®
	siding	
D7672—14 D7672—2014E1	Standard Specification for Evaluating Structural	IRC®
	Capacities of Rim Board Products and	
	Assemblies	
D7793 13 D7793—2017	Standard Specification for Insulated Vinyl Siding	IRC®
E84—2016 E84—2018B	Standard Test Method for Surface Burning	IRC®
	Characteristics of Building Materials	
E96/ E96M—2015 E96M—2016	Test Method for Water Vapor Transmission of	IRC®
	Materials	
E108—2016 <u>E108—2017</u>	Test Methods for Fire Tests of Roof Coverings	IRC®
E119—2016 E119—2018B	Test Methods for Fire Tests of Building	IRC®
	Construction and Materials	
E136—2016 <u>E136—2016A</u>	Test Method for Behavior of Materials in a	IRC®
	Vertical Tube Furnace at 750°C	
E283—04(2012) E283—	Test Method for Determining the Rate of Air	IRC®
<u>2004(2012)</u>	Leakage through Exterior Windows, Curtain Walls	
	and Doors Under Specified Pressure Differences	
	across the Specimen	
E331 00(2009) <u>E331—</u>	Test Method for Water Penetration of Exterior	IRC®
2000(2016)	Windows, Skylights, Doors and Curtain Walls by	
	Uniform Static Air Pressure Difference	15.00
E779—10 E779—2010(2018)	Standard Test Method for Determining Air	IRC®
5044 0040A5044 0040A(0047)	Leakage Rate by Fan Pressurization	IDOO
E814—2013AE814—2013A(2017)	Standard Test Method for Fire Tests of	IRC®
F070 44F070 0047	Penetration Firestop Systems	IDOS
E970—14 <u>E970—2017</u>	Standard Test Method for Critical Radiant Flux of	IRC®
	Exposed Attic Floor Insulation Using a Radiant	
F4500 40F4500 2042(2047)	Heat Energy Source	IDC®
E1509—12 <u>E1509—2012(2017)</u>	Standard Specification for Room Heaters, Pellet	IRC®
F1602 02/2010\c1F1602	Fuel-burning Type Guide for Construction of Solid Fuel Burning	IRC®
E1602—03(2010)e1E1602—	Masonry Heaters	IRC®
2003(2017) E182711E18272011(2017)	Standard Test Methods for Determining	IRC®
E1827—11 E1827—2011(2017)	Airtightness of Building Using an Orifice Blower	IKO®
	Door	
E1886—13A E1886—2013A	Test Method for Performance Impact Protective	IRC®
2010/A	Systems Impacted by Missile(s) and Exposed to	
	Cyclic Pressure Differentials	
	1 0 John 1 1000010 Dillororidate	

E1996 2014a E1996—2017	Standard Specification for Performance of	IRC®
20114 <u>21666 2017</u>	Exterior Windows, Curtain Walls, Doors and	
	Impact Protective Systems Impacted by	
	Windborne Debris in Hurricanes	
E2231—15 E2231—2018	Standard Practice for Specimen Preparation and	IRC®
	Mounting of Pipe and Duct Insulation Materials to	
	Assess Surface Burning Characteristics	
E2273—03(2011) E2273—2018	Standard Test Method for Determining the	IRC®
	Drainage Efficiency of Exterior Insulation and	
F0500 00-450500 0047A	Finish Systems (EIFS) Clad Wall Assemblies	IDCO
E2568—09e1 <u>E2568—2017A</u>	Standard Specification for PB Exterior Insulation and Finish Systems	IRC®
E2634—11(2015) E2634—2018	Standard Specification for Flat Wall Insulating	IRC®
=2034	Concrete Form (ICF) Systems	IKC®
F409—12 F409—2017	Specification for Thermoplastic Accessible and	IRC®
17403 121403 2017	Replaceable Plastic Tube and Tubular Fittings	11.00
F438—15 <u>F438—2017</u>	Specification for Socket-type Chlorinated Poly	IRC®
	(Vinyl Chloride) (CPVC) Plastic Pipe Fittings,	
	Schedule 40	
F628—12E1 <u>F628—2012E2</u>	Specification for Acrylonitrile-butadiene-styrene	IRC®
	(ABS) Schedule 40 Plastic Drain, Waste and Vent	
F050 455050 0045	Pipe with a Cellular Core	IDOS
F656 15 F656—2015	Specification for Primers for Use in Solvent Cement Joints of Poly (Vinyl Chloride)(PVC)	IRC®
	Plastic Pipe and Fittings	
F876—15A F876—2017	Specification for Cross-linked Polyethylene (PEX)	IRC®
10/10 10/1 <u>10/10 2017</u>	Tubing	11.00
F877—2011A F877—2018A	Specification for Cross-linked Polyethylene (PEX)	IRC®
	Plastic Hot- and Cold-water Distribution Systems	
F891—10F891—2016	Specification for Coextruded Poly (Vinyl Chloride)	IRC®
	(PVC) Plastic Pipe with a Cellular Core	
F1055—13 <u>F1055—2016A</u>	Specification for Electrofusion Type Polyethylene	IRC®
	Fittings for Outside Diameter Controlled	
	Polyethylene and Crosslinked Polyethylene Pipe	
F1281—11 F1281—2017	and Tubing Specification for Cross-linked	IRC®
1 1201—11 <u>F 1201—2017</u>	Polyethylene/Aluminum/Cross-linked	11/00
	Polyethylene (PEX-AL-PEX) Pressure Pipe	
F1282—10 F1282—2017	Specification for	IRC®
	Polyethylene/Aluminum/Polyethylene (PE-AL-PE)	
	Composite Pressure Pipe	
F1412—09 F1412—2016	Specification for Polyolefin Pipe and Fittings for	IRC®
	Corrosive Waste Drainage	
F1488—14 <u>F1488—14E1</u>	Specification for Coextruded Composite Pipe	IRC®
F1554—15 <u>F1554—2018</u>	Specification for Anchor Bolts, Steel, 36, 55 and	IRC®
	105-ksi Yield Strength	
F1667—15 <u>F1667—2018</u>	Specification for Driven Fasteners, Nails, Spikes and Staples	IRC®
F1807—15 F1807—2018	Specification for Metal Insert Fittings Utilizing a	IRC®
1 1001 1001 - 2010	Copper Crimp Ring for SDR9 Cross-linked	
	Polyethylene (PEX) Tubing and SDR9	
	Polyethylene of Raised Temperature (PE-RT)	
	Tubing	
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E1000 10E1000 0010	To 10 10 10 10 10 10 10 10 10 10 10 10 10	15.00
F1866—13 <u>F1866—2018</u>	Specification for Poly (Vinyl Chloride) (PVC)	IRC®
	Plastic Schedule 40 Drainage and DWV	
	Fabricated Fittings	
F1960—15 F1960—2018	Specification for Cold Expansion Fittings with	IRC®
	PEX Reinforcing Rings for Use with Cross-linked	
	Polyethylene (PEX) Tubing	
F1973—13E1 F1973—2013(2018)	Standard Specification for Factory Assembled	IRC®
	Anodeless Risers and Transition Fittings in	
	Polyethylene (PE) and Polyamide 11 (PA 11)	
	Fuel Gas Distribution Systems	
F1986—01(2011)F1986—	Multilayer Pipe Type 2, Compression Joints for	IRC®
2001(2011)	Hot and Cold Drinking Water Systems	111.00
	Specification for Cold-expansion Fittings with	IRC®
F2080—15 <u>F2080—2016</u>		IKO®
	Metal Compression-sleeves for Cross-linked	
	Polyethylene (PEX) Pipe	
F2098—08 F2098—2015	Standard Specification for Stainless Steel Clamps	IRC®
	for Securing SDR9 Cross-linked Polyethylene	
	(PEX) Tubing to Metal Insert and Plastic Insert	
	Fittings	
F2159—14 <u>F2159—2018</u>	Standard Specification for Plastic Insert Fittings	IRC®
	Utilizing a Copper Crimp Ring for SDR9 Cross-	
	linked Polyethylene (PEX) Tubing and SDR9	
	Polyethylene of Raised Temperature (PE-RT)	
	Tubing	
F2389—15 F2389—2017A	Standard for Pressure-rated Polypropylene (PP)	IRC®
F Z309—13 FZ309—2017A		IKC®
F070F 00F070F 0000(004C)	Piping Systems	IDOS
F2735—09 F2735—2009(2016)	Standard Specification for Plastic Insert Fittings	IRC®
	for SDR9 Cross-linked Polyethylene (PEX) and	
	Polyethylene of Raised Temperature (PE-RT)	
	Tubing	
F2769—14 <u>F2769—2018</u>	Polyethylene or Raised Temperature (PE-RT)	IRC®
	Plastic Hot and Cold-Water Tubing and	
	Distribution Systems	
F2945—2015 F2945—2018	Standard Specification for Polyamide 11 Gas	IRC®
	Pressure Pipe, Tubing and Fittings	
AWC	American Wood Council	
Standard Reference Number	Title	Referenced
Startaara (toronoro (tambo)	1100	in Code(s):
AWC STJR 2015 STJR—2021	Span Tables for Joists and Rafters	IRC®
ANSI/AWC PWF—2015 PWF—	Permanent Wood Foundation Design	IRC®
		IKC®
2021	Specification	
AWPA	American Wood Protection Association	<u> </u>
Standard Reference Number	Title	Referenced
		in Code(s):
M4—16 M4—15	Standard for the Care of Preservative-treated	IRC®
	Wood Products	
U1—16 <u>U1—20</u>	USE CATEGORY SYSTEM: User Specification	IRC®
	for Treated Wood Except Commodity	
	Specification H	
AWS	American Welding Society	
Standard Reference Number	Title	Referenced
Ciandala Notoronoe Number	1100	in Code(s):
AE 9M/AE 9 2011AE 9: 2011	Specifications for Filler Metals for Province and	
A5.8M/ A5.8—2011 <u>A5.8: 2011—</u> AMD1	Specifications for Filler Metals for Brazing and Braze Welding	IRC®

AWWA	American Water Works Association	
Standard Reference Number	Title	Referenced
		in Code(s):
C104/ A21.4—13 <u>A21.4—16</u>	Cement-mortar Lining for Ductile-iron Pipe and Fittings	IRC®
C151/ A21.51—09 A21.51—17	Ductile-iron Pipe, Centrifugally Cast, for Water	IRC®
C504—10 C504—15	Standard for Rubber-seated Butterfly Valves	IRC®
C511—07 C511—17	Reduced-pressure Principle Backflow Prevention	IRC®
	Assembly	
CISPI	Cast Iron Soil Pipe Institute	
Standard Reference Number	Title	Referenced
		in Code(s):
301—12 <u>301—18</u>	Standard Specification for Hubless Cast Iron Soil Pipe and Fittings for Sanitary and Storm Drain, Waste and Vent Piping Applications	IRC®
310—12 <u>310—18</u>	Standard Specification for Coupling for Use in Connection with Hubless Cast Iron Soil Pipe and Fittings for Sanitary and Storm Drain, Waste and Vent Piping Applications	IRC®
CSA	CSA Group	
Standard Reference Number	Title	Referenced in Code(s):
ASME A112.3.4—2013/CSA	Macerating Toilet Systems and Related	IRC®
B45.9—13 <u>B45.9—18</u>	Components	
ASME A112.18.1—	Plumbing Supply Fittings	IRC®
2017 A112.18.1—2018/CSA		
B125.1—2017B125.1—2018		
ASME A112.18.2— 2015 <u>A112.18.2—2019</u> /CSA B125.2—2015 <u>B125.2—2019</u>	Plumbing Waste Fittings	IRC®
A112.18.6 2017A112.18.6 2021/CSA B125.6 2017B125.6	Flexible Water Connectors	IRC®
2021 ASME A112.19.1—	Enameled Cast-iron and Enameled Steel	IRC®
2013A112.19.1—2018/CSA B45.2—13B45.2—18	Plumbing Fixtures	INCO
ASME A112.19.2— 2013A112.19.2—2018/CSA B45.1—13B45.1—18	Ceramic Plumbing Fixtures	IRC®
ASME A112.19.3— 2008 <u>A112.19.3—2017</u> /CSA B45.4—08 (R2013) <u>B45.4—2017</u>	Stainless Steel Plumbing Fixtures	IRC®
ASSE <u>1002—20151002—</u> <u>2020</u> /ASME <u>A112.1002—</u> 2015 <u>A112.1002—2020</u> /CSA	Anti-Siphon Fill Valves for water closet tanks	IRC® IRC® IRC®
B125.12—15 <u>B125.12—20</u>		
A112.19.5 2011A112.19.5 2017/CSA B45.15 2011B45.15 2017	Flush Valves and Spuds for Water-closets, Urinals and Tanks	IRC®
A112.19.7—2017A112.19.7— 2021/CSA B45.10—2017B45.10— 2021	Hydromassage Bathtub Systems	IRC® IRC®
ASME A17.1/CSA B44— 2016 <u>B44—2019</u>	Safety Code for Elevators and Escalators	IRC®

B64.1.1—16 B64.1.1—11(R2016)	Vacuum Breakers, Atmospheric Type (AVB)	IRC®
B64.1.2—16B64.1.2—11(R2016)	Pressure Vacuum Breakers (PVB)	IRC®
B64.1.3—16B64.1.3—11(R2016)	Spill Resistant Pressure Vacuum Breakers (SRPVB)	IRC®
B64.2—16B64.2—11(R2016)	Vacuum Breakers, Hose Connection Type (HCVB)	IRC®
B64.2.1—16B64.2.1—11(R2016)	Hose Connection Vacuum Breakers (HCVB) with Manual Draining Feature	IRC®
B64.2.1.1—16B64.2.1.1— 11(R2016)	Hose Connection Dual Check Vacuum Breakers (HCDVB)	IRC®
B64.2.2—16 <u>B64.2.2—11(R2016)</u>	Vacuum Breakers, Hose Connection Type (HCVB) with Automatic Draining Feature	IRC®
B64.3—16 <u>B64.3—11(R2016)</u>	Dual Check Backflow Preventers with Atmospheric Port (DCAP)	IRC®
B64.4—16B64.4—11(R2016)	Backflow Preventers, Reduced Pressure Principle Type (RP)	IRC®
B64.4.1—16B64.4.1—11(R2016)	Reduced Pressure Principle for Fire Sprinklers (RPF)	IRC®
B64.5—16B64.5—11(R2016)	Double Check Backflow Preventers (DCVA)	IRC®
B64.5.1—16 <u>B64.5.1—11(2016)</u>	Double Check Valve Backflow Preventers, Type for Fire Systems (DCVAF)	IRC®
B64.6—16 <u>B64.6—11(R2016)</u>	Dual Check Valve Backflow Preventers (DuC)	IRC®
B64.7—16B64.7—11(R2016)	Laboratory Faucet Vacuum Breakers (LFVB)	IRC®
B125.3—12B125.3—18	Plumbing Fittings	IRC®
B137.1—16 <u>B137.1—17</u>	Polyethylene (PE) Pipe, Tubing and Fittings for Cold Water Pressure Services	IRC®
B137.2 16 <u>B137.2—17</u>	Polyvinylchloride PVC Injection-moulded Gasketed Fittings for Pressure Applications	IRC®
B137.3 16 <u>B137.3—17</u>	Rigid Poly (Vinyl Chloride) (PVC) Pipe for Pressure Applications	IRC®
B137.5—16 <u>B137.5—17</u>	Cross-linked Polyethylene (PEX) Tubing Systems for Pressure Applications	IRC®
B137.6 16 <u>B137.6—17</u>	Chlorinated polyvinylchloride CPVC Pipe, Tubing and Fittings For Hot- and Cold-water Distribution Systems	IRC®
B137.9—16 <u>B137.9—17</u>	Polyethylene/Aluminum/Polyethylene (PE-AL-PE) Composite Pressure Pipe Systems	IRC®
B137.10—13B137.10—17	Cross-linked Polyethylene/Aluminum/Cross-linked Polyethylene (PE-AL-PE) Composite Pressure Pipe Systems	IRC®
B137.11—16B137.11—17	Polypropylene (PP-R) Pipe and Fittings for Pressure Applications	IRC®
B137.18—13B137.18—17	Polyethylene of Raised Temperature (PE-RT) Tubing Systems for Pressure Applications	IRC®
B181.1—15B181.1—18	Acrylonitrile-butadiene-styrene (ABS) Drain, Waste and Vent Pipe and Pipe Fittings	IRC®
B181.2—15B181.2—18	Polyvinylchloride (PVC) and chlorinated polyvinylchloride (CPVC) Drain, Waste and Vent Pipe and Pipe Fittings	IRC®
B181.3—15B181.3—18	Polyolefin and polyvinylidene (PVDF) Laboratory Drainage Systems	IRC®
B182.2—11B182.2—18	PSM Type polyvinylchloride (PVC) Sewer Pipe and Fittings	IRC®

	Profile polyvinylchloride (PVC) Sewer Pipe &	IRC®
B182.4—15B182.4—18	Fittings	
B182.6—15 <u>B182.6—18</u>	Profile Polyethylene (PE) Sewer Pipe and Fittings for leak-proof Sewer Applications	IRC®
B182.8 15 <u>B182.8—18</u>	Profile Polyethylene (PE) Storm Sewer and Drainage Pipe and Fittings	IRC®
B356 10 CAN/CSA-B356— 10(R2015)	Water Pressure Reducing Valves for Domestic Water Supply Systems	IRC®
B483.1 07(R2012) <u>B483.1—</u> 07(R2017)	Drinking Water Treatment Systems	IRC®
B602 15 B602—16	Mechanical Couplings for Drain, Waste and Vent Pipe and Sewer Pipe	IRC®
C22.2 No. 218.1 M89(R2011) 218.1—13(R2017)	Spas, Hot Tubs and Associated Equipment	IRC®
ANSI/CSA/IGSHPA C448 Series— 16	Design and Installation of Earth Energy Systemsground source heat pump systems for commercial and residential buildings	IRC®
CSA O325—07 O325—16	Construction Sheathing	IRC®
O437-Series—93 (R2011)	Standards on OSB and Waferboard (Reaffirmed 2006)	IRC®
CAN/CSA/C22.2 No. 60335-2-40 2012 60335-2-40—2017	Safety of Household and Similar Electrical Appliances Safety- Part 2-40: Particular Requirements for Electrical Heat Pumps, Air-Conditioners and Dehumidifiers	IRC®
DASMA	Door & Access Systems Manufacturers Association International	
Standard Reference Number	Title	Referenced in Code(s):
105—2016 <u>105—2017</u>	Test Method for Thermal Transmittance and Air Infiltration of Garage Doors and Rolling Doors	IRC®
	Standard Method for Testing Sectional Garage	IRC®
115—2016 115—2017	Doors, Rolling Doors and Flexible Doors: Determination of Structural Performance Under Missile Impact and Cyclic Wind Pressure	IKO®
115—2016 115—2017 DOC	Doors, Rolling Doors and Flexible Doors: Determination of Structural Performance Under	IKC®
	Doors, Rolling Doors and Flexible Doors: Determination of Structural Performance Under Missile Impact and Cyclic Wind Pressure	Referenced in Code(s):
DOC	Doors, Rolling Doors and Flexible Doors: Determination of Structural Performance Under Missile Impact and Cyclic Wind Pressure United States Department of Commerce	Referenced
DOC Standard Reference Number	Doors, Rolling Doors and Flexible Doors: Determination of Structural Performance Under Missile Impact and Cyclic Wind Pressure United States Department of Commerce Title	Referenced in Code(s):
DOC Standard Reference Number PS 1—091—19	Doors, Rolling Doors and Flexible Doors: Determination of Structural Performance Under Missile Impact and Cyclic Wind Pressure United States Department of Commerce Title Structural Plywood Performance Standard for Wood-based	Referenced in Code(s): IRC®
DOC Standard Reference Number PS 1—091—19 PS 2—102—18	Doors, Rolling Doors and Flexible Doors: Determination of Structural Performance Under Missile Impact and Cyclic Wind Pressure United States Department of Commerce Title Structural Plywood Performance Standard for Wood-based Structural-use Wood Structural Panels	Referenced in Code(s): IRC®
DOC Standard Reference Number PS 4—091—19 PS 2—102—18 FM Standard Reference Number 4880—(2015)ANSI/FM 4880—2017	Doors, Rolling Doors and Flexible Doors: Determination of Structural Performance Under Missile Impact and Cyclic Wind Pressure United States Department of Commerce Title Structural Plywood Performance Standard for Wood-based Structural-use Wood Structural Panels FM Approvals Title Approval American National Standard for Class 1 Rating of Evaluating the Fire Performance of Insulated Building Panels of Assemblies and Interior Finish Materials	Referenced in Code(s): IRC® IRC®
DOC Standard Reference Number PS 1—091—19 PS 2—102—18 FM Standard Reference Number 4880—(2015)ANSI/FM 4880—	Doors, Rolling Doors and Flexible Doors: Determination of Structural Performance Under Missile Impact and Cyclic Wind Pressure United States Department of Commerce Title Structural Plywood Performance Standard for Wood-based Structural-use Wood Structural Panels FM Approvals Title Approval American National Standard for Class 1 Rating of Evaluating the Fire Performance of Insulated Building Panels of Assemblies and	Referenced in Code(s): IRC® IRC® Referenced in Code(s):
DOC Standard Reference Number PS 4—091—19 PS 2—102—18 FM Standard Reference Number 4880—(2015)ANSI/FM 4880—2017	Doors, Rolling Doors and Flexible Doors: Determination of Structural Performance Under Missile Impact and Cyclic Wind Pressure United States Department of Commerce Title Structural Plywood Performance Standard for Wood-based Structural-use Wood Structural Panels FM Approvals Title Approval American National Standard for Class 1 Rating of Evaluating the Fire Performance of Insulated Building Panels of Assemblies and Interior Finish Materials	Referenced in Code(s): IRC® IRC® Referenced in Code(s): IRC®
DOC Standard Reference Number PS 1—091—19 PS 2—102—18 FM Standard Reference Number 4880—(2015)ANSI/FM 4880—2017	Doors, Rolling Doors and Flexible Doors: Determination of Structural Performance Under Missile Impact and Cyclic Wind Pressure United States Department of Commerce Title Structural Plywood Performance Standard for Wood-based Structural-use Wood Structural Panels FM Approvals Title Approval American National Standard for Class 1 Rating of Evaluating the Fire Performance of Insulated Building Panels of Assemblies and Interior Finish Materials Gypsum Association	Referenced in Code(s): IRC® IRC® Referenced in Code(s): IRC®

Standard Reference Number	Title	Referenced
212 22212 12	10.0	in Code(s):
916 09 <u>916—18</u>	Airflow Test Procedure	IRC®
IAPMO	IAPMO Group	
Standard Reference Number	Title	Referenced in Code(s):
CSA B45.5—17/IAPMO Z124— 2017 with Errata dated August 2017	Plastic Plumbing Fixtures	IRC®
ICC	International Code Council, Inc.	
Standard Reference Number	Title	Referenced in Code(s):
ANSI/RESNET/ICC 301— 201 4 <u>301—2019</u>	Standard for the Calculation and Labeling of the Energy Performance of Low-Rise Residential Buildings Low-rise Dwelling and Sleeping Units using the Energy Rating Index, March 7, 2014, republished 2016	IRC®
ANSI/RESNET/ICC 380 — 2016 380—2019	Standard for Testing Airtightness of Building Enclosures, Dwelling Unit and Sleeping Unit Enclosures; Airtightness of Heating and Cooling Air Distribution Systems; and Airflow of Mechanical Ventilation Systems	IRC®
MSS	Manufacturers Standardization Society of the Valve and Fittings Industry	
Standard Reference Number	Title	Referenced in Code(s):
SP-58—09 <u>SP-58—2018</u>	Pipe Hangers and Supports—Materials, Design, Manufacture, Selection, Application and Installation	IRC®
SP-67—11 SP-67—2017	Butterfly Valves	IRC®
SP-71—2013 <u>SP-71—2018</u>	Gray Iron Swing Check Valves, Flanged and Threaded Ends	IRC®
SP-110—2010a <u>SP-110—2010</u>	Ball Valves, Threaded, Socket Welded, Solder Joint, Grooved and Flared Ends	IRC®
SP-122—2012 SP-122—2017	Plastic Industrial Ball Valves	IRC®
NFPA	National Fire Protection Association	
Standard Reference Number	Title	Referenced in Code(s):
13—16 13—19	Standard for Installation of Sprinkler Systems	IRC®
13D—16 13D—19	Standard for the Installation of Sprinkler Systems in One- and Two-family Dwellings and Manufactured Homes	IRC®
13R—16 13R—19	Standard for the Installation of Sprinkler Systems in Low-Rise Residential Occupancies	IRC®
31—16 <u>31—20</u>	Standard for the Installation of Oil-burning Equipment	IRC®
58—17 <u>58</u> —20	Liquefied Petroleum Gas Code	IRC®
72—16 72—19	National Fire Alarm and Signaling Code	IRC®
85 15 85—19	Boiler and Combustion Systems Hazards Code	IRC®
211—16 211—19	Standard for Chimneys, Fireplaces, Vents and Solid Fuel Burning Appliances	IRC®

286—15 <u>286—19</u>	Standard Methods of Fire Tests for Evaluating	IRC®
	Contribution of Wall and Ceiling Interior Finish to Room Fire Growth	
853—15 <u>853—20</u>	Standard on the Installation of Stationary Fuel Cell Power Systems	IRC®
NFRC	National Fenestration Rating Council, Inc.	
Standard Reference Number	Title	Referenced in Code(s):
100 2017 <u>100—2020</u>	Procedure for Determining Fenestration Products U-Factors	IRC®
200 2017 <u>200 2020</u>	Procedure for Determining Fenestration Product Solar Heat Gain Coefficients and Visible Transmittance at Normal Incidence	IRC®
400—2017 <u>400—2020</u>	Procedure for Determining Fenestration Product Air Leakage	IRC®
NSF	NSF International	
Standard Reference Number	Title	Referenced in Code(s):
14 2015 14—2017	Plastics Piping System Components and Related Materials	IRC®
41—2011 <u>41—2016</u>	Nonliquid Saturated Treatment Systems (Composting Toilets)	IRC®
42 2015 <u>42 2017</u>	Drinking Water Treatment Units—Anesthetic Effects	IRC®
44-2015 44-2017	Residential Cation Exchange Water Softeners	IRC®
50—2015 <u>50—2017</u>	Equipment for Swimming Pools, Hot Tubs and Other Recreational Water Facilities	IRC®
53—2015 53—2017	Drinking Water Treatment Units—Health Effects	IRC®
58—2015 <u>58—2017</u>	Reverse Osmosis Drinking Water Treatment Systems	IRC®
61—2015 <u>61—2017</u>	Drinking Water System Components—Health Effects	IRC®
350—201 4 <u>350—2017a</u>	Onsite Residential and Commercial Water Reuse Treatment Systems	IRC®
358-1—2014 <u>358-1—2017</u>	Polyethylene Pipe and Fittings for Water-based Ground Source "Geothermal" Heat Pump Systems	IRC®
358-2—2012 <u>358-2—2017</u>	Polypropylene Pipe and Fittings for Water-based Ground Source "Geothermal" Heat Pump Systems	IRC®
359 2012 <u>359—2011(R2016)</u>	Valves for Crosslinked Polyethylene (PEX) Water Distribution Tubing Systems	IRC®
372 2011 <u>372—2016</u>	Drinking Water Systems Components—Lead Content	IRC®
PCA	Portland Cement Association	
Standard Reference Number	Title	Referenced in Code(s):
100—12 <u>100—2017</u>	Prescriptive Design of Exterior Concrete Walls for One- and Two-family Dwellings (Pub. No. EB241)PCA 100.3)	IRC®
SBCA	Structural Building Components Association	
Standard Reference Number	Title	Referenced in Code(s):

BCSI 2013 (Updated March 2015)BCSI—2018	Building Component Safety Information Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses	IRC®
CFS-BCSI—2008 (updated June 2016)	Cold-formed Steel Building Component Safety Information (CFSBCSI) Guide to Good Practice for Handling, Installing & Bracing of Cold-formed Steel Trusses	IRC®
FS100—12ANSI/FS100— 12(R2018)	Standard Requirements for Wind Pressure Resistance of Foam Plastic Insulating Sheathing Used in Exterior Wall Covering Assemblies	IRC®
SMACNA	Sheet Metal & Air Conditioning Contractors National Assoc. Inc.	
Standard Reference Number	Title	Referenced in Code(s):
SMACNA—10	Fibrous Glass Duct Construction Standards (2003)7th edition	IRC®
SMACNA/ANSI—2016	HVAC Duct Construction Standards—Metal and Flexible 4th Edition (ANSI) 2016	IRC®
TPI	Truss Plate Institute	
Standard Reference Number	Title	Referenced in Code(s):
TPI 1—2014	National Design Standard for Metal-plate- connected Metal Plate Connected Wood Truss Construction	IRC®
UL	UL LLC	
Standard Reference Number	Title	Referenced in Code(s):
55A04 55A2004	Materials for Built-up Roof Coverings	IRC®
58—96 <u>58—2018</u>	Steel Underground Tanks for Flammable and Combustible Liquids—with Revisions through July 1998Liquids	IRC®
103—2010	Factory-built Chimneys for Residential Type and Building Heating Appliances—with revisions through July 2012 March 2017	IRC®
127—2011	Factory-built Fireplaces—with revisions through May 2015 July 2016	IRC®
174—04 <u>174—2004</u>	Household Electric Storage Tank Water Heaters—with revisions through April 2015December 2016	IRC®
180—2012	Liquid-level Indicating Gauges for Oil Burner Fuels and Other Combustible LiquidsLiquids-with revisions through May 2017	IRC®
181—05 <u>181—2005</u>	Factory-made Air Ducts and Air Connectors—with revisions through May 2003 April 2017	IRC®
181A—2013	Closure Systems for Use with Rigid Air Ducts and Air Connectors—with revisions through December 1998March 2017	IRC®
181B—2013	Closure Systems for Use with Flexible Air Ducts and Air Connectors—with revisions through August 2003March 2017	IRC®
217—06 217—2015	Single- and Multiple-station Smoke Alarms—with revisions through October 2015 November 2016	IRC®

263—2011	Standards for Fire Test of Building Construction	IRC®
203—2011	and Materials—with revisions through June	IKC®
	2015 March 2018	
268—2009 268—2016	Smoke Detectors for Fire Alarm	IRC®
200—2003 200—2010		IRC®
	Systems Systems - with revisions through July	
005 0005 0047	2016	IDO6
325—02 <u>325—2017</u>	Door, Drapery, Gate, Louver and Window	IRC®
	Operations and Systems—with revisions through	
	May 2015Systems	
343—2008 <u>343—2017</u>	Pumps for Oil-burning Appliances—with revisions	IRC®
	through June 2013 Appliances	
378—06	Draft Equipment—with revisions through June 12,	IRC®
	2014 September 2013	
441—10 441—16	Gas Vents—with revisions through June 12,	IRC®
	2014 July 2016	
507—99 507—2017	Standard for Electric FansElectric Fans-with	IRC®
001 	revisions through August 2018	11100
E09 00E09 2049		IRC®
508—99 <u>508—2018</u>	Industrial Control Equipment—with revisions	IKUW
500 07500 0011	through October 2013 Equipment	1000
536—97 <u>536—2014</u>	Flexible Metallic Hose—with revisions through	IRC®
	December 2014Hose	
641—2010	Type L, Low-temperature Venting Systems—with	IRC®
	revisions through June 2013 April 2018	
651—2011	Schedule 40, Type EB and Schedule 80 A Rigid	IRC®
	PVC Conduit and Fittings—with revisions through	
	May 2014June 2016	
705—04 705—2017	Standard for Power Ventilators—with revisions	IRC®
	through December 2013October 2018	
723—08 723—2018	Standard for Test for Surface Burning	IRC®
720 00 <u>720 2010</u>	Characteristics of Building Materials—with	11100
	revisions through August 2013 Materials	
707 06707 2049		IRC®
727—06 727—2018	Oil-fired Central Furnaces—with revisions through	IRC®
	October 2013 Furnaces	
729—03 729—2003	Oil-fired Floor Furnaces—with revisions through	IRC®
	October 2013 November 2016	
730—03	Oil-fired Wall Furnaces—with revisions through	IRC®
	October 2013 November 2016	
732—95 732—2018	Oil-fired Storage Tank Water Heaters—with	IRC®
	revisions through October 2013 August 2018	
737—2011	Fireplaces Stoves—with revisions through August	IRC®
	2015 Stoves	
790—04	Standard Test Methods for Fire Tests of Roof	IRC®
	Coverings—with revisions through July	
	2014October 2018	
795 2011 795—2016	Commercial-industrial Gas Heating Equipment	IRC®
733 -2011 <u>7332010</u>	with revisions through November 2013 Equipment	INCO
004 04004 0004	<u> </u>	IDOS
834 04 <u>834—2004</u>	Heating, Water Supply and Power Boilers—	IRC®
	Electric—with revisions through December	
	2013 <u>September 2018</u>	
842—07 842—2015	Valves for Flammable Fluids—with revisions	IRC®
	through May 2015	
858—05 <u>858—2014</u>	Household Electric Ranges—with revisions	IRC®
	through June 2015 2018	

875—09	Electric Dry-bath Heaters—with revisions through December 2013September 2017	IRC®
896 93 896—1993	Oil-burning Stoves—with revisions through November 20132016	IRC®
923—2013	Microwave Cooking Appliances—with revisions through June 2015 July 2017	IRC®
1026—2012	Electric Household Cooking and Food Serving Appliances—with revisions through August 2015 July 2018	IRC®
1040—96 <u>1040—1996</u>	Fire Test of Insulated Wall Construction—with revisions through October 2012 April 2017	IRC®
1042—2009	Electric Baseboard Heating Equipment—with revisions through September 2014 December 2016	IRC®
1256—02	Fire Test of Roof Deck Construction—with revisions through July 2013 August 2018	IRC®
1261—01 <u>1261—2016</u>	Electric Water Heaters for Pools and Tubs—with revisions through July 2012September 2017	IRC®
1479—03 <u>1479—2015</u>	Fire Tests of Through-Penetration Firestops—with revisions through June 2015 Firestops	IRC®
1563—2009	Standard for Electric Spas, Hot Tubs Equipment Assemblies, and Associated Equipment—with revisions through March 2015October 2017	IRC®
1618—09 1618—2015	Wall Protectors, Floor Protectors, and Hearth Extensions—with revisions through October 2015 January 2018	IRC®
1703—02 1703—2002	Flat-plate Photovoltaic Modules and Panels—with revisions through October 2015 September 2018	IRC®
1715—97	Fire Test of Interior Finish Material—with revisions through January 2013 April 2017	IRC®
1738—2010	Venting Systems for Gas-burning Appliances, Categories II, III and IV—with revisions through November 2014IV	IRC®
1741—2010	Inverters, Converters, Controllers and Interconnection System Equipment with Distributed Energy Resources—with revisions through January 2015February 2018	IRC®
1777—07	Chimney Liners—with revisions through October 2015April 2014	IRC®
1897—12 <u>1897—2015</u>	Uplift Tests for Roof Covering Systems—with revisions through September 2015Systems	IRC®
1995—2011 <u>1995—2015</u>	Heating and Cooling Equipment—with revisions through July 2015 August 2018	IRC®
1996—2009	Electric Duct Heaters—with revisions through June 2014 July 2016	IRC®
2034—08 <u>2034—2017</u>	Standard for Single- and Multiple-station Carbon Monoxide Alarms—with revisions through March 2015Septembe 2018	IRC®
2075—2013	Standard for Gas and Vapor Detectors and SensorsSensors-with revisions through December 2017	IRC®
2158A—2010 2158A—2013	Outline of Investigation for Clothes Dryer Transition DuctDuct-with revisions through April 2017	IRC®

2523 09 2523—2009	Standard for Solid Fuel-fired Hydronic Heating Appliances, Water Heaters and Boilers—with revisions through February 2013 March 2018	IRC®
2703—14 2703—2014	Mounting Systems, Mounting Devices, Clamping/Retention Devices and Ground Lugs for Use with Flat-Plate Photovoltaic Modules and PanelsPanels-with revisions through December 2019	IRC®
9540—14 <u>9540—2016</u>	Outline of Investigation Standard for Energy Storage Systems and Equipment	IRC®
UL/CSA/ANCE 60335-2-40— 2012 60335-2-40—2019	Standard for Household and Similar Electrical Appliances, Part 2Appliances- Safety - Part 2-40: Particular Requirements for Motor-compressors Electrical Heat Pumps, Air Conditioners and Dehumidifiers	IRC®
ULC	ULC	
Standard Reference Number	Title	Referenced in Code(s):
CAN/ULC S 102.2 2010 102.2 2018	Standard Methods for Method of Test for Surface Burning Characteristics of Building Materials and Assemblies	IRC®
WDMA	Window and Door Manufacturers Association	
Standard Reference Number	Title	Referenced in Code(s):
I.S. 11—13 11—16	Industry Standard Analytical Method for Design Pressure (DP) Ratings of Fenestration Products	IRC®
WMA	World Millwork Alliance (formerly Association of Millwork Distributors Standards AMD)	
Standard Reference Number	Title	Referenced in Code(s):
ANSI <u>/</u> WMA 100 2016 100—2018	Standard Method of Determining Structural Performance Ratings of Side Hinged Exterior Door Systems and Procedures for Component Substitution	IRC®

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ASCE/SEI	American Society of Civil Engineers	
Standard Reference Number	Title	Referenced in
		Code(s):
7—16	Minimum Design Loads and Associated Criteria for	IEBC®
	Buildings and Other Structures with Supplement 1	
ASHRAE	ASHRAE	
Standard Reference Number	Title	Referenced in
		Code(s):
62.1—2016 <u>62.1—2019</u>	Ventilation for Acceptable Indoor Air Quality	IEBC®
ASME	American Society of Mechanical Engineers	
Standard Reference Number	Title	Referenced in
		Code(s):

ASME A17.1—2016 <u>A17.1—</u> 2019/CSA B44—16 <u>B44—19</u>	Safety Code for Elevators and Escalators	IEBC®
A17.3 2015 A17.3—2020	Safety Code for Existing Elevators and Escalators	IEBC®
A18.1—2014A18.1—2020	Safety Standard for Platform Lifts and Stairway Chair Lifts	IEBC®
ASTM	ASTM International	
Standard Reference Number	Title	Referenced in Code(s):
C94/ C94M—15A <u>C94M—</u> 2017A	Specification for Ready-mixed Concrete	IEBC®
E84—2016E84—2018B	Standard Test Method for Surface Burning Characteristics of Building Materials	IEBC®
E108—16E108—2017	Standard Test Methods for Fire Tests of Roof Coverings	IEBC®
E136—16E136—2016A	Test Method for Behavior of Materials in a Vertical Tube Furnace at 750°C	IEBC®
NFPA	National Fire Protection Agency	
Standard Reference Number	Title	Referenced in Code(s):
NFPA 13R—16 13R—19	Standard for the Installation of Sprinkler Systems in Residential Occupancies up to and Including Four Stories in Height	IEBC®
NFPA 72—16 72—19	National Fire Alarm and Signaling Code	IEBC®
NFPA 99—18 <u>99—21</u>	Health Care Facilities Code	IEBC®
NFPA 101—18 101—21	Life Safety Code	IEBC®
UL	UL LLC	
Standard Reference Number	Title	Referenced in Code(s):
723 08 723—2018	Standard for Test for Surface Burning Characteristics of Building Materials—with Revisions through August 2013 Materials	IEBC®
790—04 <u>790—2004</u>	Standard Test Methods for Fire Tests of Roof Coverings—with Revisions through July 2014October 2018	IEBC®

ADM47-IFGC-19

ANSI	American National Standards Institute	
Standard Reference	Title	Referenced in
Number		Code(s):
ANSI NGV 5.1—	Residential Fueling Appliances	IFGC®
2015 5.1—2016		
ANSI FC 1—2012 1—2014	Stationery Fuel Cell Power SystemsFuel cell	IFGC®
	technologies - Part 3-100: Stationary fuel cell power	
	systems-Safety	
LC 1/CSA 6.26—	Fuel Gas Piping Systems Using Corrugated Stainless	IFGC®
2013 6.26—2016	Steel Tubing (CSST)	
Z21.1—2010 Z21.1/CSA	Household Cooking Gas Appliances	IFGC®
<u>1.1—2016</u>		

Gas Clothes Drvers—Volume I—Type 1 Clothes Drvers	IFGC®
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Gas Clothes Dryers—Volume II—Type 2 Clothes Dryers	IFGC®
Installation of Domestic Gas Conversion Burners	IFGC®
	IFGC®
	IFGC®
Circulating and instantaneous	15000
	IFGC®
	IFGC®
Gas-illed Low-pressure Steam and not water boilers	IFGC®
Manually Operated Gas Valves for Appliances	IFGC®
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	IFGC®
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Connectors for Gas Appliances	IFGC®
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Gas-fired. Heat Activated Air Conditioning and Heat	IFGC®
	IFGC®
Pump Appliances (Internal Combustion)	
Gas-fired Illuminating Appliances	IFGC®
Gas-fired Central Furnaces	IFGC®
	IFGC®
	IFGC®
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Catabor Cooking Cat Applianous	000
Decorative Gas Appliances for Installation in Solid-fuel	IFGC®
Gas-fired Toilets	IFGC®
Connectors for Movable Gas Appliances	IFGC®
Connectors for Outdoor Gas Appliances and	IFGC®
	17000
Line Pressure Regulators	IFGC®
M	15000
	IFGC®
	IFGC®
venieu Gas-illeu Space Fleating Appliances	ILGO®
Ventless Firebox Enclosures for Gas-fired Unvented	IFGC®
Decorative Room Heaters	
Excess Flow Valves for Natural Gas and LP Propane	IFGC®
	Installation of Domestic Gas Conversion Burners Gas Water Heaters—Volume I—Storage, Water Heaters with Input Ratings of 75,000 Btu per Hour or Less Gas Water Heaters—Volume III—Storage, Water Heaters with Input Ratings above 75,000 Btu per Hour, Circulating and Instantaneous Gas-fired Room Heaters—Volume II—Unvented Room Heaters Gas-fired Low-pressure Steam and Hot Water Boilers Manually Operated Gas Valves for Appliances, Appliance Connector Valves and Hose End Valves Refrigerators Using Gas (R1999) Fuel Connectors for Gas Appliances Gas-fired, Heat Activated Air Conditioning and Heat Pump Appliances Gas-fired Work Activated Air Conditioning and Heat Pump Appliances (Internal Combustion) Gas-fired Illuminating Appliances Gas-fired Central Furnaces Vented Decorative Gas Fireplaces Gas Hose Connectors for Portable Outdoor Gas-fired Appliances Outdoor Cooking Gas Appliances Decorative Gas Appliances for Installation in Solid-fuel Burning Fireplaces Gas-fired Toilets Connectors for Outdoor Gas Appliances and Manufactured Homes Line Pressure Regulators Manually Lighted, Natural Gas Decorative Gas Appliances for Installation in Solid-Fuel Burning FireplacesAppliances Vented Gas-fired Space Heating Appliances Ventless Firebox Enclosures for Gas-fired Unvented Decorative Room Heaters

Z21.97 2012 <u>Z21.97</u> —	Outdoor Decorative Gas Appliances	IFGC®
<u>2014</u>		
Z83.4/CSA 3.7 —	Nonrecirculating Direct-gas-fired Industrial Air	IFGC®
2012 3.7—2017	Heaters Heating and Forced Ventilation Appliances for	
	Commercial and Industrial Application	
Z83.8/CSA 2.6—	Gas Unit Heater, Gas Packaged HeaterHeaters, Gas	IFGC®
2009 2.6—2016	Utility Heaters, and Gas-fired Duct Furnaces	
Z83.11/CSA 1.8—	Gas Food Service Equipment	IFGC®
2013 1.8—2016	1.7	
Z83.18—2012 Z83.18—	Recirculating Direct Gas-fired Industrial Air	IFGC®
<u>2017</u>	Heaters Heating and Forced Ventilation Appliances for	• • • •
2011	Commercial and Industrial Applications	
Z83.19—	Gas-fired High-intensity Infrared Heaters	IFGC®
2001(R2009)Z83.19—	das med riigir interisity initared riedters	11 000
09(R2014)		
Z83.20—2008 Z83.20—	Gas-fired Tubular and Low-intensity Infrared Heaters	IFGC®
2016	Gas-lifed Tubular and Low-liferisity littrated Heaters	11 900
ANSI A13.1—	Schame for the Identification of Dining Systems	IFGC®
2015A13.1—2020	Scheme for the Identification of Piping Systems	
	Amaniana Caniata of Manhanian Funingson	
ASME	American Society of Mechanical Engineers	5
Standard Reference	Title	Referenced in
Number		Code(s):
B16.1—2010B16.1—2020	Gray Iron Pipe Flanges and Flanged Fittings, Class 25, 125 and 250	IFGC®
B1.20.1—2013B1.20.1—	Pipe Threads, General Purpose (inch)	IFGC®
2019		
B16.5—2015B16.5—2019	Pipe Flanges and Flanged Fittings: NPS 1/2 through NFPS 24 Metric/Inch Standard	IFGC®
B16.24—2016 B16.24—	Cast Copper Alloy Pipe Flanges and Flanged Fittings:	IFGC®
2021	Classes 150, 300, 600, 900, 1500 and 2500	
B16.42—2016 B16.42—	Ductile Iron Pipe Flanges and Flanged Fittings, Classes	IFGC®
2021	150 and 300	
B16.47—2016 B16.47—	Large Diameter Steel Flanges: NPS 26 through NPS 60	IFGC®
2020	Metric/Inch Standard	333
B16.33—2012 B16.33—	Manually Operated Metallic Gas Valves for Use in Gas	IFGC®
2012(2017)	Piping Systems up to 125 psig (Sizes 1/2 through 2)	" 000
B16.44—2012 B16.44—	Manually Operated Metallic Gas Valves for Use in	IFGC®
2012(R2017)	Aboveground Piping Systems up to 5 psi	1,1000
B31.3—2016B31.3—2020	Process Piping	IFGC®
B31.12—2014 B31.12—	Hydrogen Piping and Pipelines	IFGC®
2019	Triyurogen riping and ripelliles	111 900
B36.10M—	Welded and Seamless Wrought-steel Pipe	IFGC®
	vvelueu anu seaniess vviougni-steel ripe	
(R2015)B36.10M—2018	ACME Doilor & Dropouro Voscal Code (2007 Edition)	LICC®
BPVC—2015BPVC—	ASME Boiler & Pressure Vessel Code (2007 Edition)	IFGC®
2019	Controls and Cofety Deliver (c. A. (c (i) B. Ell.)	IFOCO
CSD-1—2016CSD-1—	Controls and Safety Devices for Automatically Fired	IFGC®
2021	Boilers	
ASTM	ASTM International	
Standard Reference	Title	Referenced in
Number		Code(s):
A53/ A53M 12 <u>A53M—</u>	Specification for Pipe, Steel, Black and Hot Dipped Zinc-	IFGC®
<u>2018</u>	coated Welded and Seamless	

A106/ A106M	Specification for Seamless Carbon Steel Pipe for High-	IFGC®
14 A106M—2018	temperature Service	
A254—12 A254—	Specification for Copper Brazed Steel Tubing	IFGC®
2010(2018)		
A268 10 A268/A268—	Standard Specification for Seamless and Welded Ferritic	IFGC®
2010(16)	and Martensitic Stainless Steel Tubing for General	
	Service	
A269—15 A269/A269M—	Standard Specification for Seamless and Welded	IFGC®
2015A	Austenitic Stainless Steel Tubing for General Service	
A312—15 A312/A312M—	Standard Specification for Seamless, Welded and	IFGC®
2018	Heavily Cold Worked Austenitic Stainless Steel Pipes	
B88—14 B88—2016	Specification for Seamless Copper Water Tube	IFGC®
B241/ B241M	Specification for Aluminum and Aluminum-alloy,	IFGC®
12e1 B241M—2016	Seamless Pipe and Seamless Extruded Tube	
B280 13 B280—2018	Standard Specification for Seamless Copper Tube for	IFGC®
	Air-Conditioning and Refrigeration Field Service	
C315 07(2011) <u>C315</u>	Specification for Clay Flue Liners and Chimney Pots	IFGC®
2007(2016)		
D2513 14e1 D2513—	Specification for Polyethylene (PE) Gas Pressure Pipe,	IFGC®
2018A	Tubing and Fittings	
E136 16 E136—2016A	Standard Test Method for Behavior of Materials in a	IFGC®
	Vertical Tube Furnace at 750°C	
F1973 13e1 F1973—	Standard Specification for Factory Assembled Anodeless	IFGC®
<u>2013(2018)</u>	Risers and Transition Fittings in Polyethylene (PE) and	
	Polyamide 11 (PA11) and Polyamide 12 (PA12) Fuel	
	Gas Distribution Systems	
F2945—15 <u>F2945—2018</u>	Standard Specification for Polyamide 11 Gas Pressure	IFGC®
	Pipe, Tubing and Fittings	
CGA	Compressed Gas Association	
Standard Reference	Title	Referenced in
Number		Code(s):
S-1.1—(2017) <u>S-1.1—</u>	Pressure Relief Device Standards—Part 1—Cylinders for	IFGC®
<u>(2011)</u>	Compressed Gases	
S-1.3—(2016) <u>S-1.3—</u>	Pressure Relief Device Standards—Part 3—Stationary	IFGC®
<u>(2008)</u>	Storage Containers for Compressed Gases	
CSA	CSA Group	
Standard Reference	Title	Referenced in
Number		Code(s):
ANSI/CSA NGV 5.1 —	Residential Fueling Appliances	IFGC®
2015 <u>5.1</u> —2016		
MSS	Manufacturers Standardization Society of the Valve and	
	Fittings Industry	
Standard Reference	Title	Referenced in
Number		Code(s):
ANSI SP 58 2009 <u>58</u>	Pipe Hangers and Supports—Materials, Design and	IFGC®
<u>2018</u>	Manufacture	
NFPA	National Fire Protection Association	
Standard Reference	Title	Referenced in
Number		Code(s):
2—16 2—19	Hydrogen Technologies Code	IFGC®
30A—18 <u>30A—21</u>	Code for Motor Fuel Dispensing Facilities and Repair	IFGC®
	Garages	
58—17	Liquefied Petroleum Gas Code	IFGC®

82 14 82—19	Incinerators, Waste and Linen Handling Systems and Equipment	IFGC®
85 15 <u>85—19</u>	Boiler and Combustion Systems Hazards Code	IFGC®
88A—15 <u>88A—19</u>	Standard for Parking Structures	IFGC®
211—16 211—19	Standard for the Chimneys, Fireplaces, Vents and Solid Fuel-burning Appliances	IFGC®
853—15 <u>853—20</u>	Standard Installation of Stationary Fuel Cell Power Systems	IFGC®
UL	UL LLC	
Standard Reference Number	Title	Referenced in Code(s):
103—2010	Factory-built Chimneys, Residential Type and Building Heating Appliances— with Revisions through July 2012March 2017	IFGC®
127—2011	Factory-built Fireplaces—with Revisions through May 2015	IFGC®
378—2006	Draft Equipment Equipment-with revisions through September 2013	IFGC®
441—2010 441—2016	Gas Vents—with Revisions through June 2014 July 2016	IFGC®
641—2010	Type L Low-temperature Venting Systems—with Revisions through June 2013 April 2018	IFGC®
651—2011	Schedule 40, 80, Type EB and 80 A Rigid PVC Conduit and Fittings—with Revisions through May 2014 June 2016	IFGC®
795—2011 <u>795—2016</u>	Commercial-industrial Commercial-Industrial Gas Heating Equipment—with Revisions through November 2013Equipment	IFGC®
1618—09 1618—2015	Wall Protectors, Floor Protectors and Hearth Extensions—with Revisions through October 2015 January 2018	IFGC®
1738—2010	Venting Systems for Gas Burning Appliances, Categories II, III and IV— with Revisions through November 2014IV	IFGC®
1777—2007	Chimney Liners—with Revisions through October 2015April 2014	IFGC®
2200—2012	Stationary Engine Generator Assemblies—with Revisions through July October 2015	IFGC®

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ASME	American Society of Mechanical Engineers	
Standard Reference	Title	Referenced in
Number		Code(s):
ASME A17.1—	Safety Code for Elevators and Escalators	IPMC®
2016 A17.1—2019/CSA		
B44—16 <u>B44—19</u>		
ASTM	ASTM International	
Standard Reference	Title	Referenced in
Number		Code(s):

F1346—91 (2010) (2018)	Performance Specifications for Safety Covers and Labeling Requirements for All Covers for Swimming Pools, Spas and Hot Tubs	IPMC®
NFPA	National Fire Protection Association	
Standard Reference Number	Title	Referenced in Code(s):
10 17 10—21	Standard for Portable Fire Extinguishers	IPMC®
12—15 12—18	Standard on Carbon Dioxide Extinguishing Systems	IPMC®
12A—15 12A—18	Standard on Halon 1301 Fire Extinguishing Systems	IPMC®
17—17 17—20	Standard for Dry Chemical Extinguishing Systems	IPMC®
17A—17 17A—20	Standard for Wet Chemical Extinguishing Systems	IPMC®
25—17 25—20	Standard for the Inspection, Testing and Maintenance of Water-Based Fire Protection Systems	IPMC®
72—16 72—19	National Fire Alarm and Signaling Code	IPMC®
80—16 <u>80—19</u>	Standard for Fire Doors and Other Opening Protectives	IPMC®
105—16 105—19	Standard for Smoke Door Assemblies and Other Opening Protectives	IPMC®
204—15 204—18	Standard for Smoke and Heat Venting	IPMC®
750—14 750—19	Standard on Water Mist Fire Protection Systems	IPMC®
2001—15 2001—18	Standard on Clean Agent Fire Extinguishing Systems	IPMC®
UL	Underwriters Laboratories, LLC	
Standard Reference Number	Title	Referenced in Code(s):
268—09 268—2016	Smoke Detectors for Fire Alarm SystemsSystems-with revisions through July 2016	IPMC®

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ASTM	ASTM International	
Standard Reference Number	Title	Referenced in Code(s):
A74—15 <u>A74—17</u>	Specification for Cast Iron Soil Pipe and Fittings	IPSDC®
A888—15A888—18	Specification for Hubless Cast Iron Soil Pipe and Fittings for Sanitary and Storm Drain, Waste, and Vent Piping Application	IPSDC®
B88—14 <u>B88—16</u>	Specification for Seamless Copper Water Tube	IPSDC®
B251— 40B251/B251M— 2017	Specification for General Requirements for Wrought Seamless Copper and Copper-alloy Tube	IPSDC®
B813—10B813—2016	Specification for Liquid and Paste Fluxes for Soldering of Copper and Copper-alloy Tube	IPSDC®
B828— 02(2010) B828—2016	Practice for Making Capillary Joints by Soldering of Copper and Copper-alloy Tube and Fittings	IPSDC®
C4—04(2014)C4— 2004(2018)	Specification for Clay Drain Tile and Perforated Clay Drain Tile	IPSDC®
C76—15A <u>C76—</u> <u>2018A</u>	Specification for Reinforced Concrete Culvert, Storm Drain and Sewer Pipe	IPSDC®

C425	Specification for Compression Joints for Vitrified Clay Pipe	IPSDC®
04(2013) C425—	and Fittings	IF3DC®
<u>2004(2018)</u>	and rittings	
C443—12 C443—	Specification for Joints for Concrete Pipe and Manholes,	IPSDC®
2012(2017)	Using Rubber Gaskets	IF SDC®
C700—13 C700—	Specification for Vitrified Clay Pipe, Extra Strength, Standard	IPSDC®
<u>2018</u>	Strength and Perforated	IF3DC®
C1173—	Specification for Flexible Transition Couplings for	IPSDC®
		I I SDC®
10(2014) <u>C1173—</u>	Underground Piping Systems	
2018	Charification for Chialding Coupling Joining Hubban Coat	IPSDC®
C1277—15 <u>C1277—</u>	Specification for Shielding Coupling Joining Hubless Cast-	IPSDC®
2018 C1440—	iron Pipe and Fittings	IDCDC®
	Specification for Thermoplastic Elastomeric (TPE) Gasket	IPSDC®
08(2013) <u>C1440—</u>	Materials for Drain, Waste and Vent (DWV), Sewer, Sanitary	
2017	and Storm Plumbing Systems	IDCDCO
C1460—	Specification for Shielded Transition Couplings for Use with	IPSDC®
2012 C1460—2017	Dissimilar DWV Pipe and Fittings Above Ground	IDODOO
C1461—	Specification for Mechanical Couplings Using Thermoplastic	IPSDC®
08(2013) <u>C1461—</u>	Elastomeric (TPE) Gaskets for Joining Drain, Waste and	
<u>2008(2017)</u>	Vent (DWV) Sewer, Sanitary and Storm Plumbing Systems	
Door	for Above and Below Ground Use	IDODOS
D2235—	Specification for Solvent Cement for Acrylonitrile-butadiene-	IPSDC®
04(2011)D2235—	styrene (ABS) Plastic Pipe and Fittings	
<u>2004(2016)</u>		100000
D2564 12 <u>D2564—</u>	Specification for Solvent Cements for Poly Vinyl Chloride	IPSDC®
2012(2018)	(PVC) Plastic Piping Systems	
D2657 07 <u>D2657—</u>	Standard Practice for Heat-fusion Joining of Polyolefin Pipe	IPSDC®
2007(2015)	and Fittings	
D2661—14 <u>D2661—</u>	Specification for Acrylonitrile-butadiene-styrene (ABS)	IPSDC®
<u>14E1</u>	Schedule 40 Plastic Drain, Waste, and Vent Pipe and	
	Fittings	
D2665—14 <u>D2665—</u>	Specification for Poly Vinyl Chloride (PVC) Plastic Drain,	IPSDC®
2014	Waste, and Vent Pipe and Fittings	
D2729—11 <u>D2729—</u>	Specification for Poly Vinyl Chloride (PVC) Sewer Pipe and	IPSDC®
2017	Fittings	
D2855—	Standard Practice for Making Solvent-cemented Joints with	IPSDC®
96(2010) D2855—	Poly Vinyl Chloride (PVC) Pipe and Fittings	
<u>2015</u>		
D3034—14aD3034—	Specification for Type PSM Poly Vinyl Chloride (PVC) Sewer	IPSDC®
2016	Pipe and Fittings	
F628—12E1 <u>F628—</u>	Specification for Acrylonitrile-butadiene-styrene (ABS)	IPSDC®
2012E2	Schedule 40 Plastic Drain, Waste, and Vent Pipe with a	
F0-0 4 -F 0-0 -00:-	Cellular Core	100000
F656—15 <u>F656—2015</u>	Specification for Primers for Use in Solvent Cement Joints of	IPSDC®
	Poly Vinyl Chloride (PVC) Plastic Pipe and Fittings	
F891—10 <u>F891—2016</u>	Specification for Coextruded Poly Vinyl Chloride (PVC)	IPSDC®
	Plastic Pipe with a Cellular Core	
F1488—14 <u>F1488—</u>	Specification for Coextruded Composite Pipe	IPSDC®
<u>2014E1</u>		ļ
F1499—12 F1499—	Specification for Coextruded Composite Drain Waste and	IPSDC®
<u>2017</u>	Vent Pipe (DWV)	
CISPI	Cast Iron Soil Pipe Institute	
Standard Reference	Title	Referenced in
Number		Code(s):
number		Loae(s):

301—12 <u>301—18</u>	Specification for Hubless Cast Iron Soil Pipe and Fittings for Sanitary and Storm Drain, Waste and Vent Piping Applications	IPSDC®
310—12 310—18	Specification for Coupling for Use in Connection with Hubless Cast Iron Soil Pipe and Fittings for Sanitary and Storm Drain, Waste and Vent Piping Applications	IPSDC®
CSA	CSA Group	
Standard Reference Number	Title	Referenced in Code(s):
B137.3—16B137.3— 17	Rigid Poly Vinyl Chloride (PVC) Pipe for Pressure Applications	IPSDC®
B181.1—15B181.1— 18	Acrylonitrile-butadiene-styrene (ABS) Drain, Waste, and Vent Pipe and Pipe Fittings	IPSDC®
B181.2—15B181.2— 18	(PVC) Polyvinylchloride and Chlorinated Polyvinylchloride (CPVC) Drain, Waste, and Vent Pipe and Pipe Fittings	IPSDC®
B182.1—11B182.1— 18	Plastic Drain and Sewer Pipe and Pipe Fittings	IPSDC®
B182.2—11B182.2— 18	(PVC) Polyvinylchloride Sewer Pipe and Fittings PSM Type	IPSDC®
B182.4—15B182.4— 18	Profile PVC Sewer Pipe and Fittings	IPSDC®
B602—15 <u>B602—16</u>	Mechanical Couplings for Drain, Waste, and Vent Pipe and Sewer Pipe	IPSDC®
NSF	NSF International	
Standard Reference Number	Title	Referenced in Code(s):
40 2013 <u>40 2018</u>	Residential Wastewater Treatment Systems	IPSDC®
41—2011 41—2016	Nonliquid Saturated Treatment Systems (Composing Toilets)	IPSDC®

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AHRI	Air Conditioning, Heating & Refrigeration Institute	
Standard Reference Number	Title	Referenced in Code(s):
1160 (I-P)—2014	Performance Rating of Heat Pump Pool Heaters (with Addendum 1)	ISPSC®
ANSI	American National Standards Institute	
Standard Reference Number	Title	Referenced in Code(s):
A108/A118/ A136.1— 2008 A136.1—2019	Specifications for Installation of Ceramic Tile	ISPSC®
APSP	The Association of Pool & Spa Professionals	
Standard Reference Number	Title	Referenced in Code(s):
ANSI/APSP/ICC 4— 124—2019	American National Standard for Aboveground/Onground Residential Swimming Pools—Includes Addenda A Approved April 4, 2013	ISPSC®
ANSI/APSP/ICC 7— 13 7—2020	American National Standard for Suction Entrapment Avoidance in Swimming Pools, Wading Pools, Spas, Hot Tubs, and Catch Basins	ISPSC®

ANCI/ADCD/ICC 4.4	American National Standard for Dout-ble Cleatric Oc	ICDCC®
ANSI/APSP/ICC 14	American National Standard for Portable Electric Spa	ISPSC®
2014 <u>14—2019</u>	Energy Efficiency	IODOOO
ANSI/APSP/ICC 15a—	American National Standard for Energy Efficiency	ISPSC®
2011	Residential Inground Swimming Pool and Spas—Includes	
	Addenda A Approved January 9, 2013Spa Energy	
ANG!/ADGD#GG 40	Efficiency	ICDCOO
ANSI/APSP/ICC 16—	American National Standard for Suction Outlet Fittings	ISPSC®
11 16—2017	(SOFA) for Use in Swimming Pools, Wading Pools, Spas,	
1005/05/	and Hot Tubs	
ASCE/SEI	American Society of Civil Engineers Structural	
	Engineering Institute	
Standard Reference	Title	Referenced in
Number		Code(s):
ASCE 24—14 24—20	Flood Resistant Design & Construction	ISPSC®
ASME	American Society of Mechanical Engineers	
Standard Reference	Title	Referenced in
Number		Code(s):
A112.1.2—	Air Gaps in Plumbing Systems (For Plumbing Fixtures	ISPSC®
2012 A112.1.2—	and Water-connected Receptors)	
2012(R2022)	, , ,	
ASTM	ASTM International	
Standard Reference	Title	Referenced in
Number		Code(s):
A182—15 A182/A182M—	Standard Specification for Forged or Rolled Alloy and	ISPSC®
2018A	Stainless Steel Pipe Flanges, Forged Fittings, and Valves	
==	and Parts for High-temperature Service	
A240/ A240M —	Standard Specification for Chromium and Chromium-	ISPSC®
15a A240M—17	nickel Stainless Steel Plate, Sheet and Strip for Pressure	
	Vessels and for General Applications	
A312/ A312M —	Standard Specification for Seamless, Welded, and	ISPSC®
15a A312M—2018	Heavily Cold Worked Austenitic Stainless Steel Pipes	
A403—15 A403/A403M—	Standard Specification for Wrought Austenitic Stainless	ISPSC®
2018A	Steel Piping Fittings	
B88—14 B88—2016	Standard Specification for Seamless Copper Water Tube	ISPSC®
D1785—15D1785—15E1	Specification for Poly Vinyl Chloride (PVC) Plastic Pipe,	ISPSC®
DITES 10 <u>DITES 10E1</u>	Schedules 40, 80 and 120	.5. 555
D2466—15 D2466—2017	Standard Specification for Poly (Vinyl Chloride) (PVC)	ISPSC®
D2400 10D2400 2011	Plastic Pipe Fittings, Schedule 40	
D2846/ D2846M—	Standard Specification for Chlorinated Poly (Vinyl	ISPSC®
14D2846M—2017BE1	Chloride) (CPVC) Plastic Hot- and Cold-Water	101 000
TOZOTOW ZOTTOLI	Distribution Systems	
F438—15 F438—2017	Standard Specification for Socket-type Chlorinated Poly	ISPSC®
1 130 101 430 2011	(Vinyl Chloride) (CPVC) Plastic Pipe Fittings, Schedule	101 000
	40	
F1346—	Standard Performance Specification for Safety Covers	ISPSC®
9 1(2010) F1346—	and Labeling Requirements for All Covers for Swimming	101 000
1991(2018)	Pools, Spas and Hot Tubs	
CSA	CSA Group	
		Deferenced in
Standard Reference	Title	Referenced in
Number 1004272 47	Debadaydahlarida (DVO) bilantina man 11, 10, 11, 11, 11	Code(s):
B137.2—16B137.2—17	Polyvinylchloride (PVC) Injection-moulded Gasketed	ISPSC®
D407.0 40D407.0 45	Fittings for Pressure Application	100000
B137.3—16B137.3—17	Rigid Polyvinylchloride (PVC) Pipe and Fitting and	ISPSC®
	Pressure Applications	

B137.6—16B137.6—17	Chlorinated Polyvinylchloride (CPVC) Pipe, Tubing, and Fitting for Hot- and Cold-water Distribution Systems	ISPSC®
C22.2 No. 218.1 13 218.1—13(R2017)	Spas, Hot Tubs and Associated Equipment	ISPSC®
NSF	NSF International	
Standard Reference Number	Title	Referenced in Code(s):
NSF 14—2015 <u>14—2017</u>	Plastics Pumping Systems Components and Related Materials	ISPSC®
NSF 50—2015 <u>50—2017</u>	Equipment <u>and Chemicals</u> for Swimming Pools, Spas, Hot Tubs, and Other Recreational Water Facilities	ISPSC®
UL	UL LLC	
Standard Reference Number	Title	Referenced in Code(s):
1004-1—12	Standard for Rotating Electrical Machines General Requirements—with revisions through June 2011 August 2018	ISPSC®
1081—2008 <u>1081—2016</u>	Standard for Swimming Pool Pumps, Filters and Chlorinators—with revisions through March 2014October 2017	ISPSC®
1261 2001 1261—2016	Standard for Electric Water Heaters for Pools and Tubs—with revisions through July 2012September 2017	ISPSC®
1563—2009	Standard for Electric Hot Tubs, Spas Electric Spas Equipment Assemblies, and Associated Equipment—with revisions through March 2015October 2017	ISPSC®
1995—2011 <u>1995—2015</u>	Heating and Cooling Equipment—with revisions through July 2015 August 2018	ISPSC®
2017—2008	General-purpose Signaling Devices and Systems—with revisions through May 2011 January 2016	ISPSC®

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ASTM	ASTM International	
Standard Reference	Title	Referenced in
Number		Code(s):
D2898—10D2898—	Standard Test Methods for Accelerated Weathering of Fire-	IWUIC®
<u>2010(2017)</u>	retardant-treated Wood for Fire Testing	
D6662—13 <u>D6662—</u>	Standard Specification for Polyolefin-based Plastic Lumber	IWUIC®
<u>2017</u>	Decking Boards	
D7032—14D7032—	Standard Specification for Establishing Performance Ratings	IWUIC®
<u>2017</u>	for Wood-plastic Composite Deck Boards and Guardrail	
	Systems (Guards or Handrails)	
E84-2016 E84-	Standard Test Method for Surface-Burning Characteristics of	IWUIC®
<u>2018B</u>	Building Materials	
E108—16 E108—	Standard Test Methods for Fire Tests of Roof Coverings	IWUIC®
<u>2017</u>		
E119—2016E119—	Standard Test Methods for Fire Tests of Building	IWUIC®
<u>2018B</u>	Construction and Materials	
E136—16 E136—	Test Method for Behavior of Materials in a Vertical Tube	IWUIC®
<u>2016A</u>	Furnace at 750°C	

E2768 — 2011 <u>E2768</u> — <u>2011(2018)</u>	Standard Test Method for Extended Duration Surface Burning Characteristics of Building Materials (30 Minute Tunnel Test)	IWUIC®
UL	UL LLC	
Standard Reference Number	Title	Referenced in Code(s):
263—2011	Standard for Fire Test of Building Construction and Materials—with Revisions through June 2015 March 2018	IWUIC®
723 2008 723— 2018	Standard for Test for Surface Burning Characteristics of Building Materials—with Revisions through August 2013 Materials	IWUIC®
790—2004	Standard Test Methods for Fire Tests of Roof Coverings—with Revisions through July 2014October 2018	IWUIC®

ADM47-IECC-C-19

AHAM	Association of Home Appliance Manufacturers	
Standard Reference Number	Title	Referenced in Code(s):
ANSI/AHAM RAC-1— 2008 RAC-1—2015	Room Air Conditioners	IECC®
AHRI	Air-Conditioning, Heating, & Refrigeration Institute	
Standard Reference Number	Title	Referenced in Code(s):
210/ 240—2016 <u>240—2017</u>	Performance Rating of Unitary Air-conditioning and Air-source Heat Pump Equipment	IECC®
310/ 380—2014 (CSA-C744- 04) 380—2017 (CSA-C744-17)	Standard for Packaged Terminal Air Conditioners and Heat Pumps	IECC®
390 (I-P)—2015 <u>(I-P)—2003</u>	Performance Rating of Single Package Vertical Airconditioners and Heat Pumps	IECC®
550/590 (I-P)—2015 (I-P)—2018	Performance Rating of Water-chilling and Heat Pump Water-heating Packages Using the Vapor Compression Cycle	IECC®
1160 (I-P) —2014	Performance Rating of Heat Pump Pool Heaters (with Addendum 1)	IECC®
ISO/AHRI/ASHRAE 13256-1 (2017)(2012)	Water-to-Air and Brine-to-Air Heat Pumps—Testing and Rating for Performance	IECC® IECC®
ISO/AHRI/ASHRAE 13256-2 (2017)(2012)	Water-to-Water and Brine-to-Water Heat Pumps — Testing and Rating for Performance	IECC® IECC®
AMCA	Air Movement and Control Association International	
Standard Reference Number	Title	Referenced in Code(s):
205—12 205—19	Energy Efficiency Classification for Fans	IECC®
220—08 (R2012) 220—19	Laboratory Methods of Testing Air Curtain Units for Aerodynamic Performance Rating	IECC®
500D—12 <u>500D—18</u>	Laboratory Methods for Testing Dampers for Rating	IECC®
ANSI	American National Standards Institute	
Standard Reference Number	Title	Referenced in Code(s):

Z21.10.3/CSA 4.3 11 4.3—	Gas Water Heaters, Volume III—Storage Water	IECC®
2017	Heaters with Input Ratings Above 75,000 Btu per	1.200
	Hour, Circulating Tank and Instantaneous	
Z21.47/CSA 2.3—12 2.3—2016	Gas-fired Central Furnaces	IECC®
Z83.8/CSA 2.6 09 2.6—2016	Gas Unit Heaters, Gas Packaged Heaters, Gas Utility Heaters, and Gas-fired Duct Furnaces	IECC®
APSP	The Association of Pool & Spa Professionals	
Standard Reference Number	Title	Referenced in Code(s):
14—201 4 <u>14—2019</u>	American National Standard for Portable Electric Spa Energy Efficiency	IECC®
ASHRAE	ASHRAE	
Standard Reference Number	Title	Referenced in Code(s):
ASHRAE 127-2007 127-2012	Method of Testing for Rating Computer and Data Processing Room Unitary Air Conditioners	IECC®
ANSI/ASHRAE/ACCA Standard 183—2007 (RA2014)183— (RA2017)	Peak Cooling and Heating Load Calculations in Buildings, Except Low-rise Residential Buildings	IECC®
ASHRAE—2016ASHRAE— 2020	ASHRAE HVAC Systems and Equipment HandbookHandbook-2020	IECC®
ISO/AHRI/ASHRAE 13256-1 (2017)(2012)	Water-to-Air and Brine-to-Air Heat Pumps—Testing and Rating for Performance	IECC® IECC®
ISO/AHRI/ASHRAE 13256-2	Water-to-Water and Brine-to-Water Heat Pumps—	IECC®
(2017) (2012)	Testing and Rating for Performance	IECC®
55—2013 <u>55—2017</u>	Thermal Environmental Conditions for Human Occupancy	IECC®
90.1—2016 <u>90.1—2019</u>	Energy Standard for Buildings Except Low-rise Residential Buildings	IECC®
ASME	American Society of Mechanical Engineers	
Standard Reference Number	Title	Referenced in Code(s):
ASME <u>A17.1—2016</u> A17.1— 2019/CSA <u>B44—16</u> B44—19	Safety Code for Elevators and Escalators	IECC®
ASTM	ASTM International	
Standard Reference Number	Title	Referenced in Code(s):
C90—1 4 <u>C90—2016A</u>	Specification for Load-bearing Concrete Masonry Units	IECC®
C1549—09(2014) <u>C1549—2016</u>	Standard Test Method for Determination of Solar Reflectance Near Ambient Temperature Using a Portable Solar Reflectometer	IECC®
E283—04(2012) <u>E283—</u> 2004(2012)	Test Method for Determining the Rate of Air Leakage Through Exterior Windows, Curtain Walls and Doors Under Specified Pressure Differences Across the Specimen	IECC® IECC®
E779 10 <u>E779—10(2018)</u>	Standard Test Method for Determining Air Leakage Rate by Fan Pressurization	IECC® IECC®
E903 12 <u>E903—2012</u>	Standard Test Method Solar Absorptance, Reflectance and Transmittance of Materials Using Integrating Spheres (Withdrawn 2005)	IECC®
E1827—11E1827—2011(2017)	Standard Test Methods for Determining Airtightness of Building Using an Orifice Blower Door	IECC® IECC®

E1918 06(2015) E1918—2016	Standard Test Method for Measuring Solar	IECC®
, ,	Reflectance of Horizontal or Low-sloped Surfaces	
	in the Field	
E2357—11 <u>E2357—2018</u>	Standard Test Method for Determining Air Leakage	IECC®
	of Air Barriers Assemblies	
CRRC	Cool Roof Rating Council	
Standard Reference Number	Title	Referenced in Code(s):
ANSI/ CRRC-S100	Standard Test Methods for Determining Radiative	IECC®
2016 CRRC-S100 (2020)	Properties of Materials	
CTI	Cooling Technology Institute	
Standard Reference Number	Title	Referenced in Code(s):
STD 201—11STD-201RS(17)	Standard for Certification of Water Cooling Towers Thermal Performances	IECC®
DASMA	Door & Access Systems Manufacturers Association, International	
Standard Reference Number	Title	Referenced in
		Code(s):
105—2016 105—2017	Test Method for Thermal Transmittance and Air	IECC®
	Infiltration of Garage Doors and Rolling Doors	IECC®
IES	Illuminating Engineering Society	
Standard Reference Number	Title	Referenced in Code(s):
ANSI/ASHRAE/IESNA 90.1—	Energy Standard for Buildings, Except Low-rise	IECC®
2016 90.1—2019	Residential Buildings	
ISO	International Organization for Standardization	
Standard Reference Number	Title	Referenced in Code(s):
ISO/AHRI/ASHRAE 13256-	Water-to-Air and Brine-to-Air Heat Pumps -Testing	IECC®
1(2017) 13256-1(2012)	and Rating for Performance	
ISO/AHRI/ASHRAE 13256- 2(2017) 13256-2(2012)	Water-to-Water and Brine-to-Water Heat Pumps - Testing and Rating for Performance	IECC®
NEMA	National Electrical Manufacturers Association	
Standard Reference Number	Title	Referenced in
		Code(s):
MG1—2014 <u>MG1—2016</u>	Motors and Generators	IECC®
NFRC	National Fenestration Rating Council, Inc.	
Standard Reference Number	Title	Referenced in Code(s):
100 2017 <u>100</u> —2020	Procedure for Determining Fenestration Products U-factors	IECC® IECC®
200 2017 <u>200</u> —2020	Procedure for Determining Fenestration Product Solar Heat Gain Coefficients and Visible Transmittance at Normal Incidence	IECC® IECC®
400—2017400—2020	Procedure for Determining Fenestration Product Air Leakage	IECC® IECC®
UL	UL LLC	
Standard Reference Number	Title	Referenced in Code(s):
710—12	Exhaust Hoods for Commercial Cooking Equipment—with Revisions through November 2013June 2018	IECC®

727—06 <u>727—2018</u>	Oil-fired Central Furnaces with Revisions through October 2013 Furnaces	IECC®
731—95 <u>731—2018</u>	Oil-fired Unit Heaters—with Revisions through October 2013Heaters	IECC®
1784 01 <u>1784—2015</u>	Air Leakage Tests of Door Assemblies with Revisions through February 2015 <u>Assemblies</u>	IECC®

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Standard Reference	Title	Referenced
Number		in Code(s):
ANSI/ACCA 2 Manual	Residential Load Calculation Eighth Edition	IECC®
J—16		
ANSI/ACCA 3 Manual	Residential Equipment Selection	IECC®
S—14		
APSP	The Association of Pool & Spa Professionals	
Standard Reference	Title	Referenced
Number		in Code(s):
ANSI/APSP/ICC 14—	American National Standard for Portable Electric Spa	IECC®
2014 14—2019	Energy Efficiency	IECC®
ANSI/APSP/ICC 15a—	American National Standard for Residential Swimming Pool	IECC®
2011 15—2020	and Spa Energy Efficiency—includes Addenda A Approved	IECC®
	January 9, 2013 <u>Efficiency</u>	
ASHRAE	ASHRAE	
Standard Reference	Title	Referenced
Number		in Code(s):
ASHRAE—	ASHRAE Handbook of Fundamentals	IECC®
2017 ASHRAE—2021		
ASTM	ASTM International	
Standard Reference	Title	Referenced
Number		in Code(s):
E283—	Test Method for Determining the Rate of Air Leakage	IECC®
04(2012) E283—	Through Exterior Windows, Curtain Walls and Doors Under	IECC®
<u>2004(2012)</u>	Specified Pressure Differences Across the Specimen	
E779—10 E779—	Standard Test Method for Determining Air Leakage Rate by	IECC®
<u>2010(2018)</u>	Fan Pressurization	IECC®
E1827—11 <u>E1827—</u>	Standard Test Methods for Determining Airtightness of	IECC®
<u>2011(2017)</u>	Building Using an Orifice Blower Door	IECC®
DASMA	Door & Access Systems Manufacturers Association	
Standard Reference	Title	Referenced
Number		in Code(s):
105—2016 105—2017	Test Method for Thermal Transmittance and Air Infiltration of	IECC®
	Garage Doors and Rolling Doors	IECC®
HVI	Home Ventilating Institute	
Standard Reference	Title	Referenced
Number		in Code(s):
916—09 916—18	Airflow Test Procedure	IECC®
NFRC	National Fenestration Rating Council, Inc.	

Standard Reference Number	Title	Referenced in Code(s):
100 2017 <u>100—2020</u>	Procedure for Determining Fenestration Products U-factors	IECC®
200 2017 <u>200—2020</u>	Procedure for Determining Fenestration Product Solar Heat Gain Coefficients and Visible Transmittance at Normal Incidence	IECC® IECC®
400—2017 <u>400—2020</u>	Procedure for Determining Fenestration Product Air Leakage	IECC® IECC®
RESNET	Residential Energy Services Network, Inc.	
Standard Reference Number	Title	Referenced in Code(s):
ANSI/RESNET/ICC 301—2014301—2019	Standard for the Calculation and Labeling of the Energy Performance of Low-rise Residential Buildings Dwelling and Sleeping Units using an Energy Rating Index First Published March 7, 2014—Republished January 2016	IECC® IECC®
ANSI/RESNET/ICC 380—2016380—2019	Standard for Testing Airtightness for Building Enclosures, of Building, Dwelling Unit and Sleeping Unit Enclosures; Airtightness of Heating and Cooling Air Distribution Systems, and Airflow of Mechanical Ventilation Systems— Republished January 2016Systems	IECC® IECC®
UL	UL LLC	
Standard Reference Number	Title	Referenced in Code(s):
127—11 <u>127—2011</u>	Standard for Factory Built Fireplaces—with Revisions through May 2015Factory-built Fireplaces—with revisions through July 2016	IECC®
515—11 <u>515—2015</u>	Electrical Resistance Heat Tracing for Commercial and Industrial Applications Including Revisions through July 2015	IECC®

Reason:

THIS IS THE ADMIN STANDARDS UPDATE CODE CHANGE.

The CP28 Code Development Policy, Section 4.6 requires the updating of referenced standards to be accomplished administratively, and be processed as a Code Change Proposal for consideration by the Administrative Code Change Committee. In September 2018, a letter was sent to each developer of standards that is referenced in the International Codes, asking them to provide ICC with a list of their standards in order to update to the current edition. Listed are the referenced standards that are to be updated based upon responses received from standards developers.

Cost Impact:

The code change proposal will not increase or decrease the cost of construction Not applicable.

ADM47-19

<u>Public Hearing Results</u>

Errata: This proposal includes published errata

Go to https://www.iccsafe.org/wp-content/uploads/Group-B-Consolidated-Monograph-Updates.pdf.

This proposal also I includes unpublished errata:

PCI Precast Prestressed Concrete Institute

PCI 124—18 Design Specification for Fire Resistance of Precast / Prestressed Concrete

Committee Action: As Modified

AISI

AISI S100—16 w/S1-18 & w/S2-20 (2020): North American Specification for the Design of Cold-formed Steel Structural Members, 2016, with Supplements 1-18 and 2-20 (Reaffirmed 2020), dated 2018

AISI S230—18 19 : Standard for Cold-formed Steel Framing—Prescriptive Method for One- and Two-family Dwellings, 2018 2019

ASCE/SEI

817 20 : Standard Specification for the Design of Cold-formed Stainless Steel Structural Members

IIAR

ANSI/IIAR-2—2014, including Addendum A: Safe Design of Closed-Circuit circuit Ammonia Refrigeration Refrigerating Systems

ANSI/IIAR 4—2015—2020: Installation of Closed-Circuit circuit-Ammonia Refrigeration Mechanical Refrigerating Systems

ANSI/IIAR 5—2013 2019: Startup Start-up of Closed- Circuit circuit Ammonia Refrigeration Systems

<u>ANSI</u>/IIAR-7—2018-2019 : Developing Operating Procedures for Closed-<u>Circuit circuit</u> Ammonia <u>Refrigeration</u> <u>Mechanical</u> <u>Refrigerating</u> Systems

ANSI/IIAR-8—2019-2020: Decommissioning of Closed-Circuit eircuit Ammonia Refrigeration Refrigerating Systems

SJI

SJI 100 15 20 : 44th 45th Edition Standard Specification Load Tables and Weight Tables for Steel Joists and Joist Girders K-Series, LH-Series, DHL-Series, Joist Girders

Committee Reason: The committee stated that the reason for the approval of the proposal was that updating the reference standards is necessary for the function of the codes. (Vote: 13-0)

Assembly Motion: None

Individual Consideration Agenda

Public Comment 1:

Proponents: Marcelo Hirschler, representing GBH International (mmh@gbhint.com) requests As Modified by Public Comment

Modify as follows:

ASTM

E84—2018B-2019b: Standard Test Methods for Surface Burning Characteristics of Building Materials

Commenter's Reason: The CP28 Code Development Policy, Section 4.6 requires the updating of referenced standards to the codes.

The latest edition of ASTM E84 approved by the committee ASTM E05, and by the ASTM committee on standards, is dated 2019b, and was approved in July 2019.

This change is intended to apply to all ICC codes that reference ASTM E84 and not just the IBC.

Cost Impact: The net effect of the public comment and code change proposal will not increase or decrease the cost of construction. This simply updates the reference to ASTM E84 to the most current edition, as is traditionally done by ICC with consensus standards.

Public Comment 2:

Proponents: Christopher Athari, representing Hoover Treated Wood Products (cathari@frtw.com); Joseph Holland, representing Hoover Treated Wood Products (jholland@frtw.com) requests As Submitted

Commenter's Reason: This public comment is in support of the committee action to update ASTM E84 to the 2018B edition.

Recent changes to ASTM E84 have created conflicts with the codes by mandating a test for more than 10 minutes must use ASTM E2768. ASTM 2768 is not a test for testing FRTW but other products as demonstrated by in the IWUIC code.

Building codes have always required testing for FRTW be accomplished using ASTM E84. E84 is a ten-minute test for determining flame spread and smoke development. After the determination of the flame spread and smoke development the test is continued for an additional 20 minutes. The additional 20 minutes are not a part of the E84 but uses the same apparatus to determine two additional requirements, maximum flame front, and significant progressive combustion.

ASTM E2768 while a test of 30 minute duration is not a test for FRTW. The only reference to E2768 in the ICC codes is for a ignition resistance material in the IWUIC. It clearly does not apply to FRTW as it is listed as a complying material

Because FRTW is a wood product, any test for FRTW should have been developed by ASTM D7 the committee on wood. D7 understands how FRTW products should be tested.

Examples referenced in 703

D2898—10: Test Methods for Accelerated Weathering of Fire-retardant-treated Wood for Fire Testing,

D3201/D3201M—13: Test Method for Hygroscopic Properties of Fire-retardant-treated Wood and Wood-based Products

D5664—10: Standard Test Method for Evaluating the Effects of Fire-retardant Treatment and Elevated Temperatures on Strength Properties of Fire-retardant Treated Lumber

D6305—08(2015)e1: Practice for Calculating Bending Strength Design Adjustment Factors for Fire-retardant-treated Plywood Roof Sheathing

D5516—09: Test Method of Evaluating the Flexural Properties of Fire-retardant Treated Softwood Plywood Exposed to Elevated Temperatures

D6841—08: Standard Practice for Calculating Design Value Treatment Adjustment Factors for Fire-retardant Treated Lumber

Conflicts created by mandating all testing using the E84 apparatus for more than 10 minutes be conducted using E2768. Section 13.1.2 states the flame front limit is of 10-1/2 feet is "... considered evidence of no significant progressive combustion in this test method." The building code clearly states they are to be considered separately.

Section 13.2 allows the testing and qualification of only one surface, "only surfaces that have been individually tested shall be eligible to be classified and reported as meeting the conditions of classification of this standard. The building code mandates FRTW be pressure impregnated or the fire retardant be incorporated into the product during manufacture. Example: the strands in OSB or the particles in particleboard are treated with the fire retardant prior to assembling as a panel product.

This public comment is for the IBC, IRC, IFC, IMC, IEBC and the IWUIC.

Cost Impact: The net effect of the public comment and code change proposal will not increase or decrease the cost of construction Codes and standards discussion

Staff Analysis: This public comment is for the IBC, IRC, IFC, IMC, IEBC and the IWUIC.

Public Comment 3:

Proponents: Marcelo Hirschler, representing GBH International (mmh@gbhint.com) requests As Modified by Public Comment

Modify as follows:

ASTM

E136—2016A 2019: Standard Test Method for Assessing Combustibility of Behavior of Materials Using in a Vertical Tube Furnace at 750°C

Commenter's Reason: The CP28 Code Development Policy, Section 4.6 requires the updating of referenced standards to the codes.

The latest edition of ASTM E136, as approved by the committee ASTM E05 and by the ASTM committee on standards, is dated 2019. It changed the title of the standard but the test method was not changed.

This change is intended to apply to all ICC codes that reference ASTM E136 and not just the IBC.

Cost Impact: The net effect of the public comment and code change proposal will not increase or decrease the cost of construction This is simply a referenced standard update.

Public Comment 4:

Proponents: Jeffrey Shapiro, Lake Travis Fire Rescue, representing Self (jshapiro@ltfr.org) requests Disapprove

Commenter's Reason: Requesting disapproval of the 2019 update of NFPA 285: Standard Fire Test Method for the Evaluation of Fire Propagation Characteristics of Exterior Nonload-bearing Wall Assemblies Containing Combustible Components

For the past couple years, I have attempted to get the NFPA 285 committee to consider adjustments to the NFPA 285 test procedure before expanding the scope of the standard to allow application of the standard to wall assemblies on any building. My approach was to fight attempts to expand the use of NFPA 285 to include any wall assembly until changes are made to the standard to address concerns regarding sufficiency of the standard with respect to building geometry and possibly wind driven fires. The development process for NFPA 285 has been very contentious on this issue, with the committee completely reversing course from one meeting to the next, and ultimately, the NFPA Standards Council refused to issue one of the updates and returned the entire document to the technical committee. After that, the committee just repeated previous actions, and got the standard approved. I simply gave up in the NFPA process because it was clear that committee members with proprietary interests in the standard were driving the process, and there was no way to stop that train.

The fire service has very little voice in the NFPA 285 process compared to industry interests, and it has been very difficult to get the committee to give these concerns due consideration, and on this issue, I am representing the perspective of the fire service and a code official. Lacking the ability to get appropriate consideration from the NFPA 285 technical committee, I am asking ICC to delay updating the NFPA 285 reference so that the IBC continues to reference a version of NFPA 285 that has a limited scope.

As discussed at numerous code hearings, issues of building geometry, in particular, such as reentrant corners, are not considered by NFPA 285, and they dramatically effect the intensity of the fire exposure to tested assemblies. Either ICC, NFPA or both need to force a discussion about the test sufficiency, recognizing that other international tests and FM tests for the same assembly types are substantially more stringent than what NFPA 285 calls for.

The fire service is well aware of the effects of wind driven fires and of building geometry when it comes to fire behavior, and we can ill afford the risk of catastrophic high-rise fires involving exterior walls. While it has been claimed that there have been no such documented losses involving NFPA 285 compliant panels on buildings, the lack of a bad fire does not equate to a conclusion that everything is fine. Instead, numerous catastrophic exterior fires that have occurred just happened to occur on buildings with non-compliant walls assemblies. What would have happened if NFPA 285 compliant panels were used? Nobody can say for certain.

The previous NFPA 285 test method, that I'm trying to get back to with this public comment, is scoped to ONLY include non-bearing geometrically flat curtain walls attached to buildings, and I have no issue with the current test method continuing for this application. However, the effectiveness of this test method for assemblies with overhangs and inside corners that can intensify the fire exposure needs to be known before these untested geometric variations should be permitted by NFPA 285 or the IBC. UL's mantra is "know by test." We haven't tested, therefore, we don't know.

Building officials and the fire service would be unwise to accept the risk of catastrophic high-rise fires by knowingly standing by while the NFPA 285 test method is exploited. Without knowing the fire performance consequences of stretching the test method to allow assemblies that are not well represented in the test, we cannot reasonably assure public safety or firefighter safety. We must do a better job of making sure we get this issue right because Grenfell Tower was a wake up call with respect to the consequences of inadequate testing. Do we really want to allow buildings to be built with untested wall configurations only to later learn that we screwed up and created a large pool of dangerous existing buildings? The time to address these concerns is now, before NFPA 285's new scoping is permitted by the IBC.

Cost Impact: The net effect of the public comment and code change proposal will not increase or decrease the cost of construction. This proposal maintains the current requirements of the 2018 IBC in the 2021 edition. Therefore, no change in the requirement will have no impact on cost.

Public Comment 5:

Proponents: Jeremy Brown, representing NSF International (brown@nsf.org) requests As Modified by Public Comment

Modify as follows:

NSF

14--2017 14--2018: Plastics Piping System Components and Related Materials

Commenter's Reason: The code should reference the most recent version of the standard.

Cost Impact: The net effect of the public comment and code change proposal will not increase or decrease the cost of construction This change will not affect cost.

Public Comment 6:

Proponents: Jeremy Brown, representing NSF International (brown@nsf.org) requests As Modified by Public Comment

Modify as follows:

NSF

42--2017 42--2018: Drinking Water Treatment Units—Anesthetic Effects

Commenter's Reason: The code should reference the most recent version of the standard.

Cost Impact: The net effect of the public comment and code change proposal will not increase or decrease the cost of construction This change will not affect cost.

Public Comment 7:

Proponents: Jeremy Brown, representing NSF International (brown@nsf.org) requests As Modified by Public Comment

Modify as follows:

NSF

44--2017 44--2018: Residential Cation Exchange Water Softeners

Commenter's Reason: The code should reference the most recent version of the standard.

Cost Impact: The net effect of the public comment and code change proposal will not increase or decrease the cost of construction This change will not affect cost.

Public Comment 8:

Proponents: Jeremy Brown, representing NSF International (brown@nsf.org) requests As Modified by Public Comment

Modify as follows:

NSF

61--2017 61--2018: Drinking Water System Components—Health Effects

Commenter's Reason: The code should reference the most recent version of the standard.

Cost Impact: The net effect of the public comment and code change proposal will not increase or decrease the cost of construction This change will not affect cost.

Public Comment 9:

Proponents: Jeremy Brown, representing NSF International (brown@nsf.org) requests As Modified by Public Comment

Modify as follows:

NSF

359-2016 359-2018: Valves for Crosslinked Polyethylene (PEX) Water Distribution Tubing Systems

Commenter's Reason: The code should reference the most recent version of the standard.

Cost Impact: The net effect of the public comment and code change proposal will not increase or decrease the cost of construction This change will not affect cost.

Public Comment 10:

Proponents: David Bixby, representing Air Conditioning Contractors of America (bixster1953@yahoo.com) requests Disapprove

Commenter's Reason: ACCA opposes the Committee's Action to Approve the updated reference to the 2019 edition of ANCE/CAN-CSA/UL 60335-2-40, and requests the committee to retain the current reference as found in the 2018 IRC. The 2019 edition of the above standard covers residential equipment for direct systems that use A2L flammable refrigerants. Moreover, previous proposals to add coverage for A2L refrigerants for use in all direct systems for air-conditioning applications were all rejected by the membership and technical committees during the 2018 "Group A" code change cycle for the IMC and the IFC. Therefore, allowing the 2019 edition of this standard to appear in the Admin section for the IRC would create confusion in the field since no approval requirements will exist in the 2021 IRC. It would also be in direct conflict with the IMC and IFC. Currently the IRC has no additional restrictions or code provisions to safely install these new flammable refrigerant systems in homes, schools and offices. Until training is created and provided for installers, inspectors and firefighters, the current research at AHRI is completed and analyzed, and ASHRAE completes the residential air-conditioning standard (15.2), it is very premature to allow these systems in the residential marketplace. ACCA requests disapproval of this proposal and an overturn of the committee recommendation.

Cost Impact:

The net effect of the public comment and code change proposal will not increase or decrease the cost of construction

No change to code.

Public Comment 11:

Proponents: James Narva, representing National Assoc. of State Fire Marshals (jnarva@narvaassociates.com) requests Disapprove

Commenter's Reason: The National Association of State Fire Marshals is opposed to updating the standard for air conditioners to accommodate flammable refrigerants – UL/CSA/ANCE 60335-2-40 – 2019. We ask that the ICC membership overturn the Administrative Committee and maintain the protections afforded in the current IRC. This is consistent with actions taken by the IMC committee and the membership during the 2021 Group A cycle.

In addition, when A2L refrigerants are introduced to flame, they will ignite, burn completely and produce significant quantities of hydrofluoric acid. This highly corrosive contact poison can penetrate tissue, readily poisoning firefighters and citizens through exposure of skin or eyes, or when inhaled or swallowed.

We believe that while a lot of work has been accomplished to identify and mitigate the risks associated with these products, much work remains before there is solid scientific justification to support this change.

For instance, we have learned that flammable refrigerant detectors aren't durable enough to serve their intended purpose in these systems; they may only last a few months to a few years at best. These systems, many times, are in service for decades. It's likely, as we have learned with battery powered smoke alarms, that homeowners will find ways to circumvent the detection system if they don't perform as intended for the life of the equipment.

Training for the fire service will also take some time. Without this training, which is vitally necessary to inform responding fire fighters of these new risks, which include flammability, combustion byproduct issues, including the previously mentioned HF poisoning, we place first responders in harm's way needlessly.

We believe introducing a product safety standard as a stand-alone document in the code is an ill-conceived idea. Product safety standards of this type need installation criteria, either in the form of code provisions or an installation standard, to complete the regulatory loop. The code requires many products to be listed, then goes on to say how they should be installed and maintained. We understand that such an installation standard is under development, but perilously, it is not yet available. The update of this standard absent the accompanying installation standard further only further escalates the risks imposed on fire fighters.

Industry decided to risk developing the regulations for the use of flammable refrigerants without input from the public safety community. We have offered our expertise to industry and remain committed to working toward a safe solution for the implementation of more environmentally palatable refrigerants. Yet, we are disappointed that the industry has resisted our overtures while attempting to use an administrative update procedure to achieve their goal after being turned down during the normal code development process.

Overturning the committee action will provide the time to develop reasonable installation criteria, identify and repair any flaws in the current standard, and implement training programs for fire fighters.

Cost Impact:

The net effect of the public comment and code change proposal will not increase or decrease the cost of construction Since the public comment maintains the current code language, there is no increase or decrease in cost.

Public Comment 12:

Proponents: Paul Armstrong, representing JCI (paul.armstrong@pacodeservices.com) requests Disapprove

Commenter's Reason: This Public Comment is submitted specifically to ask for the disapproval of the update of UL60335-2-40 to the 2019 edition. The code change update proposal would allow flammable refrigerants to be used in direct HVAC systems installed in residential construction covered by only the International Residential Code. Please note that in all model mechanical codes there is currently a prohibition against the use of such flammable refrigerants in residential construction in direct HVAC systems, so this is a major change. This revision was previously heard during the Group A Code Development Cycle last year in a more comprehensive manner and was disapproved by the code committee and the ICC membership. Also, the 2019 edition of this UL Standard is supposed to have completed its review and ANSI approval process but no ICC technical committee has been given the opportunity to review it in its final form to date. Also, note that this is only proposed for the IRC, a more complete proposal is needed to completely cover all types of projects covered by both the IRC and IMC to eliminate confusion between the two model codes.

While the move to more climate friendly refrigerants is ideal, we also need a complete review considering all aspects of the installation of flammable refrigerants in the IRC. Other Public Comments will address the, to date, known issues in the 2019 edition of the UL standard, other concerns need to be addressed as follows:

1. There is an assumption that highly trained contractors will be installing HVAC systems but the IRC is intended for use by all levels of construction experience. As such, there are no safety measures addressed for people to attempt to do this installation themselves. There isn't even a limitation proposed that would require certified installers.

- Significant training would be required for both professional and volunteer fire department personnel, building inspectors or even home inspectors in dealing with these systems in both emergency and non-emergency situations. Again, nothing has been proposed either through this code development process or heard of outside of it. Home owners would also need much more than just an owner's guide to be safe.
- 3. Lastly, no evaluation has been provided on the impacts to both new and existing construction under the IRC for the effects of fires involving HVAC systems using flammable refrigerants. The IRC was developed with the current code limitations in mind and further protection may be required of the structure and/or for safety of the occupants as a result.

Please understand that while this seems as if it is a minor change, it really is a big shift in IRC related construction and should be completely evaluated by all facets of industry, especially emergency responders, to understand its impacts on the bulk of the projects that occur in jurisdictions across the United States. Please disapprove the update to the 2019 edition of UL 60335-2-40 so a more thorough review can be completed next code development cycle.

Cost Impact: The net effect of the public comment and code change proposal will not increase or decrease the cost of construction However the effect of the original proposal will increase the cost of construction based on the use of the 2019 edition of UL 60335-2-40

Public Comment 13:

Proponents: James Dominik, representing UL Fire Advisory Board on behalf of Public Safety and Emergency Responders requests Disapprove

Commenter's Reason: Requesting disapproval of the update of UL/CSA/ANCE standard 60335-2-40 to the 2019 edition.

UL created a Fire Services Advisory group to evaluate flammable refrigerants and the standards being created. This group is comprised of:

International Association of Firefighters
International Association of Fire Chiefs
National Association of State Fire Marshals
Fire Department New York City
Chicago Fire Department
Boston Fire Department
Plano Fire Department

This group feels that inclusion of flammable refrigerants in the IRC update is premature and should not be included in the proposed IRC update. This recently was not approved in the update to the UMC code.

Since the public safety/emergency responder community has been involved it is apparent there still is much research that is not complete. Until the planned research can be completed and the code creation process can have involvement from all stakeholders this is premature and potentially putting the public and its emergency responders at increased risk. Industry agrees there has been a failure to involve the public safety/emergency responder community in the creation of these standards at this time. https://img1.wsimg.com/blobby/go/253af947-bd2c-4f8b-9959-e817c041d781/downloads/UL%20Fire%20Service%20Position%20Statement%20-%20Flammable.pdf?ver=1566757294047

Cost Impact: The net effect of the public comment and code change proposal will not increase or decrease the cost of construction No change to code.

Public Comment 14:

Proponents: Chris Forth, Johnson Controls, representing Johnson Controls (chris.m.forth@jci.com) requests Disapprove

Commenter's Reason: JCI requests that the committee disapprove the update of UL 60335-2-40 to the 2019 version to allow for the completion of all testing, training and standards updates and for a thorough review to be completed during the code development cycle.

- Proposed change has a substantive impact. Although characterized as an administrative update to the UL60335-2-40 2019 edition, this is a substantive change that would allow flammable refrigerants in residential and commercial air conditioning and heat pump systems.
- Proposed change has been rejected by the membership in the Group A cycle (IMC and IFC hearings). Both the
 technical committee and the voting ICC membership rejected the proposed change during the IMC and IFC Group A code
 development hearings in Richmond, Virginia.
- Training Not In Place to Support Proposed Change. The proposed change to allow flammable refrigerants in residential and commercial air conditioning and heat pump systems, where such provisions have never been allowed and where licensing requirements and training does not presently exist, should not be rushed. OEM's such as JCI depend on independent contractors to properly and safely install our equipment. These independent contractors need a uniform, nationwide training curriculum fully developed and executed prior to any new flammable equipment being released to the

market. Given that the training materials for the safe handling, transportation and storage of flammable refrigerants are not complete, as well as the absence of a nationwide licensing system to ensure compliance, dictates that the industry is not ready for such provisions. Given adequate time we feel such issues can be addressed but it will require further stakeholder input and study.

- Uniform Model Codes Not In Place to Support Proposed Change. The HVAC industry needs both universal models codes (IMC and UMC) to be in alignment in regards to the allowance of flammable refrigerants to ensure consistent safety standards across the country and avoid interstate border compliance gaps. At this time, the UMC has rejected any proposal to allow flammable refrigerants in residential and commercial air conditioning and heat pump systems.
- Research Designed to Inform Decision Making Not Complete. In addition to the training and licensing risk, there are critical safety standards (ASHRAE 15.2) and research testing (AHRI, ASHRAE, etc.) which remain incomplete or have yet to even be started as follows:

AHRI/AHRTI Research Projects

- 1. <u>9012</u>: Refrigerant Leak Characterization: Evaluates the impact of A2L flammable refrigerant leaks on concentrations in the spaces to which they are connected. Project currently delayed and not expected to be complete until 2020.
- 2. <u>9014</u>: Assess Refrigeration Detector Characteristics for Use in HVACR Equipment. Work underway. Not expected to be completed until early 2020.
- 3. <u>9015</u>: Assessment of Refrigerant Leakage Mitigation Effectiveness for Air Conditioning and Refrigeration Equipment. Work not started. Uncertain as to when the project will be completed.

ASHRAE Research Projects

- 4. <u>RP-1806</u>: Post-Ignition Risk Assessment of Flammable Refrigerants. Work has started but has been suspended. Results not expected until the end of 2020.
- 5. <u>RP-1808</u>: Evaluation of Mechanical Field Joints. Testing is complete but results have not been reviewed for incorporation into standards.
- 6. <u>WS-1855</u>: Evaluation of Combustion By-Products for HFO Refrigerants. Testing has not started and is not expected to be complete until ~2020

Standards

7. <u>ASHRAE Standard 15.2P</u>: Safety Standard for Air-conditioning and Heat Pump Systems in Residential Applications. In the proposal stage. Not likely to be complete until ~2021 or later. This standard is critical for contractors and inspectors to understand the specific installation, sizing and safety requirements for residential applications.

The results of this new research testing needs to be evaluated and if deemed appropriate incorporated into the multiple standards (ASHRAE 15 / 15.2 – UL 60335-2-40) as well as into future contractor training materials which presently do not exist. Due to the complexity of the multiple standards which have overlapping and in some cases conflicting requirements, inspectors will also need sufficient time to study and digest the standard in order to provide proper enforcement.

For these reasons, JCI reiterates its request that the committee <u>disapprove</u> the update of UL 60335-2-40 to the 2019 version.

Bibliography: Johnson Controls

Cost Impact: The net effect of the public comment and code change proposal will not increase or decrease the cost of construction However the effect of the original proposal would increase the cost of compliance based on the use of the 2019 edition of UL 60335-2-40 which would require the addition of special refrigerant sensors, dedicated control schemes and dedicated piping requirements for specific applications.

Public Comment 15:

Proponents: Joe Holomy, Illinois Fire Advisory Commission, representing Illinois Fire Advisory Commission requests Disapprove

Commenter's Reason: Requesting disapproval of the update of UL/CSA/ANCE standard 60335-2-40 to the 2019 edition.

The Illinois Fire Advisory Commission (FAC) has determined the vast majority of the mainstream refrigerant replacements being proposed by industry are odorless and colorless and have a higher heat ignition resulting in the introduction of a new risk to the general public. The FAC has formally voted on and adopted Resolution 01-19 which is attached.



Resolution 01-19

ILLINOIS FIRE ADVISORY COMMISSION RELATING TO INDUSTRY FLAMMABLE REFRIGERANTS

- 1. Whereas the Illinois Fire Advisory Commission (FAC) is a statutorily created organization that is charged with advising the Office of the State Fire Marshal in the exercise of its duties which includes fire prevention and life safety subject matter (20 ILCS 2905/3);
- 2. Whereas the FAC is a fire service member organization that promotes progress of all major fire service organizations as it relates to the life, health, and safety of the citizens of the State of Illinois while also being the common voice on behalf of the fire service members in communicating with the Illinois General Assembly Fire Caucus, with membership including the Associated Firefighters of Illinois, the City of Chicago Fire Department, Illinois Chapter of the International Association of Arson Investigators, Illinois Association of Fire Protection Districts, Illinois Fire Chiefs Association, Illinois Fire Inspectors Association, Illinois Fire Safety Alliance, Illinois Fire Service Institute, Illinois Firefighters Association, Illinois Professional Firefighters Association, Illinois Society of Fire Service Instructors, Mutual Aid Box Alarm System, and the Northern Illinois Alliance of Fire Protection Districts and;
- 3. Whereas it has come to the attention of the FAC that the Air-Conditioning, Heating, and Refrigeration Institute (AHRI) representing manufacturers of the Heating, Ventilation, Air Condition, Refrigeration and Water Heating equipment (HVAC&R) within the global industry is proposing a change to the International Residential Building Code allowing for a new refrigerant that has been determined to be highly flammable and;
- 4. Whereas the FAC has further determined the vast majority of the mainstream refrigerant replacements being proposed by industry are odorless and colorless and have a higher heat ignition resulting in the introduction of a new risk to the general public and;
- Whereas the FAC has discovered until now, the public safety community has not been involved in the testing of these products and policy discussions as to the long-term impacts;

It is hereby Resolved that the FAC:

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- Formally objects to the proposed industry action relating to flammable refrigerants as it is currently being introduced;
- Urges industry representatives to withdraw any current proposals to National Codes and Standards that would result in the widespread installation of equipment using flammable refrigerants;
- 3. Urges industry representatives to fully research the actual and potential consequences of their proposed action relative to public and firefighter safety prior to implementing such action; and
- 4. Urges industry representatives to formally meet with the FAC prior to the implementation of any such proposed action for the specific purpose of discussing the proposed industry action and any alternative actions that could be implemented which address public and firefighter safety.

We further certify that the FAC is duly organized and existing, and that the members have voted, authorized, and called for the foregoing resolution.

Chief Joseph Holomy

Chairman

Illinois Fire Advisory Commission

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Cost Impact: The net effect of the public comment and code change proposal will not increase or decrease the cost of construction No change to code.

Public Comment 16:

Proponents: Michael O'Brian, Fire and Life Safety Section of the International Association of Fire Chiefs, representing Fire and Life Safety Section of the International Association of Fire Chiefs (mobrian@brightonareafire.com) requests Disapprove

Commenter's Reason: Requesting disapproval of the update of UL/CSA/ANCE standard 60335-2-40 to the 2019 edition.

During the Group A code development process, several proposals to allow air conditioning equipment using increased quantities of flammable refrigerants were discussed at length, and the committee voted against those proposals. Public comments were filed, and the membership considered those same proposals. Those proposals failed again, so the 2021 IMC will not change its current restrictions on flammable refrigerants.

The proposal to administratively update the standard for air conditioning equipment is a "back door" for the industry to achieve what they couldn't during the IMC debates.

Regardless of the process, the flaws in the proposal remain, including:

- Wildland fire potential has not been considered during the development of this standard
- This is a product safety standard; we also need installation criteria for this new risk
- Training for fire fighters so that they are aware of the risks associated with flammable refrigerants is imperative. This would include ignition/fire risks as well as the risks associated with the combustion byproducts of these gases.
- Serious consideration should be given to finding a way to odorize this material.
- The risk mitigation scheme proposed (detection/ventilation) should be validated through a comprehensive study before the standard is used.

As one person said "So, someone wants to run flammable, unodorized gas through your home at high pressure through copper tubing . . . what could go wrong?"

We urge the ICC membership to overturn the committee and keep the current standard until the concerns over flammable refrigerants are addressed.

Cost Impact: The net effect of the public comment and code change proposal will not increase or decrease the cost of construction No change to code.

Public Comment 17:

Proponents: Matthew Perez, Illinois State Fire Marshal, representing Illinois State Fire Marshal requests Disapprove

Commenter's Reason: UL should curtail development of Standard 60335-2-40 until all pertinent research is available to assure the current level of safety is maintained and resist any proposals to national codes and standards that would result in the widespread installation of equipment using flammable refrigerants. UL should take into consideration the input and expertise of the fire service as well as acquire compllete scientific justification in order to fully address risk management.

Cost Impact: The net effect of the public comment and code change proposal will not increase or decrease the cost of construction No change to code.

Public Comment 18:

Proponents: Richard Swan, representing IAFF requests Disapprove

Commenter's Reason: Requesting disapproval of the update of UL/CSA/ANCE standard 60335-2-40 to the 2019 edition. The International Association of Fire Fighters represents over 317,000 fire fighters and paramedics in the United States and Canada and these are the bulk of the responders that will be facing this issue. There are many issues of concern with the proposal; no definition of the word "mildly flammable", the marketing department came up with this because it is quickly tied to "when compared to hydrocarbons", A2L must only be used in A2L equipment- we all know this won't happen, what are the combustion byproducts of these new refrigerants, questions related to the detection systems and detectors, using non-standard DOA and NFPA symbols, complete lack of knowledge, analysis and consideration as to: Mitigation of incidents involving now flammable appliances - Tactical considerations for homes containing flammable appliances - Identification of this hazard prior to determining the risk vs. reward of committing personnel to an interior attack.

Based upon the amount of research pending, and the apparent lack of knowledge around some of these issues, the development of regulations enabling the use of flammable refrigerants is premature. If done now without careful thought and consideration the consequences could be catastrophic.

Cost Impact: The net effect of the public comment and code change proposal will not increase or decrease the cost of construction No change to code.

Public Comment 19:

Proponents: Jim Tidwell, representing Honeywell (jimtidwell@tccfire.com) requests Disapprove

Commenter's Reason: This public comment is for disapproval of the proposed update of UL 60335-2-40. This is a product safety standard that covers air conditioning equipment.

The proposal to update the standard for air conditioning systems to allow for the use of flammable refrigerants is premature and in direct conflict with actions taken by the membership in the Group A cycle (IMC and IFC hearings). This is especially relevant for direct systems where a flammable refrigerant can leak in the occupied space. Whether it's a small commercial system or a residential system, the safety issues are the same. The IMC committee rejected each and every proposal to allow increased quantities of flammable refrigerants and their rejections were upheld by the membership. Now, the proponents would have the membership negate that process through an administrative update of the standard. We don't believe it was ever the intent of the ICC Board of Directors to allow an administrative standard update to circumvent the normal code development process, which will be the result if the standard is allowed to be updated.

In addition to the philosophical issues, we believe the update of this product safety standard is premature for the following reasons:

- A product safety standard such as UL-60335-2-40, even if it is appropriate, is only part of the regulatory solution. In addition to the product safety standard, installation criteria are necessary for the safe installation and use of any equipment and that criteria doesn't currently exist. At this time, ASHRAE is in the process of developing the installation standard for this equipment in residential occupancies (ASHRAE 15.2). In the current ASHRAE draft, there are requirements for outdoor equipment to be located a minimum distance from a structure; requirements for protection of piping containing flammable refrigerants and other requirements to attempt to address the additional risks involved with the use of flammable refrigerants. These are not included in the UL standard, as it's only addresses product safety, not installation.
- There are several studies (ASHRAE, AHRI, DOE, etc.) in various stages to validate the requirements set by these standards.
 These studies will likely uncover deficiencies in the standards that will need to be addressed before equipment is actually installed. Note that approximately 8 million air conditioning units are installed in the U.S. each year; getting this right is of paramount importance.
- The UL Standard has not received a review from any ICC technical committee; the Administrative Committee did not debate
 the technical issues related to the standard, although several members of the ICC attempted to address them. The
 Administrative Committee chose to move the standard forward based on the fact that the procedural issues were all satisfied.

In addition to these facts, the membership should be aware that the standard has a number of gaps/issues that many believe are critical and need to be corrected including:

- The standard doesn't require risk mitigation unless the equipment exceeds a certain amount of refrigerant; a formula is used to calculate the maximum amount allowed without mitigation rather than a fixed weight or volume of refrigerant. A research project is currently underway by the Oak Ridge National Laboratory to investigate the proper basis for setting charge limits of all flammable refrigerants; when that study is complete, the results should be used to determine the appropriate amount of flammable refrigerant allowed in the equipment.
- Once triggered, the risk mitigation scheme is to detect any leaking refrigerant and activate mechanical air movement (either circulation or ventilation). There is a study proposed by AHRI to evaluate the detection and mitigation strategies in this standard. It hasn't begun as of this writing, and may identify gaps in the standard in need of attention.
- The standard does not require listed detectors; rather, it requires sensors to be "evaluated" with the air conditioning equipment being listed. This is a significant difference. UL staff testified in the Group A hearings that there is a UL listing standard for these devices, so there should be no reason to allow anything other than listed detectors. The requirements in the latest draft of the standard for evaluation of detectors doesn't address calibration drift, which is a known problem with existing detectors that could render them useless.
- In determining the maximum charge size, the standard assumes that any leak will diffuse completely and immediately
 throughout the room into which it leaks this is a false assumption; no gas or liquid diffuses immediately and completely in
 the atmosphere. If the leak is in liquid form, the situation worsens. In tests at UL, leaks of this fluid actually pooled on the floor
 and off-gassed for some period of time. We don't believe this is addressed in the standard.
- The standard allows unlimited quantities of refrigerant where the system is installed with shutoff valves activated by refrigerant detectors to limit the amount of refrigerant released. Neither the valves nor the detectors are required to be listed. This may be a substantial safety risk, but more research is needed to make that determination.
- Many of the requirements of the standard are based upon complex computer modeling. During actual tests, it was found that turbulence had a significant and dangerous effect on the ignitability and burning characteristics of these refrigerants.
 Turbulence isn't a condition that can be adequately predicted using computer models.
- The standard only requires detection inside equipment. Any failure of piping that results in leaked refrigerant outside the equipment will not result in detection and mitigation.
- In the current draft of the standard, notification of occupants is by a "series of flashing lights", which will not produce adequate information for occupants to react to a leak.

Overturning the committee for this single standard will allow the industry and public safety officials the opportunity to address these important issues; updating to the new standard presents unnecessary and inordinate risks to our communities. Please vote to overturn the committee.

Here is the link to the AHRI report:

http://www.ahrinet.org/App_Content/ahri/files/RESEARCH/Technical%20Results/AHRI_9007-01_Final_Report.pdf

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