IADMIN


# 2022 GROUP B PROPOSED CHANGES TO THE I-CODES ROCHESTER COMMITTEE ACTION HEARINGS

March 27 - April 6, 2022
Rochester Riverside Convention Center, Rochester, NY

ICC
INTERNATIONAL CODE COUNCIL®

2021-2022 Code Development Cycle, Group B (2022) Proposed Changes to the 2021 *International Codes*

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# TENTATIVE ORDER OF DISCUSSION
# 2022 PROPOSED CHANGES TO THE ADMINISTRATIVE PROVISIONS CODE

The following is the tentative order in which the proposed changes to the code will be discussed at the public hearings. Proposed changes which impact the same subject have been grouped to permit consideration in consecutive changes.

Proposed change numbers that are indented are those which are being heard out of numerical order. Indentation does not necessarily indicate that one change is related to another. Proposed changes may be grouped for purposes of discussion at the hearing at the discretion of the chair. Note that some ADM code change proposals may not be included on this list, as they are being heard by another committee.

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# ADM1-22 Part I

**IBC: SECTION 202; IEBC: SECTION 202 (New); IFC: SECTION 202; IFGC: SECTION 202 (New); IMC: SECTION 202 (New); ISPSC: SECTION 202 (New)**

**Proponents:** Jonathan Roberts, representing UL LLC (jonathan.roberts@ul.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 THESE COMMITTEES.**

## 2021 International Building Code

**Revise as follows:**

**[A] LISTED.** Equipment, materials, products or services included in a list published by an organization acceptable to the *building official* and concerned with evaluation of products or services that maintains periodic inspection of production of *listed* equipment or materials or periodic evaluation of services and whose listing states either that the equipment, material, product or service meets identified standards or has been tested and found suitable for a specified purpose. Terms that are used to identify listed equipment, products, or materials include “listed”, “certified”, “classified” or other terms as determined appropriate by the listing organization.

## 2021 International Existing Building Code

**Add new definition as follows:**

**[A] LISTED.** Equipment, materials, products or services included in a list published by an organization acceptable to the code official and concerned with evaluation of products or services that maintains periodic inspection of production of listed equipment or materials or periodic evaluation of services and whose listing states either that the equipment, material, product or service meets identified standards or has been tested and found suitable for a specified purpose. Terms that are used to identify listed equipment, products, or materials include “listed”, “certified”, “classified” or other terms as determined appropriate by the listing organization.

## 2021 International Fire Code

**Revise as follows:**

**[A] LISTED.** Equipment, materials, products or services included in a list published by an organization acceptable to the *fire code official* and concerned with evaluation of products or services that maintains periodic inspection of production of listed equipment or materials or periodic evaluation of services and whose listing states either that the equipment, material, product or service meets identified standards or has been tested and found suitable for a specified purpose. Terms that are used to identify listed equipment, products, or materials include “listed”, “certified”, “classified” or other terms as determined appropriate by the listing organization.

## 2021 International Fuel Gas Code

**Revise as follows:**

**[A] LISTED.** Equipment, materials, products or services included in a list published by an organization acceptable to the code official and concerned with evaluation of products or services that maintains periodic inspection of production of listed equipment or materials or periodic evaluation of services and whose listing states either that the equipment, material, product or service meets identified standards or has been tested and found suitable for a specified purpose. Terms that are used to identify listed equipment, products, or materials include “listed”, “certified”, “classified” or other terms as determined appropriate by the listing organization.

## 2021 International Mechanical Code

**Revise as follows:**

**[A] LISTED.** Equipment, materials, products or services included in a list published by an organization acceptable to the code official and concerned with evaluation of products orservices that maintains periodic inspection of production of listed equipment or materials or periodic evaluation of services and whose listing states either that the equipment, material, product or service meets identified standards or has been tested and found suitable for a specified purpose. Terms that are used to identify listed equipment, products, or materials include “listed”, “certified”, “classified” or other terms as determined appropriate by the listing organization.

## 2021 International Swimming Pool and Spa Code

**Revise as follows:**

**[A] LISTED.** Equipment, materials, products or services included in a list published by an organization acceptable to the code official and concerned with evaluation of products or services that maintains periodic inspection of production of listed equipment or materials or periodic

evaluation of services and whose listing states either that the equipment, material, product or service meets identified standards or has been tested and found suitable for a specified purpose. Terms that are used to identify listed equipment, products, or materials include “listed”, “certified”, “classified” or other terms as determined appropriate by the listing organization.

# ADM1-22 Part II

**IRC: SECTION 202**

**Proponents:** Jonathan Roberts, representing UL LLC (jonathan.roberts@ul.com)

## 2021 International Residential Code

**Revise as follows:**

**[RB] LISTED.** Equipment, materials, products or services included in a list published by an organization acceptable to the code official and concerned with evaluation of products or services that maintains periodic inspection of production of *listed equipment* or materials or periodic evaluation of services and whose listing states either that the *equipment*, material, product or service meets identified standards or has been tested and found suitable for a specified purpose. Terms that are used to identify listed equipment, products, or materials include “listed”, “certified”, “classified” or other terms as determined appropriate by the listing organization. For the definition applicable in Chapter 11, see Section N1101.6.

**Reason Statement:** The proposed revision to the definitions for “Listed” recognizes that listing organizations may use other terms to identify “listed” equipment, products, or materials. Two examples of other terms used meet the definition of listed include “certified” and “classified”. The term “certified” is a more globally recognized term used by listing organizations compared to the term “listed”. The term “classified” has historically referred to building materials evaluated for specific performance aspects such as surface burning characteristics that has also been accepted by code officials as meeting the definition of “Listed".

**Cost Impact:** The code change proposal will not increase or decrease the cost of construction
This is simply modifying the existing definitions of Listed, and adding a definition of Listed where one does not exist.

# ADM2-22

**IBC: SECTION 202, SECTION 202 (New); IFC: SECTION 202, SECTION 202 (New)**

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

## 2021 International Building Code

**Revise as follows:**

**[A] TOWNHOUSE.** A building that contains three or more attached townhouse units. ~~A single-family *dwelling unit* constructed in a group of three or more attached units in which each unit extends from the foundation to roof and with open space on at least two sides.~~

**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.

## 2021 International Fire Code

**Revise as follows:**

**[A] TOWNHOUSE.** A building that contains three or more attached townhouse units. ~~A single-family *dwelling unit* constructed in a group of three or more attached units in which each unit extends from the foundation to roof and with open space on not less than two sides.~~

**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.

**Reason Statement:** This proposal coordinates with changes made by ADM5-19, Part 2, which was approved by the ICC membership last cycle. Part 2 included IRC changes to implement dividing the term "townhouse" into "townhouse" and "townhouse unit." Most occurrences of the term "townhouse" (which is a building containing 3 or more townhouse units) follow a phrase "one- and two-family dwellings," and it should be noted that a "townhouse unit" is defined as a single-family dwelling. Therefore, a phrase "one- and two-family dwelling and townhouse" conveys buildings with one-, two-, and three- or more dwelling units. There is no need to mention "townhouse unit" in these cases because a townhouse unit is a one-family dwelling located in a townhouse (which is a building containing 3 or more such units).
With this in mind, I reviewed the occurrences of the terms "townhouse" and "townhouses" in the IBC and IFC and determined that no additional changes are needed to correlate with the new definitions. There is no impact of the term "townhouse unit" in either code, beyond being needed to support the updated definition of "townhouse."

The IFC uses the term "townhouse" in Sections 903.3.1.3 and 1001.1, in addition to Appendix B. The townhouse unit definition must also be added because that term is used in the definition of townhouse. Last cycle, ICC members voted on ADM5-19 to support these updated definitions at the public comment hearing in response to a comment submitted by the Washington Association of Building Officials. That vote was affirmed in the OGCV by a substantial margin (84% support). To finish what was started last cycle in the IRC, the IFC and IBC need to be updated to correlate with the 2021 IRC.

**Cost Impact:** The code change proposal will not increase or decrease the cost of construction
This change is intended to be editorial. It is simply updating terminology to match the IRC. There are no changes to how buildings are constructed.

# ADM3-22 Part I

**IEBC: [A] 101.2**

**Proponents:** David Bonowitz, representing FEMA-ATC Seismic Code Support Committee (dbonowitz@att.net); Kelly Cobeen, representing Federal Emergency Management Agency/Applied Technology Council - Seismic Code Support Committee (kcobeen@wje.com); Michael Mahoney, representing FEMA (mike.mahoney@fema.dhs.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 IRC-BUILDING CODE COMMITTEE. SEE THE TENTATIVE HEARING ORDER FOR THESE COMMITTEES.**

## 2021 International Existing Building Code

**Revise as follows:**

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

**~~Exception:~~** ~~Detached one- and two-family dwellings and townhouses not more than three stories above grade plane in height with a separate means of egress, and their accessory structures not more than three stories above grade plane in height,~~ Existing buildings whose size and occupancy are within the scope of the *International Residential Code* for new construction shall comply with ~~this code or~~ the *International Residential Code.*

**Staff Analysis:** The scope and intent of the I-codes is subject to the approval of the ICC Board of Directors.

# ADM3-22 Part II

**IRC: R101.2**

**Proponents:** David Bonowitz, representing FEMA-ATC Seismic Code Support Committee (dbonowitz@att.net); Kelly Cobeen, representing Federal Emergency Management Agency/Applied Technology Council - Seismic Code Support Committee (kcobeen@wje.com); Michael Mahoney, representing FEMA (mike.mahoney@fema.dhs.gov)

## 2021 International Residential Code

**Revise as follows:**

**R101.2 Scope.** The provisions of this code shall apply to the construction, *alteration*, movement, enlargement, replacement, *repair*, equipment, use and occupancy, *change of occupancy*, location, removal and demolition of detached one- and two-family dwellings and *townhouses* not more than three stories above *grade plane* in height with a separate means of egress and their *accessory structures* not more than three stories above *grade plane* in height.

**~~Exception:~~** ~~The following shall be permitted to be constructed in accordance with this code~~ The provisions of this code shall also apply to the construction, repair, alteration, *change of occupancy*, addition to, and relocation of the following where provided with an automatic sprinkler system complying with Section P2904:

1. Live/work units located in townhouses and complying with the requirements of Section 508.5 of the International Building Code.
2. Owner-occupied *lodging houses* with five or fewer guestrooms.
3. A care facility with five or fewer persons receiving custodial care within a *dwelling unit*.
4. A care facility with five or fewer persons receiving medical care within a *dwelling unit*.
5. A care facility for five or fewer persons receiving care that are within a single-family dwelling.

**Staff Analysis:** The scope and intent of the I-codes is subject to the approval of the ICC Board of Directors.

**Reason Statement:** This proposal directs certain existing buildings from the IEBC to the IRC. It arises from the simple premise that if you can design or construct a certain building with the IRC, you should be able to – and in fact you should – regulate that same *existing* building with the IRC. The proposal is consistent with past positions of IRC supporters and developers who have advocated for the IRC to be a standalone code covering both new construction and existing building projects.
The IEBC portion of this proposal sends certain existing buildings to the IRC. The IRC portion of this proposal prepares the IRC to receive them.

First, consider the scope of the IRC. Currently, IRC Section R101.2 recognizes two categories of buildings:

- Dwellings, townhouses, and their accessory structures up to three stories. For these buildings, the IRC already covers both their new construction and a range of existing building project types.
- Five listed uses, given in the current exception to Section R101.2: certain live/work townhouses, small lodging houses, and certain small care facilities, all with qualifying sprinkler systems. For these buildings, the current IRC covers their new construction. But as existing buildings, these 5 uses must use the IEBC.

It appears that the only reason the 5 uses are listed in an “exception” is to make a distinction between the types of projects allowed for the first group, and those allowed for the 5 uses in the second group. Therefore, if we want to allow these 5 listed uses to use the IRC for existing building projects too, all we need to do is remove the “exception” and clarify the existing building project types of interest. Those project types are simply the ones already covered in IEBC Section 101.2: repair, alteration, change of occupancy, addition, and relocation.

Is there any reason *not* to allow these 5 uses to be regulated as existing buildings with the IRC? After all, the IRC already has basic existing building provisions in Sections R102.7.1 (“do no harm”), R105.3.1.1 (flood), and R110.2 (change of occupancy), as well as a variety of system-specific existing building provisions throughout the code. These current provisions are already deemed adequate to regulate typical 3-story townhouses, so they should be equally suitable to the 5 listed uses.

One possible objection to allowing these uses to use the IRC is that they would then avoid some of the IEBC’s upgrade triggers for wind, seismic, and other causes. For example, in the IEBC, substantial structural damage or a major alteration could trigger a seismic evaluation and possibly a seismic retrofit. In the IRC, the same intended project would only need to show (per Section R102.7.1) that the repaired or altered building is “no less compliant” when the work is done. Thus, this proposal **will often result in the applicable code being *less* onerous (and construction *less* costly)** than it is currently. While we support the IEBC’s upgrade triggers, we are nevertheless proposing here to trade that reduction in conservatism for clearer and more consistent code applicability. (The reduced conservatism would be limited to the 5 listed uses. Any townhouse up to three stories can already avoid any IEBC triggers by using the current exception to IEBC Section 101.2.)

So the IRC portion of the proposal expands the scope of the IRC to cover the 5 listed uses as existing buildings. Now consider the IEBC portion of

the proposal. The IEBC portion directs both of the building groups discussed above – the usual dwellings and townhouses, as well as the 5 listed uses – to use the IRC instead of the IEBC.

In a separate proposal, we propose that the first group – dwellings and townhouses and their accessory structures – should be *required* to use the IRC. If that proposal is disapproved, then there is no need for this proposal's expansion to the second group. In fact, directing the 5 uses – but not the dwellings and townhouses – to the IRC would create a whole new level of confusion. But if the first proposal is approved, then one of the arguments in its favor applies here too: if a building is designed and built new with the IRC, and it *can* be regulated as an existing building with the IRC, then for consistency, clarity, and usability, it *should* be regulated as an existing building with the IRC.

A note about coordination of the two proposals: The first proposal included a few changes and additions to the IRC to ensure that no building using it would lose any advantages it would have had under the IEBC. This proposal is only a supplement (not an alternative) to that first proposal. Therefore, if that first proposal is approved, there is no need to repeat the extra changes here.

The proposal makes the following specific changes:

**IEBC Section 101.2:** The edits to this section do two things:

- The scope of the exception is widened to include all of the buildings that would be covered by the IRC as new construction – the dwellings, townhouses, and accessory structures up to three stories (which are already covered by the current exception) and the 5 listed uses within the IRC scope.
- It changes the use of the IRC from an option to a requirement. Currently, the 5 listed uses would be required to use the IEBC for existing building projects. With this proposal, they will be required to use the IRC. Since the IEBC would no longer be an option, the second paragraph is no longer an "exception."

**IRC Section R101.2:** The edits to this section do two things:

- In the first sentence, the "change of occupancy" project type is added to the current list. This ensures that the IRC scope covers all five IEBC project types – addition (i.e. enlargement), alteration, repair, relocation (i.e. movement) and, now, change of occupancy. Current R101.2 already lists "use and occupancy," so it's possible that the current IRC already intends to cover change of occupancy, but the edit is recommended in any case for completeness and consistency. There is no doubt that the IRC does intend to cover change of occupancy, since that project type is already defined in IRC Chapter 2 and mentioned in IRC Sections R102.7.1, R105.1, and R110.2.
- The exception is changed to an additional scope statement. The only reason the 5 listed uses are given in an "exception" is to make clear that the IRC covers them only for new construction, not for any of the existing building project types. The point of this proposal is to expand the IRC scope to cover the 5 listed uses also as existing buildings, so the "exception" no longer applies. "Construction" of the 5 uses is already covered. This edit adds the IEBC project types – repair, alteration, change of occupancy, addition, and relocation – to the IRC scope.

**Cost Impact:** The code change proposal will decrease the cost of construction
By requiring use of the IRC for the 5 special uses listed in IRC Section R101.2, this proposal removes all the upgrade triggers that might have applied in the IEBC. In addition, since this proposal will only work together with a separate proposal that adds certain IEBC cost advantages (allowances for existing materials, etc.) to the IRC, there can be no increase in cost by using the IRC. Therefore, the cost of any existing building project for these 5 listed uses will be the same (for small projects) or less (for large projects that would have triggered more work in the IEBC).

# ADM4-22 Part I

**IEBC: [A] 101.2**

**Proponents:** David Bonowitz, representing FEMA-ATC Seismic Code Support Committee (dbonowitz@att.net); Kelly Cobeen, representing Federal Emergency Management Agency/Applied Technology Council - Seismic Code Support Committee (kcobeen@wje.com); Michael Mahoney, representing FEMA (mike.mahoney@fema.dhs.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 IRC-BUILDING CODE COMMITTEE. SEE THE TENTATIVE HEARING ORDER FOR THESE COMMITTEES.**

## 2021 International Existing Building Code

**Revise as follows:**

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

> ~~**Exception:** Detached one- and two-family dwellings and townhousesnot 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,~~ Existing buildings whose size and occupancy are within the scope of the *International Residential Code* for repair, alteration, *change of occupancy*, addition, and relocation shall comply with ~~this code or~~ the *International Residential Code.*

**Staff Analysis:** The scope and intent of the I-codes is subject to the approval of the ICC Board of Directors.

# ADM4-22 Part II

**IRC: R101.2**

**Proponents:** David Bonowitz, representing FEMA-ATC Seismic Code Support Committee (dbonowitz@att.net); Kelly Cobeen, representing Federal Emergency Management Agency/Applied Technology Council - Seismic Code Support Committee (kcobeen@wje.com); Michael Mahoney, representing FEMA (mike.mahoney@fema.dhs.gov)

## 2021 International Residential Code

**Revise as follows:**

**R101.2 Scope.** The provisions of this code shall apply to the construction, *alteration*, movement, enlargement, replacement, *repair*, equipment, use and occupancy, *change of occupancy*, location, removal and demolition of detached one- and two-family dwellings and *townhouses* not more than three stories above *grade plane* in height with a separate means of egress and their *accessory structures* not more than three stories above *grade plane* in height.

**~~Exception:~~** ~~The following shall be permitted to be constructed in accordance with this code~~ The provisions of this code shall also apply to the construction of the following where provided with an automatic sprinkler system complying with Section P2904, and to the repair, alteration, *change of occupancy*, addition to and relocation of of the following regardless of the presence of an automatic sprinkler system:

1. Live/work units located in townhouses and complying with the requirements of Section 508.5 of the International Building Code.
2. Owner-occupied *lodging houses* with five or fewer guestrooms.
3. A care facility with five or fewer persons receiving custodial care within a *dwelling unit*.
4. A care facility with five or fewer persons receiving medical care within a *dwelling unit*.
5. A care facility for five or fewer persons receiving care that are within a single-family dwelling.

**Staff Analysis:** The scope and intent of the I-codes is subject to the approval of the ICC Board of Directors.

**Reason Statement:** This proposal directs certain existing buildings from the IEBC to the IRC. It expands the scope of the IRC as a code for existing buildings. It is consistent with past positions of IRC supporters and developers who have advocated for the IRC to be a standalone code covering both new construction and existing building projects.
The proposal assumes that a separate proposal, expanding the scope of the IRC to certain existing buildings with automatic sprinkler systems, will be approved. If those buildings – the five listed uses in the current exception to IRC Section R101.2 – are going to use the IRC for existing building projects, then similar buildings with deficiencies or non-conforming conditions should use the IRC too. (The only difference between this proposal and that separate proposal is the inclusion here of buildings without qualifying sprinkler systems. If that separate proposal is disapproved, then we expect this proposal to be disapproved for the same reasons.)

Current IRC Section R101.2 (plus R102.7.1, R110.2, etc.) makes clear that the IRC is meant to function as a code for existing buildings. And any code for existing buildings must be able to accommodate non-conforming conditions, and even deficiencies. **Indeed, that is the main purpose of an existing building code.** The lack of a qualifying sprinkler system is just one type of deficiency or non-conforming condition.

The current IRC already admits any number of deficient and non-conforming buildings within its scope. Nothing in the first sentence of current Section R101.2 limits the code's application based on a building's age, condition, location, exposure to environmental loads, or obsolete construction. Similarly, the current exception to IEBC Section 101.2, which was added to the 2018 code, encourages certain dwellings and townhouses to use the IRC even if they're deficient or would be ineligible for the IRC as new construction.

And consider the separate proposal that points the 5 listed uses to the IRC if they *do* have sprinklers. Even in those cases the building can be non-conforming in terms of its structure, energy efficiency, plumbing, accessibility, etc. and is still allowed to use the IRC.

Two other considerations, both of which argue for approval of this proposal:

- If this proposal is disapproved, these non-sprinklered existing buildings would be regulated by the IEBC, but that won't get them sprinklered. So if the intent is to encourage sprinklers, keeping these existing buildings out of the IRC doesn't make a difference.
- The current code doesn't only require sprinklers, it requires compliance with Section P2904, which could change in the future. Thus, every time a building with one of the 5 listed uses has an existing building project, you would have to check its existing sprinkler system just to know which code to use. Better to just bring it under the IRC at the start.

The specific changes to IEBC Section 101.2 and IRC Section R101.2 are essentially the same as those in the separate proposal that expanded the existing building scope to the 5 listed uses. The only difference between this proposal and that separate proposal is the inclusion here of buildings without qualifying sprinkler systems.

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

By requiring use of the IRC for the 5 special uses listed in IRC Section R101.2, this proposal removes all the upgrade triggers that might have applied in the IEBC. In addition, since this proposal will only work together with a separate proposal that adds certain IEBC cost advantages (allowances for existing materials, etc.) to the IRC, there can be no increase in cost by using the IRC. Therefore, the cost of any existing building project for these 5 listed uses will be the same (for small projects) or less (for large projects that would have triggered more work in the IEBC).

# ADM5-22

**ISPSC: [A] 101.2, [A] 102.4**

**Proponents:** Nicholas Capezza, Pool & Hot Tub Alliance, representing Pool & Hot Tub Alliance (ncapezza@phta.org); Jennifer Hatfield, representing Pool & Hot Tub Alliance (jhatfield@phta.org)

## 2021 International Swimming Pool and Spa Code

**Revise as follows:**

**[A] 101.2 Scope.** The provisions of this code shall apply to the construction, alteration, movement~~, renovation~~, replacement, repair and maintenance of aquatic recreation facilities, pools and spas. The pools and spas covered by this code are either permanent or temporary, and shall be only those that are designed and manufactured to be connected to a circulation system and that are intended for swimming, bathing or wading.

**[A] 102.4 Additions, alterations or repairs.** ~~Additions, *alterations* *Alterations*~~, ~~renovations~~ or *repairs* to any pool, spa or related system shall conform to that required for a new system without requiring the existing systems to comply with the requirements of this code. Additions, alterations or repairs shall not cause existing systems to become unsafe, insanitary or overloaded.
Minor additions, alterations, ~~renovations~~ and repairs to existing systems shall be permitted in the same manner and arrangement as in the existing system, provided that such repairs or replacement are not hazardous and are *approved*.

**Reason Statement:** The term renovation is not defined in the I-Codes including the International Swimming Pool and Spa Code. Alteration is defined and includes renovation as part of its definition; use of the word renovation is redundant, unnecessary and potentially confusing.

**Cost Impact:** The code change proposal will not increase or decrease the cost of construction
This proposal will not increase the cost of construction because no additional labor, materials, equipment, appliances, or devices are mandated beyond what is currently required by the code.

# ADM6-22

**IWUIC: [A] 101.2**

**Proponents:** Dennis Richardson, representing self (dennisrichardsonpe@yahoo.com)

## 2021 International Wildland-Urban Interface Code

**Revise as follows:**

**[A] 101.2 Scope.** The provisions of this code shall apply to the construction, alteration, movement, repair, rebuilding, maintenance and use of any building, structure or premises within the *wildland-urban interface areas* in this jurisdiction.
When a fire incident spreads outside of a wildland-urban interface area into an area that is not regulated by this code, rebuilding of new replacement buildings shall comply with this code as applied in the area where the fire spread from.

Buildings or conditions in existence at the time of the adoption of this code are allowed to have their use or occupancy continued, if such condition, use or occupancy was legal at the time of the adoption of this code, provided that such continued use does not constitute a distinct danger to life or property.

Buildings or structures moved into or within the jurisdiction shall comply with the provisions of this code for new buildings or structures.

**Reason Statement:** Numerous recent fires in CA have shown that destructive WUI fires are not limited to WUI areas. A misattributed quote “The definition of insanity is doing the same thing over and over again and expecting different results” is applicable to WUI fires. For example: in Santa Rosa, CA, the Tubbs fire traveled over 15 miles in one night before jumping a freeway and burning thousands of home in Coffey Park as well as other neighborhoods. Nearly all of those homes are now rebuilt to non-WUI standards in Coffey Park which is located outside of the official WUI area.

Coffey Park is a flat urban area located west of a canyon regulated by the WUI provisions. Diablo winds from the east to west appear regularly in the fall and can serve to push embers from the WUI area into the non WUI urban area. By the time that happens there is little fire resource to protect those non WUI areas. When portions or entire neighborhoods burn down, these homes can be reasonably be expected to exposed to a similar hazard again some day in the future. The WUI provisions are more effective if all of the homes in a group comply with this code. Clearly homes burned down in mass from a WUI fire should be rebuilt to the WUI standards. Waiting for the wheels of government to reclassify areas after a conflagration does not result in WUI hardened structures being built as replacements.

**Cost Impact:** The code change proposal will increase the cost of construction
I am the design professional for a homeowner in Coffey Park, Santa Rosa, who wanted to rebuild and have a chance of surviving the next conflagration. Experience has shown it is very difficult and costly to design a single home that can survive such a conflagration when surrounded by homes that do not meet any WUI provisions. Though more costly, it is more effective for a neighborhood to require the WUI provisions spread throughout the neighborhood as a form of herd immunity from blowing embers rather than trying to make single homes have the ability to withstand a future conflagration. If the code requires the WUI provisions for rebuilds then many insurance policies offer coverage for rebuilding under more stringent code requirements.

# ADM7-22 Part I

**ICCPC: 101.3.3 (New); IEBC: 101.2.1 (New), [A] 101.6; IFGC: [A] 101.3; IPC: [A] 101.2, 101.2.1 (New); IPMC: 101.2.1 (New); ISPSC: 101.2.1 (New); IGCC: 101.3.2 (New)**

**Proponents:** Mike Nugent, representing 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.**

## 2021 International Code Council Performance Code

**Add new text as follows:**

**101.3.3 Appendices.** Provisions in the appendices shall not apply unless specifically adopted.

## 2021 International Existing Building Code

**Add new text as follows:**

**101.2.1 Appendices.** Provisions in the appendices shall not apply unless specifically adopted.

**Delete without substitution:**

~~**[A] 101.6 Appendices.** The *code official* is authorized to require retrofit of buildings, structures or individual structural members in accordance with the appendices of this code if such appendices have been individually adopted.~~

## 2021 International Fuel Gas Code

**Revise as follows:**

**[A] 101.2.1 ~~101.3~~ Appendices.** Provisions in the appendices shall not apply unless specifically adopted.

## 2021 International Plumbing Code

**Revise as follows:**

**[A] 101.2 Scope.** The provisions of this code shall apply to the erection, installation, alteration, repairs, relocation, replacement, addition to, use or maintenance of plumbing systems within this jurisdiction. This code shall regulate nonflammable medical gas, inhalation anesthetic, vacuum piping, nonmedical oxygen systems and sanitary and condensate vacuum collection systems. The installation of fuel gas distribution piping and equipment, fuel-gas-fired water heaters and water heater venting systems shall be regulated by the *International Fuel Gas Code* . ~~Provisions in the appendices shall not apply unless specifically adopted.~~

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

**Add new text as follows:**

**101.2.1 Appendices.** Provisions in the appendices shall not apply unless specifically adopted.

## 2021 International Property Maintenance Code

**Add new text as follows:**

**101.2.1 Appendices.** Provisions in the appendices shall not apply unless specifically adopted.

## 2021 International Swimming Pool and Spa Code

**Add new text as follows:**

**101.2.1 Appendices.** Provisions in the appendices shall not apply unless specifically adopted.

## 2021 International Green Construction Code

**Add new text as follows:**

**101.3.2 Appendices.** Provisions in the appendices shall not apply unless specifically adopted.

# ADM7-22 Part II

**IRC: R102.5**

**Proponents:** Mike Nugent, representing Building Code Action Committee (bcac@iccsafe.org)

## 2021 International Residential Code

**Revise as follows:**

~~**R102.5**~~ **R101.2.1 Appendices.** Provisions in the appendices shall not apply unless specifically ~~referenced in the adopting ordinance~~ adopted.

**Reason Statement:** Appendices are in all of the codes except for IZC. The intent is to put information about their adoption for inclusion in the same location in all of the codes immediately following the section on scope. This is already the case in the IBC, IFC, IMC, IPSDC and IWUIC. This section is added to ICCPC, IGCC, IPMC, and ISPSC. This section is relocated in the IEBC, IFGC, IPC and IRC. This will also be proposed to the first public draft of the IECC.
This proposal is submitted by the ICC Building Code Action Committee (BCAC) and ICC Plumbing/Mechanical/Gas Code Action Committee (PMGCAC).

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. In 2020 and 2021 the BCAC has held several virtual meetings open to any interested party. In addition, there were numerous virtual Working Group meetings for the current code development cycle, which included members of the committee as well as interested parties. Related documents and reports are posted on the BCAC website at https://www.iccsafe.org/products-and-services/i-codes/code-development/cs/building-code-action-committee-bcac/.

The PMG CAC was established by the ICC Board of Directors in July 2011 to pursue opportunities to improve and enhance assigned International Codes or portions thereof. In 2020 and 2021, the PMGCAC has held several virtual meetings open to any interested party. Numerous interested parties attended the committee meetings and offered their input.

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

# ADM8-22

**IFC: [A] 101.3; IWUIC: [A] 101.3**

**Proponents:** Carl Baldassarra, representing Self (cbaldassarra@wje.com)

## 2021 International Fire Code

**Revise as follows:**

**[A] 101.3 Purpose.** The purpose of this code is to establish the minimum requirements ~~consistent with nationally recognized good practice~~ for providing a reasonable level of life safety and property protection from the hazards of fire, explosion or dangerous conditions in new and existing buildings, structures and premises, and to provide a reasonable level of safety to fire fighters and emergency responders during emergency operations.

## 2021 International Wildland-Urban Interface Code

**Revise as follows:**

**[A] 101.3 Purpose.** The purpose of this code is to establish minimum regulations ~~consistent with nationally recognized good practice~~ for the safeguarding of life and for property protection. Regulations in this code are intended to mitigate the risk to life and structures from intrusion of fire from wildland fire exposures and fire exposures from adjacent structures and to mitigate structure fires from spreading to wildland fuels. The extent of this regulation is intended to be tiered commensurate with the relative level of hazard present.
The unrestricted use of property in *wildland-urban interface areas* is a potential threat to life and property from fire and resulting erosion. Safeguards to prevent the occurrence of fires and to provide adequate fire protection facilities to control the spread of fire in *wildland-urban interface areas* shall be in accordance with this code.

This code shall supplement the jurisdiction's building and fire codes, if such codes have been adopted, to provide for special regulations to mitigate the fire- and life-safety hazards of the *wildland-urban interface areas*.

**Reason Statement:** This section of the code is often used in matters involving litigation and is, therefore, important to correctly reflect its purpose. This is an editorial change to assure consistency among the similar provisions in the I-codes.
The statement that the IFC and IWUIC are "consistent with nationally recognized good practice" is not always true and could be used to challenge certain requirements that may be found to be inconsistent. Why allow such a challenge?

In fact, the IFC and IWUIC are in themselves documents establishing "nationally-recognized good practice."

It is recognized that the IFC and IWUIC adopt other nationally-recognized codes and standards by reference, but there are numerous amendments in those adoptions that contradict the statement about being consistent.

Also, there is no such language in the I-codes other than the IFC and the IWUIC.

This change is part of an effort to assure consistency among the similar provisions in the I-codes that I initiated a few cycles ago.

**Cost Impact:** The code change proposal will not increase or decrease the cost of construction
This proposal does not add or delete requirements affecting cost.

# ADM9-22

**ICCPC: CHAPTER 1, [A] 101.3.1, [A] 101.3.2**

**Proponents:** David Collins, representing Self; Ronald Geren, representing The American Institute of Architects (ron@specsandcodes.com); Paul Karrer, representing The American Institute of Architects (paulkarrer@aia.org)

## 2021 International Code Council Performance Code

### CHAPTER 1
### SCOPE AND ADMINISTRATION

**Revise as follows:**

**[A] 101.3~~.1 Building~~ Scope.** ~~Part II of t~~ This code provides requirements for buildings and structures and includes provisions for structural strength, stability, sanitation, means of access and egress, light and ventilation, safety to life and protection of property from fire and, in general, to secure life and property from other hazards affecting the built environment. This code includes provisions for the use and occupancy of buildings, structures, facilities and premises, their alteration, repair, maintenance, removal, demolition, and the installation and maintenance of amenities including, but not limited to, such services as the electrical, gas, mechanical, plumbing, energy conservation and building transportation systems; and for the storage, handling and use of explosive, flammable and combustuble materials, hazardous materials and dangerous operations and processes.

**[A] ~~101.3.2 Fire.~~** ~~Part III of this code establishes requirements applicable to the use and occupancy of buildings, structures and facilities; and to the prevention, control and mitigation of fire, life safety and property hazards arising from this use and from the storage, handling and use of explosive, flammable and combustible materials, hazardous materials and dangerous operations and processes.~~

**Reason Statement:** In 2018, the president of the AIA established a Blue Ribbon Panel to examine the future of the architectural profession and its relationship to codes and standards as part of AIA's public policies.
*We stand for protecting communities from the impact of climate change. Global warming and man-made hazards pose an increasing threat to the safety of the public and the vitality of our nation. Rising sea levels and devastating natural disasters result in unacceptable losses of life and property. Resilient and adaptable buildings are a community's fires line of defense against disasters and changing conditions of life and property. This is why we advocate for robust building codes and policies that make our communities more resilient.*

A key finding of the Blue Ribbon Panel was the need to direct the architect's practices toward higher performing buildings, while meeting and exceeding the standards adopted in our communities. AIA's 2019 and 2020 Codes and Standards Committee began that effort by reviewing the ICC's Performance Building Code that has remained largely unchanged since its initial publication in 2003.

This effort has led to the development of a series of changes intended to improve the usefulness of the International Code Council Performance Code for Buildings and Facilities (ICCPC). Many of these changes are proposed to clarify and coordinate the ICCPC with the family of I-Codes that have been advanced since the initial effort to create this performance based code. Some findings are best addressed in the guide for the use of the ICCPC. AIA has already reached out to the ICC staff to facilitate that effort following the completion of these code change.

A significant part of the proposed changes in Group A consolidate various requirements on the same subject that are currently located in different parts of the code for no apparent reason. Doing so left some things unsaid in one part that are stated in another without reference. Design and evaluation of performance designs and the disparate elements of a building aren't done independently, but are a part of a comprehensive examination of the involved systems and materials associated with the design. In the Group A hearings we submitted Code Changes PC1, PC10, PC11, PC12, PC13, PC14, PC15, PC16, PC17 and PC18 that were all approved.

This change is proposed to continue the effort to make the Performance Code better.

In addition, ICC's Board of Directors has authorized a study being performed by Brian Meachum, FSFPE to evaluate the future of the ICCPC. To date the results of that work appear encouraging. To help forward that effort, AIA Codes and Standards Committee has prepared a series of changes that take the next step in Group B changes to improve the code for all to use. The need to split the ICCPC into three parts that can be adopted independently defeats the purpose of having a single, comprehensive performance code. The proposed changes approved during the Group A hearings reorganized similar content that was included in both Parts II and III into a single location; thus, eliminating duplicative content.

**Cost Impact:** The code change proposal will not increase or decrease the cost of construction
The consolidation of the scope provisions in the ICCPC from Part II and Part III does not cause the design or construction of buildings using this code to change. This proposal addresses changes already approved by ICC voters in Group A in 2021. There is no change to the technical content of the provisions, only the reorganization of the original content, which should not cause any cost impact when approving this proposal.

# ADM10-22

**ICCPC: [A] 101.4.1, [A] 101.4.2**

**Proponents:** David Collins, representing Self (dcollins@preview-group.com); Ronald Geren, representing The American Institute of Architects (ron@specsandcodes.com); Paul Karrer, representing The American Institute of Architects (paulkarrer@aia.org)

## 2021 International Code Council Performance Code

**Revise as follows:**

**[A] 101.4.1 Building.** The purpose of this code is to provide an acceptable level of health, safety, and general welfare and to limit damage to property from events that are expected to impact buildings and structures. Accordingly, Part II of this code intends buildings and structures to provide for the following:

~~1. An environment free of unreasonable risk of death and injury from fires.~~

1. ~~2.~~ A structure that will withstand loads associated with normal use and of the severity associated with the location in which the structure is constructed.
2. ~~3.~~ Means of egress and access for normal and emergency circumstances.

~~4. Limited spread of fire both within the building and to adjacent properties.~~

3. ~~5.~~ Ventilation and sanitation facilities to maintain the health of the occupants.
4. ~~6.~~ Natural light, heating, cooking and other amenities necessary for the well being of the occupants.
5. ~~7.~~ Efficient use of energy.

~~8. Safety to fire fighters and emergency responders during emergency operations.~~

**[A] 101.4.2 Fire.** Part III of this code establishes requirements necessary to provide a reasonable level of life safety and property from the hazards of fire, explosion or dangerous conditions in facilities, equipment and processes. accordingly, Part III of this code intends buildings and structures to provide for the following:

1. An environment free of unreasonable risk of death and injury from fires.
2. Limited spread of fire both within the building and to adjacent properties.
3. Safety to fire fighters and emergency responders during emergency operations.

**Reason Statement:** In 1998, the president of the AIA established a Blue Ribbon Panel to examine the future of the architectural profession and its relationship to codes and standards as part of AIA's public policies.
*We stand for protecting communities from the impact of climate change. Global warming and man-made hazards pose an increasing threat to the safety of the public and the vitality of our nation. Rising sea levels and devastating natural disasters result in unacceptable losses of life and property. Resilient and adaptable buildings are a community's fires line of defense against disasters and changing conditions of life and property. This is why we advocate for robust building codes and policies that make our communities more resilient.*

A key finding of the Blue Ribbon Panel was the need to direct the architect's practices toward higher performing buildings, while meeting and exceeding the standards adopted in our communities. AIA's 2019 and 2020 Codes and Standards Committee began that effort by reviewing the ICC's Performance Building Code that has remained largely unchanged since its initial publication in 2003.This effort has led to the development of a series of changes intended to improve the usefulness of the International Code Council Performance Code for Buildings and Facilities (ICCPC). Many of these changes are proposed to clarify and coordinate the ICCPC with the family of I-Codes that have been advanced since the initial effort to create this performance based code. Some findings are best addressed in the guide for the use of the ICCPC. AIA has already reached out to the ICC staff to facilitate that effort following the completion of these code change.

A significant part of the proposed changes in Group A consolidate various requirements on the same subject that are currently located in different parts of the code for no apparent reason. Doing so left some things unsaid in one part that are stated in another without reference. Design and evaluation of performance designs and the disparate elements of a building aren't done independently, but are a part of a comprehensive examination of the involved systems and materials associated with the design. In the Group A hearings we submitted Code Changes PC1, PC10, PC11, PC12, PC13, PC14, PC15, PC16, PC17 and PC18 that were all approved.

In addition, ICC's Board of Directors has authorized a study currently being performed by Bryan Meachum, Ph.D., P.E. (CT&MA), CEng. (UK), EUR ING, FIFireE, FSFPE, to evaluate the future of the ICCPC. To date the results appear encouraging. To that end we have prepared a series of changes that take the next step in Group B changes to improve the code for all to use.

This change is proposed to continue the effort to make the Performance Code better.

This change responds to the fire-related content located in Part II that was modified in the Group A changes and added to the similar content located in Part III. Revising these two sections aligns them with content that is located within the two Parts.

**Cost Impact:** The code change proposal will not increase or decrease the cost of construction
This proposal only revises the content to correlate the section with previously approved changes.

ADM10-22

# ADM11-22

**ICCPC: [A] 102.2.10, [A] 102.2.11, [A] 102.3.4.2, [A] 102.3.9.2, [A] 102.3.9.2.1, [A] 102.3.9.2.2, [A] 102.3.9.2.3, [A] 102.3.9.2.4 (New), [A] 102.3.10.2, [A] 102.3.10.3**

**Proponents:** David Collins, representing Self (dcollins@preview-group.com); Ronald Geren, representing The American Institute of Architects (ron@specsandcodes.com); Paul Karrer, representing The American Institute of Architects (paulkarrer@aia.org)

## 2021 International Code Council Performance Code

**Revise as follows:**

**[A] 102.2.10 Maintenance.** Maintenance of the performance-based design shall be ensured through the issuance and renewal of certificates over the life of the building in compliance with Sections 102.3.9.2 and 102.3.10.

**[A] 102.2.11 Management of change.** The owner or the owner's authorized agent shall prepare ~~Written~~ written procedures for managing ~~change~~ changes to original *construction documents*, system processes, technology, equipment and facilities ~~shall be established and implemented~~. These procedures shall also include procedures for the inspection and renewal of the certificate of compliance by the code official in compliance with Section 102.3.9.2.

**[A] 102.3.4.2 Reports and manuals.** Where required by the code official, design documentation shall include a concept report, design report and operations and maintenance manual. When using performance-based design for alternative materials, design and methods of construction in accordance with one or more of the following, the design documentation shall only be required to the extend ot the perfornace-based design.

1. Section 104.11 of the *International Building Code.*
2. Section 104.11 of the *International Existing Building Code.*
3. Section 104.10 of the *International Fire Code.*
4. Section 105.2 of the *International Plumbing Code.*
5. Section 105.2 of the *International Mechanical Code.*
6. Section 105.2 of the *International Fuel Gas Code.*
7. Section 105.2 of the *International Private Sewage Disposal Code.*

**[A] 102.3.9.2 Certificate of compliance.** Prior to use of a building, facility, process or premises subject to ~~Part III of~~ this code, a certificate of compliance shall be obtained from the code official.

**[A] 102.3.9.2.1 Continued use.** A certificate of compliance is required for the continued use or occupancy of a facility, process or equipment subject to ~~Part III of~~ this code throughout the life of the facility.

**[A] 102.3.9.2.2 Renewal frequency.** The certificate of compliance issued subject to ~~Part III of~~ this code shall be renewed at a frequency ~~as determined in the design and approved by the code official.~~ of not more than every 2 years. The certificate of compliances shall also be renewed when the building, facilities, equipment, processes, materials, contents, or policies are changed or modified in accordance with Section 102.2.11. Requests for inspections by the building official required for renewal of the certificate of compliance shall be the responsibility of the owner or the owner's authorized agent.

**[A] 102.3.9.2.3 Revocation and renewal.** Failure of the owner or the owner's authorized agent to demonstrate compliance with this section is cause to revoke or not renew the certificate of compliance.

**Add new text as follows:**

**[A] 102.3.9.2.4 Certificate of compliance renewal inspector.** The code official may choose to have the building, facilities, equipment, processes, materials, contents, or policies inspected for the certificate of compliance by a special expert. The special expert for the renewal of each certificate of compliance shall meet the requirements of Appendix D101.4.

**Revise as follows:**

**[A] 102.3.10.2 Continued compliance.** Compliance with the operations and maintenance manual and bounding conditions shall be verified throughout the life of the building or facility at a frequency in accordance with the approved documents.

**[A] 102.3.10.3 Compliance verification.** Documents verifying that the building, facilities, premises, processes and contents are in compliance with the approved *construction documents* and are maintained in a safe manner shall be filed with the code official at a frequency approved by the code official.

**Reason Statement:** In 2018, the president of the AIA established a Blue Ribbon Panel to examine the future of the architectural profession and its relationship to codes and standards as part of AIA's public policies.
*We stand for protecting communities from the impact of climate change. Global warming and man-made hazards pose an increasing threat to the*

*safety of the public and the vitality of our nation. Rising sea levels and devastating natural disasters result in unacceptable losses of life and property. Resilient and adaptable buildings are a community's fires line of defense against disasters and changing conditions of life and property. This is why we advocate for robust building codes and policies that make our communities more resilient.*

A key finding of the Blue Ribbon Panel was the need to direct the architect's practices toward higher performing buildings, while meeting and exceeding the standards adopted in our communities. AIA's 2019 and 2020 Codes and Standards Committee began that effort by reviewing the ICC's Performance Building Code that has remained largely unchanged since its initial publication in 2003.

This effort has led to the development of a series of changes intended to improve the usefulness of the International Code Council Performance Code for Buildings and Facilities (ICCPC). Many of these changes are proposed to clarify and coordinate the ICCPC with the family of I-Codes that have been advanced since the initial effort to create this performance based code. Some findings are best addressed in the guide for the use of the ICCPC. AIA has already reached out to the ICC staff to facilitate that effort following the completion of these code change.

A significant part of the proposed changes in Group A consolidate various requirements on the same subject that are currently located in different parts of the code for no apparent reason. Doing so left some things unsaid in one part that are stated in another without reference. Design and evaluation of performance designs and the disparate elements of a building aren't done independently, but are a part of a comprehensive examination of the involved systems and materials associated with the design. In the Group A hearings we submitted Code Changes PC1, PC10, PC11, PC12, PC13, PC14, PC15, PC16, PC17 and PC18 that were all approved.

In addition, ICC's Board of Directors has authorized a study currently being performed by Brian Meachum, Ph.D., P.E. (CT&MA), CEng. (UK), EUR ING, FIFireE, FSFPE, to evaluate the future of the ICCPC. To date the results appear encouraging. To that end we have prepared a series of changes that take the next step in Group B changes to improve the code for all to use.

This change is proposed to continue the effort to make the Performance Code better. The following are specific to each change.

**102.2.10 and 102.2.11:**

This change will tie some of the sections of the code together for a more cohesive and direct requirement for inspection and renewal of the certificate of compliance. As most buildings do experience change, we are making it clear that the code requires procedures for how changes are handled that become part of the construction documents for approval by the code official.

**102.3.4.2:**

The ICC Performance Code (ICCPC) should not be considered solely for whole building designs, but also as another pathway for evaluating alternative materials, designs, and methods of construction. When projects are designed per the prescriptive requirements of any ICC code, there are situations where a single material, element, or system cannot conform to the prescriptive requirements. Also, new materials, elements, or systems are entering the construction market at a pace that the prescriptive codes cannot keep up.

Although the prescriptive provisions in each of the codes provides one pathway for approval of alternative materials, designs, and methods of construction, the ICCPC should not be overlooked as an alternative pathway. The ICCPC may be considered by the building official as an alternative method in and of itself per any of the sections listed, by including it within the text of each section will draw much greater attention to the ICCPC and thereby increase its use and adoption.

**102.3.9.2 and 102.3.10:**

This change makes it clear that the requirements for when the certificate of compliance is required is not just for just Part III of this code, but is applicable to all Performance Code designs. In addition this change will make it clear that the certificate is to be reviewed on a maximum timeframe of two years, and requires the review to occur when changes are made to any part of the building, facilities, equipment, processes, materials, contents, or policies. It also specifically makes the owner responsible for the renewals.

**Cost Impact:** The code change proposal will not increase or decrease the cost of construction
This code change proposal is connected with seven other code change proposals offered by AIA modifying the administration and enforcement requirements in Chapter 1 of seven other I-Codes (IBC, IEBC, IFC, IFGC, IPC, IPSDC, and IMC). It provides an additional option connecting those codes to the ICCPC for those projects that wish to pursue more performance-based solutions. It clarifies the scope of the application of the ICCPC in the situations when one of these new proposed options would be used by an individual project. Clarification within the code will allow the owner, designer, and code official a clear path toward approval of projects and clear responsibility for the development of procedures to do so.

This change to the ICCPC does not add a requirement that individual projects must comply with. ICC's Cost Impact Guide cites code change proposals that modify the design requirements (e.g. greater number of design options, design process efficiencies) as recognized instances of proposals that do not affect the construction or construction cost. Providing projects a route to use the ICC Performance Code to evaluate materials, designs and methods of construction does not impact the cost of construction.

# ADM12-22

**IGCC: TABLE 101.5.1**

**Proponents:** Emily Toto, representing ASHRAE (etoto@ashrae.org)

## 2021 International Green Construction Code

**Revise as follows:**

## TABLE 101.5.1 REQUIREMENTS DETERMINED BY THE JURISDICTION

| SECTION | SECTION TITLE | JURISDICTIONAL REQUIREMENT |
|---|---|---|
| **Chapter 5—Site Sustainability** | | |
| 501.3.5.2 (5.3.5.2) | Mitigation of Heat Island Effect—Walls | __ No |
| 501.3.6 (5.3.6) | Reduction of Light Pollution | __ No |
| 501.3.7.2.2 (5.3.7.2.2) | Bicycle Parking Location | __ No |
| 501.3.7.2.3 (5.3.7.2.3) | Bicycle Parking, Horizontal Parking Racks | __ No |
| 501.3.7.2.5 (5.3.7.2.5) | Bicycle Parking, Security and Visibility | __ No |
| 501.3.8.1 (5.3.8.1) | Building Site Waste Management—Diversion Percentage | __ 75% __ 50% |
| **Chapter 6—Water Use Efficiency** | | |
| 601.3.1.2.1(a,3) [6.3.1.2.1(a,3)] | Irrigation System Design, Master Valve | __ No |
| 601.3.1.2.1(a,4) [6.3.1.2.1(a,4)] | Irrigation System Design, Flow Sensors | __ No |
| 601.3.4 (6.3.4) | Special Water Features | __ No |
| 601.3.5.2 (6.3.5.2) | Consumption Data Collection | __ No |
| 601.3.5.3 (6.3.5.3) | Data Storage and Retrieval | __ No |
| 601.3.9 (6.3.9) | Dual Water Supply Plumbing | __ No |
| **Chapter 7—Energy Efficiency** | | |
| 701.4.2.1 (7.4.2.1) | Building Envelope Requirements | __ No |
| 701.4.2.3 (7.4.2.3) | Single Rafter Roof Insulation | __ No |
| 701.4.2.4 (7.4.2.4) | High-speed Doors | __ No |
| 701.4.2.7 (7.4.2.7) | Permanent Projections | __ No |
| 701.4.2.10 (7.4.2.10) | Orientation | __ No |
| 701.4.3.2 (7.4.3.2) | Ventilation Controls for Densely Occupied Spaces | __ No |
| 701.4.3.4 (7.4.3.4) | Economizers | __ No |
| 701.4.3.5 (7.4.3.5) | Zone Controls | __ No |
| 701.4.3.7 (7.4.3.7) | Exhaust Air Energy Recovery | __ No |
| 701.4.3.8 (7.4.3.8) | Kitchen Exhaust Systems | __ No |
| 701.4.4.3 (7.4.4.3) | Insulation for Spa Pools | __ No |
| 701.4.6.3.1 (7.4.6.3.1) | Occupancy Sensor Controls in Commercial and Industrial Storage Stacks | __ No |
| 701.4.6.3.2 (7.4.6.3.2) | Automatic Controls for Egress and Security Lighting | __ No |
| 701.4.7.2 (7.4.7.2) | Supermarket Heat Recovery | __ No |
| 701.4.7.4 (7.4.7.4) | Programmable Thermostats | __ No |
| 701.4.7.5 (7.4.7.5) | Refrigerated Display Cases | __ No |
| 701.5.4 (7.5.4) | Energy Simulation Aided Design | __ No |
| **Chapter 8—Indoor Environmental Quality** | | |
| ~~801.3.1.3(b) [8.3.1.3(b)]~~ | ~~Outdoor Air Ozone Removal~~ | ~~__ No~~ |
| 801.3.1.4.2 (8.3.1.4.2) | Exfiltration | __ No |
| 801.3.3.4 (8.3.3.4) | Interior Sound Reverberation | __ No |
| 801.3.9 [8.3.9] | Exterior Views | __ No |
| 801.4.1.3 (8.4.1.3) | Shading for Offices | __ No |
| **Chapter 9—Materials and Resources** | | |
| 901.3.1.2 (9.3.1.2) | Total Waste | __ No |
| **Chapter 10—Construction and Plans for Operation** | | |
| 1001.4.4 (10.4.4) | Construction Activity Pollution Prevention: Protection of Occupied Areas | __ No |

| SECTION | SECTION TITLE | JURISDICTIONAL REQUIREMENT |
|---|---|---|
| 1001.7 (10.7) | Postconstruction Building Flush-out and Air Monitoring | __ No |
| 1001.10 (10.10) | Service Life Plan | __ No |
| 1001.11.2 (10.11.2) | Transportation Management Plan, Owner-occupied Building Projects or Portions of Building Projects | __ No |
| 1001.11.3 (10.11.3) | Transportation Management Plan, Building Tenant | __ No |

**Reason Statement:** Table 101.5.1 is being updated to reflect the latest published technical requirements in Standard 189.1. Since the release of the 2021 IgCC, Outdoor Air Ozone Removal has been made a core requirement. Additional changes to 101.5.1 are expected prior to the final publication of Standard 189.1-2023. ASHRAE staff will continue to monitor changes to the standard that impact the information being report Section 1 of the IgCC, and will submit public comments as necessary.

**Bibliography:** ANSI/ASHRAE/ICC/USGBC/IES Standard 189.1-2020 with Addendum br, Standard for the Design of High-Performance Green Buildings Except Low-Rise Residential Buildings

**Cost Impact:** The code change proposal will not increase or decrease the cost of construction
Adjustments to Table 101.5.1 reflect changes made in Standard 189.1 that were not necessarily subject to a cost analysis.

ADM12-22

# ADM13-22 Part I

IBC: SECTION 104, 202; IEBC: SECTION 104, 202; IFC: SECTION 104, 202; IPMC: SECTION 105, 202; IWUIC: SECTION 104, 105, 202; IZC: [A] 104.7, [A] 104.7.1; IGCC: SECTION 104

**Proponents:** Robert Marshall, representing FCAC (fcac@iccsafe.org); Mike Nugent, representing Building Code Action Committee (bcac@iccsafe.org); Jeffrey Shapiro, representing Lake Travis Fire Rescue (jeff.shapiro@intlcodeconsultants.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 THESE COMMITTEES.**

**Primary sections and titles shown as deleted include the deletion of all sections and subsections within them. For clarity, the full text of these deletions are not shown.**

## 2021 International Building Code

**Revise as follows:**

**[A] APPROVED AGENCY.** An established and recognized ~~agency~~ organization that is regularly engaged in conducting tests, furnishing inspection services or furnishing product evaluation or certification where such ~~agency~~ organization has been *approved* by the *building official*.

**Add new definition as follows:**

**PEER REVIEW.** An independent and objective technical review conducted by an approved third party.

**Revise as follows:**

**~~SECTION 104~~**
**~~DUTIES AND POWERS OF THE BUILDING OFFICIAL~~**
***(Delete entire section and replace as follows)***

**Add new text as follows:**

**SECTION 104**
**DUTIES AND POWERS OF THE BUILDING OFFICIAL.**

**[A] 104.1 General.** The building official is hereby authorized and directed to enforce the provisions of this code.

**[A] 104.2 Determination of Compliance.** The building official shall have the authority to determine compliance with this code, to render interpretations of this code and to adopt policies, procedures, rules and regulations in order to clarify the application of this code's provisions. Such interpretations, policies, procedures, rules and regulations:

1. Shall be in compliance with the intent and purpose of this code.
2. Shall not have the effect of waiving requirements specifically provided for in this code.

**[A] 104.2.1 Listed compliance.** Determination of compliance for anything required by this code, or a reference standard, to be listed shall be based on a test standard or approved listing evaluation that is germane to the provision requiring the listing. Anything required by this code, or a reference standard, to be listed shall be installed in accordance with the listing and the manufacturer's instructions. Copies of the listing standard and manufacturer's instructions shall be made available to the building official upon request.

**[A] 104.2.2 Technical assistance.** To determine compliance with this code, the building official is authorized to require the owner or owner's authorized agent to provide a technical opinion and report.

**[A] 104.2.2.1 Cost.** A technical opinion and report shall be provided without charge to the jurisdiction.

**[A] 104.2.2.2 Preparer qualifications.** The technical opinion and report shall be prepared by a qualified engineer, specialist, laboratory or specialty organization acceptable to the building official. The building official is authorized to require design submittals to be prepared by, and bear the stamp of, a registered design professional.

**[A] 104.2.2.3 Content.** The technical opinion and report shall analyze the safety properties of the design, operation or use of the building or premises and the facilities and appurtenances situated thereon, to identify and propose necessary recommendations.

**[A] 104.2.2.4 Tests.** Where there is insufficient evidence of compliance with the provisions of this code, the building official is authorized to require tests as evidence of compliance. Test methods shall be as specified in this code or by other recognized test standards. In the absence of recognized test standards, the building official shall approve the testing procedures. Tests shall be performed by a party acceptable to the building official.

**[A] 104.2.3 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 is not specifically prohibited by this code and has been approved.

**[A] 104.2.3.1 Approval authority.** An alternative material, design or method of construction shall be approved where the building official finds that the proposed alternative is satisfactory and complies with Sections 104.2.3 through 104.2.3.7, as applicable.

**[A] 104.2.3.2 Application and disposition.** A request to use an alternative material, design or method of construction shall be submitted in writing to the building official for approval. Where the alternative material, design or method of construction is not approved, the building official shall respond in writing, stating the reasons the alternative was not approved.

**[A] 104.2.3.3 Compliance with code intent.** An alternative material, design or method of construction shall comply with the intent of the provisions of this code,

**[A] 104.2.3.4 Equivalency criteria.** An alternative material, design or method of construction shall, for the purpose intended, be not less than the equivalent of that prescribed in this code with respect to all of the following, as applicable:

1. Quality
2. Strength
3. Effectiveness
4. Durability
5. Safety

**[A] 104.2.3.4.1 Fire safety equivalency.** Determination of safety equivalency, with respect to fire, shall be based on an analysis that includes applicable fire safety performance properties, such as but not limited to ignitability, flame spread, heat release rate, heat of combustion, smoke development, and fire resistance. Determination of safety equivalency, with respect to structural fire safety, shall also include a structural system analysis.

**[A] 104.2.3.5 Tests.** Tests conducted to demonstrate equivalency in support of an alternative material, design or method of construction application shall be of a scale that is sufficient to predict performance of the end use configuration. Tests shall be performed by a party acceptable to the building official.

**[A] 104.2.3.6 Reports.** Supporting documentation, where necessary to assist in the approval of materials or assemblies not specifically provided for in this code, shall comply with Sections 104.2.3.6.1 and 104.2.3.6.2.

**[A] 104.2.3.6.1 Evaluation reports.** Evaluation reports shall be issued by an approved agency accredited to evaluate or certify products. The alternate material, design or method of construction and product evaluated shall be within the scope of accreditation of the approved agency. Criteria used for the evaluation shall be identified within the report, developed using a process that includes input from the public and made available for review by the public.

**[A] 104.2.3.6.2 Other reports.** Reports not complying with Section 104.2.3.6.1 shall describe criteria, including but not limited to any referenced testing or analysis, used to determine compliance with code intent and justify code equivalence, including but not limited to any referenced testing or analysis. The report shall be prepared by a qualified engineer, specialist, laboratory or specialty organization acceptable to the building official. The building official is authorized to require design submittals to be prepared by, and bear the stamp of, a registered design professional.

**[A] 104.2.3.7 Peer review.** The building official is authorized to require submittal of a peer review report in conjunction with a request to use an alternative material, design or method of construction, prepared by a peer reviewer that is approved by the building official.

**[A] 104.2.4 Modifications.** Where there are practical difficulties involved in carrying out the provisions of this code, the building official shall have the authority to grant modifications for individual cases provided that the building official shall first find that one or more special individual reasons make the strict letter of this code impractical, that the modification is in compliance with the intent and purpose of this code, and that such modification does not lessen health, accessibility, life and fire safety or structural requirements. The details of the written request for and action granting modifications shall be recorded and entered in the files of the department of building safety.

**[A] 104.2.4.1 Flood hazard areas.** The building official shall not grant modifications to any provision required in flood hazard areas as established by Section 1612.3 unless a determination has been made that:

1. A showing of good and sufficient cause that the unique characteristics of the size, configuration or topography of the site render the elevation standards of Section 1612 inappropriate.
2. A determination that failure to grant the variance would result in exceptional hardship by rendering the lot undevelopable.
3. A determination that the granting of a variance will not result in increased flood heights, additional threats to public safety, extraordinary public expense, cause fraud on or victimization of the public, or conflict with existing laws or ordinances.
4. A determination that the variance is the minimum necessary to afford relief, considering the flood hazard.

5. Submission to the applicant of written notice specifying the difference between the design flood elevation and the elevation to which the building is to be built, stating that the cost of flood insurance will be commensurate with the increased risk resulting from the reduced floor elevation, and stating that construction below the design flood elevation increases risks to life and property.

**[A] 104.3 Applications and permits.** The building official shall receive applications, review construction documents and issue permits for the erection, and alteration, demolition and moving of buildings and structures, inspect the premises for which such permits have been issued and enforce compliance with the provisions of this code.

**[A] 104.3.1 Determination of substantially improved or substantially damaged existing buildings and structures in flood hazard areas.** For applications for reconstruction, rehabilitation, repair, alteration, addition or other improvement of existing buildings or structures located in flood hazard areas, the building official shall determine if the proposed work constitutes substantial improvement or repair of substantial damage. Where the building official determines that the proposed work constitutes substantial improvement or repair of substantial damage, and where required by this code, the building official shall require the building to meet the requirements of Section 1612 or Section R322 of the International Residential Code, as applicable.

**[A] 104.4 Right of entry.** Where it is necessary to make an inspection to enforce the provisions of this code, or where the building official has reasonable cause to believe that there exists in a structure or on a premises a condition that is contrary to or in violation of this code that makes the structure or premises unsafe, dangerous or hazardous, the building official is authorized to enter the structure or premises at all reasonable times to inspect or to perform the duties imposed by this code. If such structure or premises is occupied, the building official shall present credentials to the occupant and request entry. If such structure or premises is unoccupied, the building official shall first make a reasonable effort to locate the owner, the owner's authorized agent or other person having charge or control of the structure or premises and request entry. If entry is refused, the building official shall have recourse to every remedy provided by law to secure entry.

**[A] 104.4.1 Warrant.** Where the building official has first obtained a proper inspection warrant or other remedy provided by law to secure entry, an owner, the owner's authorized agent or occupant or person having charge, care or control of the building or premises shall not fail or neglect, after proper request is made as herein provided, to permit entry therein by the building official for the purpose of inspection and examination pursuant to this code.

**[A] 104.5 Identification.** The building official shall carry proper identification when inspecting structures or premises in the performance of duties under this code.

**[A] 104.6 Notices and orders.** The building official shall issue necessary notices or orders to ensure compliance with this code in accordance with Section 114.

**[A] 104.7 Official records.** The building official shall keep official records as required by Sections 104.7.1 through 104.7.5. Such official records shall be retained for not less than 5 years or for as long as the building or structure to which such records relate remains in existence, unless otherwise provided by other regulations.

**[A] 104.7.1 Approvals.** A record of approvals shall be maintained by the building official and shall be available for public inspection during business hours in accordance with applicable laws.

**[A] 104.7.2 Inspections.** The building official shall keep a record of each inspection made, including notices and orders issued, showing the findings and disposition of each.

**[A] 104.7.3 Code alternatives and modifications.** Application for alternative materials, design and methods of construction and equipment in accordance with Section 104.2.3; modifications in accordance with Section 104.2.4; and documentation of the final decision of the building official for either shall be in writing and shall be retained in the official records.

**[A] 104.7.4 Tests.** The building official shall keep a record of tests conducted to comply with Sections 104.2.2.4 and 104.2.3.5.

**[A] 104.7.5 Fees.** The building official shall keep a record of fees collected and refunded in accordance with Section 109.

**[A] 104.8 Liability.** The building 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 personally liable, either civilly or criminally, 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] 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 under the provisions of this code or other laws or ordinances implemented through the enforcement of this code shall be defended by legal representatives of the jurisdiction until the final termination of the proceedings. The building 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.

**[A] 104.9 Approved materials and equipment.** Materials, equipment and devices approved by the building official shall be constructed and installed in accordance with such approval.

**[A] 104.9.1 Material and equipment reuse.** Materials, equipment and devices shall not be reused unless such elements are in good working condition and approved.

# 2021 International Existing Building Code

**Add new definition as follows:**

**APPROVED AGENCY.** An established and recognized organization that is regularly engaged in conducting tests, furnishing inspection services or furnishing product evaluation or certification where such organization has been approved by the code official.

**PEER REVIEW.** An independent and objective technical review conducted by an approved third party.

**Revise as follows:**

## ~~SECTION 104~~
## ~~DUTIES AND POWERS OF THE CODE OFFICIAL~~
## *(Delete entire section and replace as follows)*

**Add new text as follows:**

## SECTION 104
## DUTIES AND POWERS OF THE CODE OFFICIAL

**[A] 104.1 General.** The code official is hereby authorized and directed to enforce the provisions of this code.

**[A] 104.2 Determination of Compliance.** The code official shall have the authority to determine compliance with this code, to render interpretations of this code and to adopt policies, procedures, rules and regulations in order to clarify the application of this code's provisions. Such interpretations, policies, procedures, rules and regulations:

1. Shall be in compliance with the intent and purpose of this code.
2. Shall not have the effect of waiving requirements specifically provided for in this code.

**[A] 104.2.1 Listed compliance.** Determination of compliance for anything required by this code, or a reference standard, to be listed shall be based on a test standard or approved listing evaluation that is germane to the provision requiring the listing. Anything required by this code, or a reference standard, to be listed shall be installed in accordance with the listing and the manufacturer's instructions. Copies of the listing standard and manufacturer's instructions shall be made available to the code official upon request.

**[A] 104.2.2 Technical assistance.** To determine compliance with this code, the code official is authorized to require the owner or owner's authorized agent to provide a technical opinion and report.

**[A] 104.2.2.1 Cost.** A technical opinion and report shall be provided without charge to the jurisdiction.

**[A] 104.2.2.2 Preparer qualifications.** The technical opinion and report shall be prepared by a qualified engineer, specialist, laboratory or fire safety specialty organization acceptable to the code official. The code official is authorized to require design submittals to be prepared by, and bear the stamp of, a registered design professional.

**[A] 104.2.2.3 Content.** The technical opinion and report shall analyze the fire safety properties of the design, operation or use of the building or premises and the facilities and appurtenances situated thereon, to identify and propose necessary recommendations.

**[A] 104.2.2.4 Tests.** Where there is insufficient evidence of compliance with the provisions of this code, the code official is authorized to require tests as evidence of compliance. Test methods shall be as specified in this code or by other recognized test standards. In the absence of recognized test standards, the code official shall approve the testing procedures. Tests shall be performed by a party acceptable to the code official.

**[A] 104.2.3 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 is not specifically prohibited by this code and has been approved.

**[A] 104.2.3.1 Approval authority.** An alternative material, design or method of construction shall be approved where the code official finds that the proposed alternative is satisfactory and complies with Sections 104.2.3.2 through 104.2.3.7, as applicable.

**[A] 104.2.3.2 Application and disposition.** A request to use an alternative material, design or method of construction shall be submitted in writing to the code official for approval. Where the alternative material, design or method of construction is not approved, the code official shall respond in writing, stating the reasons the alternative was not approved.

**[A] 104.2.3.3 Compliance with code intent.** An alternative material, design or method of construction shall comply with the intent of the provisions of this code.

**[A] 104.2.3.4 Equivalency criteria.** An alternative material, design or method of construction shall, for the purpose intended, be not less than the equivalent of that prescribed in this code with respect to all of the following, as applicable:

1. Quality
2. Strength
3. Effectiveness
4. Durability
5. Safety

**[A] 104.2.3.4.1 Fire safety equivalency.** Determination of safety equivalency, with respect to fire, shall be based on an analysis that includes applicable fire safety performance properties, such as but not limited to ignitability, flame spread, heat release rate, heat of combustion, smoke development, and fire resistance. Determination of safety equivalency, with respect to structural fire safety, shall also include a structural system analysis.

**[A] 104.2.3.5 Tests.** Tests conducted to demonstrate equivalency in support of an alternative material, design or method of construction application shall be of a scale that is sufficient to predict performance of the end use configuration. Tests shall be performed by a party acceptable to the code official.

**[A] 104.2.3.6 Reports.** Supporting documentation, where necessary to assist in the approval of materials or assemblies not specifically provided for in this code, shall comply with Sections 104.2.3.6.1 and 104.2.3.6.2.

**[A] 104.2.3.6.1 Evaluation reports.** Evaluation reports shall be issued by an approved agency accredited to evaluate or certify products. The alternative material, design or method of construction and product evaluated shall be within the scope of accreditation of the approved agency. Criteria used for the evaluation shall be identified within the report, developed using a process that includes input from the public, and made available for review by the public.

**[A] 104.2.3.6.2 Other reports.** Reports not complying with Section 104.2.3.6.1 shall describe criteria, including but not limited to any referenced testing or analysis, used to determine compliance with code intent and justify code equivalence. The report shall be prepared by a qualified engineer, specialist, laboratory or fire safety specialty organization acceptable to the fire code official. The code official is authorized to require design submittals to be prepared by, and bear the stamp of, a registered design professional.

**[A] 104.2.3.7 Peer review.** The code official is authorized to require submittal of a peer review report in conjunction with a request to use an alternative material, design or method of construction, prepared by a peer reviewer that is approved by the code official.

**[A] 104.2.4 Modifications.** Where there are practical difficulties involved in carrying out the provisions of this code, the code official shall have the authority to grant modifications for individual cases, provided that the code official shall first find that one or more special individual reasons make the strict letter of this code impractical, that the modification is in compliance with the intent and purpose of this code, and that such modification does not lessen health, accessibility, life and fire safety, or structural requirements. The details of the written request for and action granting modifications shall be recorded and entered in the files of the department of building safety.

**[A] 104.2.4.1 Flood hazard areas.** For existing buildings located in flood hazard areas for which repairs, alterations and additions constitute substantial improvement, the code official shall not grant modifications to provisions related to flood resistance unless a determination is made that:

1. The applicant has presented good and sufficient cause that the unique characteristics of the size, configuration or topography of the site render compliance with the flood-resistant construction provisions inappropriate.
2. Failure to grant the modification would result in exceptional hardship.
3. The granting of the modification will not result in increased flood heights, additional threats to public safety, extraordinary public expense nor create nuisances, cause fraud on or victimization of the public, or conflict with existing laws or ordinances.
4. The modification is the minimum necessary to afford relief, considering the flood hazard.

A written notice will be provided to the applicant specifying, if applicable, the difference between the design flood elevation and the elevation to which the building is to be built, stating that the cost of flood insurance will be commensurate with the increased risk resulting from the reduced floor elevation and that construction below the design flood elevation increases risks to life and property.

**[A] 104.3 Applications and permits.** The code official is authorized to receive applications, review construction documents and issue permits for the repair and construction regulated by this code; inspect the premises for which such permits have been issued; and enforce compliance with the provisions of this code.

**[A] 104.3.1 Determination of substantially improved or substantially damaged existing buildings and structures in flood hazard areas.** For applications for reconstruction, rehabilitation, repair, alteration, addition or other improvement of existing buildings or structures located in flood hazard areas, the code official shall determine where the proposed work constitutes substantial improvement or repair of substantial damage. Where the code official determines that the proposed work constitutes substantial improvement or repair of substantial damage, and where required by this code, the code official shall require the building to meet the requirements of Section 1612 of the International Building Code, or Section R322 of the International Residential Code, as applicable.

**[A] 104.3.2 Preliminary meeting.** When requested by the permit applicant or the code official, the code official shall meet with the permit applicant prior to the application for a construction permit to discuss plans for the proposed work or change of occupancy in order to establish the specific applicability of the provisions of this code.

**Exception:** Repairs and Level 1 alterations.

**[A] 104.3.3 Building evaluation.** The code official is authorized to require an existing building to be investigated and evaluated by a registered design professional based on the circumstances agreed on at the preliminary meeting. The design professional shall notify the code official if any potential noncompliance with the provisions of this code is identified.

**[A] 104.4 Right of entry.** Where it is necessary to make an inspection to enforce the provisions of this code, or where the code official has reasonable cause to believe that there exists in a structure or on a premises any conditions or violations of this code that makes the structure or premises unsafe, dangerous or hazardous, the code official shall have the authority to enter the structure or premises at all reasonable times to inspect or to perform the duties imposed on the code official by this code. If such structure or premises is occupied, the code official shall present credentials to the occupant and request entry. If such structure or premises be unoccupied, the code official shall first make a reasonable effort to locate the owner, the owner's authorized agent or other person having charge or control of the structure or premises and request entry. If entry is refused, the code official shall have recourse to every remedy provided by law to secure entry.

**[A] 104.4.1 Warrant.** Where the code official has first obtained a proper inspection warrant or other remedy provided by law to secure entry, an owner, the owner's authorized agent or occupant or person having charge, care or control of the building or premises shall not fail or neglect, after proper request is made as herein provided, to permit entry therein by the code official for the purpose of inspection and examination pursuant to this code.

**[A] 104.5 Identification.** The code official shall carry proper identification when inspecting structures or premises in the performance of duties under this code.

**[A] 104.6 Notices and orders.** The code official is authorized to issue such notices or orders as are required to affect compliance with this code in accordance with Section 113.

**[A] 104.7 Official records.** The code official shall keep official records as required by Sections 104.7.1 through 104.7.5. Such official records shall be retained for not less than 5 years or for as long as the structure or activity to which such records relate remains in existence, unless otherwise provided by other regulations.

**[A] 104.7.1 Approvals.** A record of approvals shall be maintained by the code official and shall be available for public inspection during business hours in accordance with applicable laws.

**[A] 104.7.2 Inspections.** The code official shall keep a record of each inspection made, including notices and orders issued, showing the findings and disposition of each.

**[A] 104.7.3 Code alternatives and modifications.** Application for alternative materials, design and methods of construction and equipment in accordance with Section 104.2.3; modifications in accordance with Section 104.2.4; and documentation of the final decision of the code official for either shall be in writing and shall be officially recorded in the permanent records of the code official.

**[A] 104.7.4 Tests.** The code official shall keep a record of tests conducted to comply with Sections 104.2.2.4 and 104.2.3.5.

**[A] 104.7.5 Fees.** The code official shall keep a record of fees collected and refunded in accordance with Section 108.

**[A] 104.8 Liability.** The 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 personally liable, either civilly or criminally, 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] 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 or other laws or ordinances implemented through the enforcement 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 costs in any action, suit or proceeding that is instituted in pursuance of the provisions of this code.

**[A] 104.9 Approved materials and equipment.** Materials, equipment and devices approved by the code official shall be constructed and installed in accordance with such approval.

**[A] 104.9.1 Material and equipment reuse.** Materials, equipment and devices shall not be reused unless such elements are in good working condition and approved.

## 2021 International Fire Code

**Add new definition as follows:**

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furnishing product evaluation or certification where such organization has been approved by the fire code official.

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**Revise as follows:**

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## ~~DUTIES AND POWERS OF THE FIRE CODE OFFICIAL~~
## *(Delete entire section and replace as follows)*

**Add new text as follows:**

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1. Shall be in compliance with the intent and purpose of this code.
2. Shall not have the effect of waiving requirements specifically provided for in this code.

**[A] 104.2.1 Listed compliance.** Determination of compliance for anything required by this code, or a reference standard, to be listed shall be based on a test standard or approved listing evaluation that is germane to the provision requiring the listing. Anything required by this code, or a reference standard, to be listed shall be installed in accordance with the listing and the manufacturer's instructions. Copies of the listing standard and manufacturer's instructions shall be made available to the fire code official upon request.

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**[A] 104.2.2.1 Cost.** A technical opinion and report shall be provided without charge to the jurisdiction.

**[A] 104.2.2.2 Preparer qualifications.** The technical opinion and report shall be prepared by a qualified engineer, specialist, laboratory or fire safety specialty organization acceptable to the fire code official. The fire code official is authorized to require design submittals to be prepared by, and bear the stamp of, a registered design professional.

**[A] 104.2.2.3 Content.** The technical opinion and report shall analyze the fire safety properties of the design, operation or use of the building or premises and the facilities and appurtenances situated thereon, to identify and propose necessary recommendations.

**[A] 104.2.2.4 Tests.** Where there is insufficient evidence of compliance with the provisions of this code, the fire code official is authorized to require tests as evidence of compliance. Test methods shall be as specified in this code or by other recognized test standards. In the absence of recognized test standards, the fire code official shall approve the testing procedures. Tests shall be performed by a party acceptable to the fire code official.

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**[A] 104.2.3.1 Approval authority.** An alternative material, design or method of construction shall be approved where the fire code official finds that the proposed alternative is satisfactory and complies with Sections 104.2.3.2 through 104.2.3.7, as applicable.

**[A] 104.2.3.2 Application and disposition.** A request to use an alternative material, design or method of construction shall be submitted in writing to the fire code official for approval. Where the alternative material, design or method of construction is not approved, the fire code official shall respond in writing, stating the reasons the alternative was not approved.

**[A] 104.2.3.3 Compliance with code intent.** An alternative material, design or method of construction shall comply with the intent of the provisions of this code.

**[A] 104.2.3.4 Equivalency criteria.** An alternative material, design or method of construction shall, for the purpose intended, be not less than the equivalent of that prescribed in this code with respect to all of the following, as applicable:

1. Quality
2. Strength

3. Effectiveness
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5. Safety

**[A] 104.2.3.4.1 Fire safety equivalency.** Determination of safety equivalency, with respect to fire, shall be based on an analysis that includes applicable fire safety performance properties, such as but not limited to ignitability, flame spread, heat release rate, heat of combustion, smoke development, and fire resistance. Determination of safety equivalency, with respect to structural fire safety, shall also include a structural system analysis.

**[A] 104.2.3.5 Tests.** Tests conducted to demonstrate equivalency in support of an alternative material, design or method of construction application shall be of a scale that is sufficient to predict performance of the end use configuration. Tests shall be performed by a party acceptable to the fire code official.

**[A] 104.2.3.6 Reports.** Supporting documentation, where necessary to assist in the approval of materials or assemblies not specifically provided for in this code, shall comply with Sections 104.2.3.6.1 and 104.2.3.6.2.

**[A] 104.2.3.6.1 Evaluation reports.** Evaluation reports shall be issued by an approved agency accredited to evaluate or certify products. The alternative material, design or method of construction and product evaluated shall be within the scope of accreditation of the approved agency. Criteria used for the evaluation shall be identified within the report, developed using a process that includes input from the public, and made available for review by the public.

**[A] 104.2.3.6.2 Other reports.** Reports not complying with Section 104.2.3.6.1 shall describe criteria, including but not limited to any referenced testing or analysis, used to determine compliance with code intent and justify code equivalence. The report shall be prepared by a qualified engineer, specialist, laboratory or fire safety specialty organization acceptable to the fire code official. The fire code official is authorized to require design submittals to be prepared by, and bear the stamp of, a registered design professional.

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**[A] 104.2.4 Modifications.** Where there are practical difficulties involved in carrying out the provisions of this code, the fire code official shall have the authority to grant modifications for individual cases, provided that the fire code official shall first find that one or more special individual reasons make the strict letter of this code impractical, that the modification is in compliance with the intent and purpose of this code, and that such modification does not lessen health, life and fire safety requirements. The details of the written request for and action granting modifications shall be recorded and entered in the files of the department of fire prevention.

**[A] 104.3 Applications and permits.** The fire code official is authorized to receive applications, review construction documents and issue permits for construction regulated by this code, issue permits for operations regulated by this code, inspect the premises for which such permits have been issued and enforce compliance with the provisions of this code.

**[A] 104.4 Right of entry.** Where it is necessary to make an inspection to enforce the provisions of this code, or where the fire code official has reasonable cause to believe that there exists in a structure or on a premises any conditions or violations of this code that make the structure or premises unsafe, dangerous or hazardous, the fire code official shall have the authority to enter the structure or premises at all reasonable times to inspect or to perform the duties imposed on the fire code official by this code. If such structure or premises is occupied, the fire code official shall present credentials to the occupant and request entry. If such structure or premises is unoccupied, the fire code official shall first make a reasonable effort to locate the owner, the owner's authorized agent or other person having charge or control of the structure or premises and request entry. If entry is refused, the fire code official shall have recourse to every remedy provided by law to secure entry.

**[A] 104.4.1 Warrant.** Where the fire code official has first obtained a proper inspection warrant or other remedy provided by law to secure entry, an owner, the owner's authorized agent or occupant or person having charge, care or control of the building or premises shall not fail or neglect, after proper request is made as herein provided, to permit entry therein by the fire code official for the purpose of inspection and examination pursuant to this code.

**[A] 104.5 Identification.** The fire code official shall carry proper identification when inspecting structures or premises in the performance of duties under this code.

**[A] 104.6 Notices and orders.** The fire code official is authorized to issue such notices or orders as are required to affect compliance with this code in accordance with Sections 112.1 and 112.2.

**[A] 104.7 Official records.** The fire code official shall keep official records as required by Sections 104.7.1 through 104.7.6. Such official records shall be retained for not less than 5 years or for as long as the structure or activity to which such records relate remains in existence, unless otherwise provided by other regulations.

**[A] 104.7.1 Approvals.** A record of approvals shall be maintained by the fire code official and shall be available for public inspection during business hours in accordance with applicable laws.

**[A] 104.7.2 Inspections.** The fire code official shall keep a record of each inspection made, including notices and orders issued, showing the

findings and disposition of each.

**104.7.3 Fire records.** The fire code official fire department shall keep a record of fires occurring within its jurisdiction and of facts concerning the same, including statistics as to the extent of such fires and the damage caused thereby, together with other information as required by the fire code official.

**[A] 104.7.4 Code alternatives and modifications.** Application for alternative materials, design and methods of construction and equipment in accordance with Section 104.2.3; modifications in accordance with Section 104.2.4; and documentation of the final decision of the fire code official for either shall be in writing and shall be officially recorded in the permanent records of the fire code official.

**[A] 104.7.5 Tests.** The fire code official shall keep a record of tests conducted to comply with Sections 104.2.2.4 and 104.2.3.5.

**[A] 104.7.6 Fees.** The fire code official shall keep a record of fees collected and refunded in accordance with Section 107.

**[A] 104.8 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 be personally liable, either civilly or criminally, 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] 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 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.

**[A] 104.9 Approved materials and equipment.** Materials, equipment and devices approved by the fire code official shall be constructed and installed in accordance with such approval.

**[A] 104.9.1 Material and equipment reuse.** Materials, equipment and devices shall not be reused unless such elements are in good working condition and approved.

**104.10 Fire investigations.** The fire code official, the fire department or other responsible authority shall have the authority to investigate the cause, origin and circumstances of any fire, explosion or other hazardous condition. Information that could be related to trade secrets or processes shall not be made part of the public record, except as directed by a court of law.

**104.10.1 Assistance from other agencies.** Police and other enforcement agencies shall have authority to render necessary assistance in the investigation of fires when requested to do so.

**104.11 Authority at fires and other emergencies.** The fire chief or officer of the fire department in charge at the scene of a fire or other emergency involving the protection of life or property, or any part thereof, shall have the authority to direct such operation as necessary to extinguish or control any fire, perform any rescue operation, investigate the existence of suspected or reported fires, gas leaks or other hazardous conditions or situations, or take any other action necessary in the reasonable performance of duty. In the exercise of such power, the fire chief is authorized to prohibit any person, vehicle, vessel or thing from approaching the scene, and is authorized to remove, or cause to be removed or kept away from the scene, any vehicle, vessel or thing that could impede or interfere with the operations of the fire department and, in the judgment of the fire chief, any person not actually and usefully employed in the extinguishing of such fire or in the preservation of property in the vicinity thereof.

**104.11.1 Barricades.** The fire chief or officer of the fire department in charge at the scene of an emergency is authorized to place ropes, guards, barricades or other obstructions across any street, alley, place or private property in the vicinity of such operation so as to prevent accidents or interference with the lawful efforts of the fire department to manage and control the situation and to handle fire apparatus.

**104.11.2 Obstructing operations.** Persons shall not obstruct the operations of the fire department in connection with extinguishment or control of any fire, or actions relative to other emergencies, or disobey any lawful command of the fire chief or officer of the fire department in charge of the emergency, or any part thereof, or any lawful order of a police officer assisting the fire department.

**104.11.3 Systems and devices.** Persons shall not render a system or device inoperative during an emergency unless by direction of the fire chief or fire department official in charge of the incident.

# 2021 International Property Maintenance Code

**Add new definition as follows:**

**APPROVED AGENCY.**. An established and recognized organization that is regularly engaged in conducting tests, furnishing inspection services or furnishing product evaluation or certification where such organization has been approved by the code official.

**PEER REVIEW.** An independent and objective technical review conducted by an approved third party.

**Revise as follows:**

~~**SECTION 105**~~
~~**DUTIES AND POWERS OF THE CODE OFFICIAL**~~
***(Delete entire section and replace as follows)***

~~**SECTION 106**~~
~~**APPROVAL**~~
***(Delete entire section and replace as follows)***

**Add new text as follows:**

## SECTION 105
## DUTIES AND POWERS OF THE CODE OFFICIAL

**[A] 105.1 General.** The code official is hereby authorized and directed to enforce the provisions of this code.

**[A] 105.2 Determination of compliance.** The code official shall have the authority to determine compliance with this code, to render interpretations of this code and to adopt policies, procedures, rules and regulations in order to clarify the application of this code's provisions. Such interpretations, policies, procedures, rules and regulations:

1. Shall be in compliance with the intent and purpose of this code.
2. Shall not have the effect of waiving requirements specifically provided for in this code.

**[A] 105.2.1 Technical assistance.** To determine compliance with this code, the code official is authorized to require the owner or owner's authorized agent to provide a technical opinion and report.

**[A] 105.2.1.1 Cost.** A technical opinion and report shall be provided without charge to the jurisdiction.

**[A] 105.2.1.2 Preparer qualifications.** The technical opinion and report shall be prepared by a qualified engineer, specialist, laboratory or specialty organization acceptable to the code official. The code official is authorized to require design submittals to be prepared by, and bear the stamp of, a registered design professional.

**[A] 105.2.1.3 Content.** The technical opinion and report shall analyze the safety properties of the design, operation or use of the building or premises and the facilities and appurtenances situated thereon, to identify and propose necessary recommendations.

**[A] 105.2.1.4 Tests.** Where there is insufficient evidence of compliance with the provisions of this code, the code official is authorized to require tests as evidence of compliance. Test methods shall be as specified in this code or by other recognized test standards. In the absence of recognized test standards, the code official shall approve the testing procedures. Tests shall be performed by a party acceptable to the code official.

**[A] 105.2.2 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 such alternative is not specifically prohibited by this code and has been approved.

**[A] 105.2.2.1 Approval authority.** An alternative material, design or method of construction shall be approved where the code official finds that the proposed alternative is satisfactory and complies with Sections 105.2.2 through 105.2.2.7, as applicable.

**[A] 105.2.2.2 Application and disposition.** A request to use an alternative material, design or method of construction shall be submitted in writing to the code official for approval. Where the alternative material, design or method of construction is not approved, the code official shall respond in writing, stating the reasons the alternative was not approved.

**[A] 105.2.2.3 Compliance with code intent.** An alternative material, design or method of construction shall comply with the intent of the provisions of this code.

**[A] 105.2.2.4 Equivalency criteria.** An alternative material, design or method of construction shall, for the purpose intended, be not less than the equivalent of that prescribed in this code with respect to all of the following, as applicable:

1. Strength
2. Quality
3. Strength
4. Durability
5. Safety

**[A] 105.2.2.4.1 Fire safety equivalency.** Determination of safety equivalency, with respect to fire, shall be based on an analysis that includes

applicable fire safety performance properties, such as but not limited to ignitability, flame spread, heat release rate, heat of combustion, smoke development, and fire resistance. Determination of safety equivalency, with respect to structural fire safety, shall also include a structural system analysis.

**[A] 105.2.2.5 Tests.** Tests conducted to demonstrate equivalency in support of an alternative material, design or method of construction application shall be of a scale that is sufficient to predict safety performance of the end use configuration. Tests shall be performed by a party acceptable to the code official.

**[A] 105.2.2.6 Reports.** Supporting documentation, where necessary to assist in the approval of materials or assemblies not specifically provided for in this code, shall comply with Sections 105.2.2.6.1 and 105.2.2.6.2.

**[A] 105.2.2.6.1 Evaluation reports.** Evaluation reports shall be issued by an approved agency accredited to evaluate or certify products. The alternate material, design or method of construction and product evaluated shall be within the scope of accreditation of the approved agency. Criteria used for the evaluation shall be identified within the report, developed using a process that includes input from the public and made available for review by the public.

**[A] 105.2.2.6.2 Other reports.** Reports not complying with Section 105.2.2.6.1 shall describe criteria, including but not limited to any referenced testing or analysis, used to determine compliance with code intent and justify code equivalence, including but not limited to any referenced testing or analysis. The report shall be prepared by a qualified engineer, specialist, laboratory or specialty organization acceptable to the code official. The code official is authorized to require design submittals to be prepared by, and bear the stamp of, a registered design professional.[A] 105.2.2.6.2 Other reports. Reports not complying with Section 105.2.2.6.1 shall describe criteria, including but not limited to any referenced testing or analysis, used to determine compliance with code intent and justify code equivalence, including but not limited to any referenced testing or analysis. The report shall be prepared by a qualified engineer, specialist, laboratory or specialty organization acceptable to the code official. The code official is authorized to require design submittals to be prepared by, and bear the stamp of, a registered design professional.

**[A] 105.2.2.7 Peer review.** The code official is authorized to require submittal of a peer review report in conjunction with a request to use an alternative material, design or method of construction, prepared by a peer reviewer that is approved by the code official.

**[A] 105.2.3 Modifications.** Whenever there are practical difficulties involved in carrying out the provisions of this code, the code official shall have the authority to grant modifications for individual cases provided that the code official shall first find that one or more special individual reasons make the strict letter of this code impractical, that the modification is in compliance with the intent and purpose of this code and that such modification does not lessen health, life and fire safety requirements. The details of the written request for and action granting modifications shall be recorded and entered in the department files.

**[A] 105.3 Inspections.** The code official shall have the authority to conduct inspections, or shall accept reports of inspection by approved agencies or individuals. Reports of such inspections shall be in writing and be certified by a responsible officer of such approved agency or by the responsible individual.

**[A] 105.4 Right of entry.** Where it is necessary to make an inspection to enforce the provisions of this code, or whenever the code official has reasonable cause to believe that there exists in a structure or upon a premises a condition in violation of this code, the code official is authorized to enter the structure or premises at all reasonable times to inspect or perform the duties imposed by this code. If such structure or premises is occupied the code official shall present credentials to the occupant and request entry. If such structure or premises is unoccupied, the code official shall first make a reasonable effort to locate the owner, owner's authorized agent or other person having charge or control of the structure or premises and request entry. If entry is refused, the code official shall have recourse to every remedy provided by law to secure entry.

**[A] 105.4.1 Warrant.** Where the code official has first obtained a proper inspection warrant or other remedy provided by law to secure entry, an owner, the owner's authorized agent or occupant or person having charge, care or control of the building or premises shall not fail or neglect, after proper request is made as herein provided, to permit entry therein by the code official for the purpose of inspection and examination pursuant to this code.

**[A] 105.5 Identification.** The code official shall carry proper identification when inspecting structures or premises in the performance of duties under this code.

**[A] 105.6 Notices and orders.** The code official shall issue all necessary notices or orders to ensure compliance with this code in accordance with Section 111.4.

**[A] 105.7 Official records.** The code official shall keep official records as required by Sections 105.7.1 through 105.7.5. Such official records shall be retained for not less than 5 years or for as long as the building or structure to which such records relate remains in existence, unless otherwise provided by other regulations.

**[A] 105.7.1 Approvals.** A record of approvals shall be maintained by the code official and shall be available for public inspection during business hours in accordance with applicable laws.

**[A] 105.7.2 Inspections.** The building official shall keep a record of each inspection made, including notices and orders issued, showing the findings and disposition of each.

**[A] 105.7.3 Code alternatives and modifications.** Application for alternative materials, design and methods of construction and equipment in

accordance with Section 105.2.2; modifications in accordance with Section 105.2.3; and documentation of the final decision of the code official for either shall be in writing and shall be retained in the official records.

**[A] 105.7.4 Tests.** The code official shall keep a record of tests conducted to comply with Sections 105.2.1.4 and 105.2.2.5.

**[A] 105.7.5 Fees.** The code official shall keep a record of fees collected and refunded in accordance with Section 104.

**[A] 105.8 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 personally liable, either civilly or criminally, 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] 105.8.1 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 or other laws or ordinances implemented through the enforcement 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.

**[A] 105.9 Approved materials and equipment.** Materials, equipment and devices approved by the code official shall be constructed and installed in accordance with such approval.

**[A] 105.9.1 Material and equipment reuse.** Materials, equipment and devices shall not be reused unless such elements are in good working condition and approved.

## 2021 International Wildland-Urban Interface Code

**Add new definition as follows:**

**APPROVED AGENCY.** An established and recognized organization that is regularly engaged in conducting tests, furnishing inspection services or furnishing product evaluation or certification where such organization has been approved by the code official.

**PEER REVIEW.** An independent and objective technical review conducted by an approved third party.

**REGISTERED DESIGN PROFESSIONAL.** An architect or engineer, registered or licensed to practice professional architecture or engineering, as defined by the statutory requirements of the professional registration laws of the state in which the project is to be constructed.

**Revise as follows:**

**[A] 102.5 ~~104.4~~ Subjects not regulated by this code.** Where applicable standards or requirements are not set forth in this code, or are contained within other laws, codes, regulations, ordinances or policies adopted by the jurisdiction, compliance with applicable standards of other nationally recognized safety standards, as *approved*, shall be deemed as prima facie evidence of compliance with the intent of this code. Nothing herein shall derogate from the authority of the code official to determine compliance with codes or standards for those activities or installations within the code official's jurisdiction or responsibility.

**[A] 102.6 ~~104.5~~ Matters not provided for.** Requirements that are essential for the public safety of an existing or proposed activity, building or structure, or for the safety of the occupants thereof, which are not specifically provided for by this code, shall be determined by the *code official* consistent with the necessity to establish the minimum requirements to safeguard the public health, safety and general welfare.

### ~~SECTION 104~~
### ~~AURHORITY OF THE CODE OFFICIAL~~
***(Delete Section 104.1 through 104.3.1, 104.6 and 104.7 and replace as follows)***

### ~~SECTION 105~~
### ~~COMPLIANCE ALTERNATIVES~~
***(Delete entire section and replace as follows)***

**Add new text as follows:**

### SECTION 104
### DUTIES AND POWERS OF THE CODE OFFICIAL

**[A] 104.1 Powers and duties of the code official.** The code official is hereby authorized to enforce the provisions of this code.

**[A] 104.2 Determination of compliance.** The code official shall have the authority to determine compliance with this code, to render interpretations of this code and to adopt policies, procedures, rules and regulations to clarify the application of this code's provisions. Such interpretations, policies, procedures, rules and regulations:

1. Shall be in compliance with the intent and purpose of this code.

2. Shall not have the effect of waiving requirements specifically provided for in this code.

**[A] 104.2.1 Technical assistance.** To determine compliance with this code, the code official is authorized to require the owner, the owner's authorized agent or the person in possession or control of the building or premises to provide a technical opinion and report.

**[A] 104.2.1.1 Cost.** A technical opinion and report shall be provided without charge to the jurisdiction.

**[A] 104.2.1.2 Preparer qualifications.** The technical opinion and report shall be prepared by a qualified engineer, specialist, laboratory or fire safety specialty organization acceptable to the code official. The code official is authorized to require design submittals to be prepared by, and bear the stamp of, a registered design professional.

**[A] 104.2.1.3 Content.** The technical opinion and report shall analyze the fire safety of the design, operation or use of the building or premises, the facilities and appurtenances situated thereon and fuel management to identify and propose necessary recommendations.

**[A] 104.2.1.4 Tests.** Where there is insufficient evidence of compliance with the provisions of this code, the code official is authorized to require tests as evidence of compliance. Test methods shall be as specified in this code or by other recognized test standards. In the absence of recognized test standards, the code official shall approve the testing procedures. Tests shall be performed by a party acceptable to the code official.

**[A] 104.2.2 Alternative materials, design and methods.** The provisions of this code are not intended to prevent the installation of any material or to prohibit any design or method not specifically prescribed by this code, provided that any such alternative is not specifically prohibited by this code and has been approved.

**[A] 104.2.2.1 Approval authority.** An alternative material, design or method shall be approved where the code official in concurrence with the code official finds that the proposed alternative is satisfactory and complies with Sections 104.2.2.2 through 104.2.2.7. as applicable.

**[A] 104.2.2.2 Application and disposition.** A request to use an alternative material, design or method of construction shall be submitted in writing to the code official for approval. Where the alternative material, design or method of construction is not approved, the code official shall respond in writing, stating the reasons the alternative was not approved.

**[A] 104.2.2.3 Compliance with code intent.** An alternative material, design or method of construction shall comply with the intent of the provisions of this code.

**[A] 104.2.2.4 Equivalency criteria.** An alternative material, design or method of construction shall, for the purpose intended, be not less than the equivalent of that prescribed in this code with respect to all of the following, as applicable:

1. Quality
2. Strength
3. Effectiveness
4. Durability
5. Safety

**[A] 104.2.2.4.1 Fire safety equivalency.** Determination of safety equivalency, with respect to fire, shall be based on an analysis that includes applicable fire safety performance properties, such as but not limited to ignitability, flame spread, heat release rate, heat of combustion, smoke development, and fire resistance. Determination of safety equivalency, with respect to structural fire safety, shall also include a structural system analysis.

**[A] 104.2.2.5 Tests.** Tests conducted to demonstrate equivalency in support of an alternative material, design or method of construction application shall be of a scale that is sufficient to predict performance of the end use configuration. Tests shall be performed by a party acceptable to the code official.

**[A] 104.2.2.6 Reports.** Supporting documentation, where necessary to assist in the approval of materials or assemblies not specifically provided for in this code, shall comply with Sections 104.2.2.6.1 and 104.2.2.6.2.

**[A] 104.2.2.6.1 Evaluation reports.** Evaluation reports shall be issued by an approved agency accredited to evaluate or certify products. The alternative material, design or method of construction and product evaluated shall be within the scope of accreditation of the approved agency. Criteria used for the evaluation shall be identified within the report, developed using a process that includes input from the public, and made available for review by the public.

**[A] 104.2.2.6.2 Other reports.** Reports not complying with Section 104.2.2.6.1 shall describe criteria, including but not limited to any referenced testing or analysis, used to determine compliance with code intent and justify code equivalence. The report shall be prepared by a qualified engineer, specialist, laboratory or fire safety specialty organization acceptable to the fire code official. The code official is authorized to require design submittals to be prepared by, and bear the stamp of, a registered design professional.

**[A] 104.2.2.7 Peer review.** The code official is authorized to require submittal of a peer review report in conjunction with a request to use an alternative material, design or method of construction, prepared by a peer reviewer that is approved by the code official.

**[A] 104.2.3 Modifications.** Where there are practical difficulties involved in carrying out the provisions of this code, the code official shall have the authority to grant modifications for individual cases provided that the code official shall first find that one or more special individual reasons make enforcement of the strict letter of this code impractical, that the modification is in conformance to with the intent and purpose of this code, and that such modification does not lessen health, life and fire safety requirements. The details of the written request and action granting modifications shall be recorded and entered into the files of the code enforcement agency.

**[A] 104.3 Applications and permits.** The code official is authorized to receive applications, review construction documents and issue permits for construction regulated by this code, issue permits for operations regulated by this code, inspect the premises for which such permits have been issued and enforce compliance with the provisions of this code.

**[A] 104.4 Right of entry.** Where it is necessary to make an inspection to enforce the provisions of this code, or where the code official has reasonable cause to believe that there exists in a structure or on a premises any conditions or violations that makes such building or premises unsafe, the code official shall have the authority to enter the structure or premises at all reasonable times to inspect or to perform the duties imposed by this code. If such structure or premises is occupied, the code official shall present proper credentials to the occupant and request entry. If such structure or premises is unoccupied, the code official shall first make a reasonable effort to locate the owner, the owner's authorized agent, or other persons having charge or control of the structure or premises and request entry. If such entry is refused, then the code official shall have recourse to every remedy provided by law to secure entry.

**[A] 104.4.1 Warrant.** Where the code official has first obtained a proper inspection warrant or other remedy provided by law to secure entry, an owners, the owner's authorized agent or occupants or persons having charge, care or control of the building or premises, shall not fail or neglect, after proper request is made as herein provided, to permit entry therein by the code official for the purpose of inspection and examination pursuant to this code.

**[A] 104.5 Identification.** The code official shall carry proper identification when inspecting structures or premises in the performance of duties under this code.

**[A] 104.6 Notices and orders.** The code official is authorized to issue such notices or orders as are required to affect compliance with this code in accordance with Section 110.2.

**[A] 104.7 Official records.** The code official shall keep official records as required by Sections 104.7.1 through 104.7.5. Such official records shall be retained for not less than 5 years or for as long as the structure or activity to which such records relate remains in existence, unless otherwise provided by other regulations.

**[A] 104.7.1 Approvals.** A record of approvals shall be maintained by the code official and shall be available for public inspection during business hours in accordance with applicable laws.

**[A] 104.7.2 Inspections.** The code official shall keep a record of each inspection made, including notices and orders issued, showing the findings and disposition of each.

**[A] 104.7.3 Code alternatives and modifications.** Application for alternative materials, design and methods of construction and equipment in accordance with Section 104.2.2; modifications in accordance with Section 104.2.3; and documentation of the final decision of the code official for either shall be in writing and shall be officially recorded in the permanent records of the code official.

**[A] 104.7.4 Tests.** The code official shall keep a record of tests conducted to comply with Sections 104.2.1.4 and 104.2.2.5.

**[A] 104.7.5 Fees.** The code official shall keep a record of fees collected and refunded in accordance with Section 109.

**[A] 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 personally liable, either civilly or criminally, and is hereby relieved from all personal liability for damages 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] 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 or other laws or ordinances implemented through the enforcement 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; 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.

**[A] 104.9 Approved materials and equipment.** Materials, equipment and devices approved by the code official shall be constructed and installed in accordance with such approval.

**[A] 104.9.1 Material and equipment reuse.** Materials, equipment and devices shall not be reused or reinstalled unless such elements have been reconditioned, tested and placed in good and proper working condition and approved.

**[A] 104.10 Other agencies.** When requested to do so by the code official, other officials of this jurisdiction shall assist and cooperate with the code official in the discharge of the duties required by this code.

## 2021 International Zoning Code

**Revise as follows:**

**[A] 104.7 Liability.** The code official, ~~or designee,~~ member of the board of adjustment or employee charged with the enforcement of this code, while acting in good faith and without malice in the discharge of the duties ~~described~~ required in this code or other pertinent law or ordinance, shall not be personally liable, either civilly or criminally , and is hereby relieved from personal liability ~~liable~~ for any damage ~~that may accrue~~ accruing to persons or property as a result of an act or by reason of an act or omission in the discharge of such duties.

**[A] 104.7.1 Legal defense.** ~~A~~ Any suit or criminal complaint ~~brought~~ instituted against the code official or employee because ~~such~~ of an act or omission performed by the code official or employee in the ~~enforcement of any provision of such codes~~ lawful discharge of duties under the provisions of this code or other pertinent laws or ordinances implemented through the enforcement of this code or ~~enforced by the enforcement agency~~ other laws or ordinances implemented through the enforcement of this code shall be defended by the jurisdiction until final termination of such proceedings. ~~Any judgment resulting therefrom shall be assumed by the jurisdiction.~~ 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. This code shall not be construed to relieve from or lessen the responsibility of any person owning, operating or controlling any building or parcel of land for any damages to persons or property caused by defects, nor shall the enforcement agency or its jurisdiction be held as assuming any such liability by reason of the reviews or permits issued under this code.

## 2021 International Green Construction Code

**Revise as follows:**

### ~~SECTION 104~~
### ~~DUTIES AND POWERS OF THE AUTHORITY HAVING JURISDICTION~~
***(Delete entire section and replace as follows)***

### ~~SECTION 105~~
### ~~APPROVAL~~
***(Delete entire section and replace as follows)***

**Add new text as follows:**

### SECTION 104
### DUTIES AND POWERS OF THE AUTHORITY HAVING JURISDICTION

**104.1 General.** The authority having jurisdiction is hereby authorized and directed to enforce the provisions of this code.

**104.2 Determination of compliance.** The authority having jurisdiction shall have the authority to determine compliance with this code, to render interpretations of this code and to adopt policies, procedures, rules and regulations in order to clarify the application of this code's provisions. Such interpretations, policies, procedures, rules and regulations:

1. Shall be in compliance with the intent and purpose of this code.
2. Shall not have the effect of waiving requirements specifically provided for in this code or other applicable codes and ordinances.

**104.2.1 Listed compliance.** Determination of compliance for anything required by this code, or a reference standard, to be listed shall be based on a test standard or approved listing evaluation that is germane to the provision requiring the listing. Anything required by this code, or a reference standard, to be listed shall be installed in accordance with the listing and the manufacturer's instructions. Copies of the listing standard and manufacturer's instructions shall be made available to the authority having jurisdiction upon request.

**104.2.2 Technical assistance.** To determine compliance with this code, the authority having jurisdiction is authorized to require the owner or owner's authorized agent to provide a technical opinion and report.

**104.2.2.1 Cost.** A technical opinion and report shall be provided without charge to the jurisdiction.

**104.2.2.2 Preparer qualifications.** The technical opinion and report shall be prepared by a qualified engineer, specialist, laboratory or fire safety specialty organization acceptable to the authority having jurisdiction. The authority having jurisdiction is authorized to require design submittals to be prepared by, and bear the stamp of, a registered design professional.

**104.2.2.3 Content.** The technical opinion and report shall analyze the properties of the design, operation or use of the building or premises and the

facilities and appurtenances situated thereon, to identify and propose necessary recommendations.

**104.2.2.4 Tests.** Where there is insufficient evidence of compliance with the provisions of this code, the authority having jurisdiction is authorized to require tests as evidence of compliance. Test methods shall be as specified in this code or by other recognized test standards. In the absence of recognized test standards, the authority having jurisdiction shall approve the testing procedures. Tests shall be performed by a party acceptable to the authority having jurisdiction.

**104.2.3 Compliance materials.** The authority having jurisdiction shall be permitted to approve specific computer software, worksheets, compliance manuals and other similar materials that meet the intent of this code.

**104.2.4 Approved programs.** The authority having jurisdiction shall have the authority to deem a national, state or local program as meeting or exceeding this code. Buildings approved in writing by such a program shall be considered to be in compliance with this code.

**104.2.4.1 Specific approval.** The authority having jurisdiction shall have the authority to approve programs or compliance tools for a specified application, limited scope or specific locale, including approval that is applicable to a specific section or chapter of this code.

**104.2.5 Innovative approaches and 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, innovative approach, or method of construction not specifically prescribed by this code, provided that any such alternative is not specifically prohibited by this code and has been approved.

**104.2.5.1 Approval authority.** An alternative material, design, innovative approach or method of construction shall be approved where the authority having jurisdiction finds that the proposed alternative is satisfactory and complies with Sections 104.2.5 through 104.2.7, as applicable.

**104.2.5.2 Application and disposition.** A request to use an alternative material, design, innovative approach or method of construction shall be submitted in writing to the authority having jurisdiction for approval. Where the alternative material, design, innovative approach or method of construction is not approved, the authority having jurisdiction shall respond in writing, stating the reasons the alternative was not approved.

**104.2.5.3 Compliance with code intent.** An alternative material, design, innovative approach or method of construction shall comply with the intent of the provisions of this code.

**104.2.5.4 Equivalency criteria.** An alternative material, design, innovative approach or method of construction shall, for the purpose intended, be not less than the equivalent of that prescribed in this code with respect to all of the following, as applicable:

1. Quality
2. Strength
3. Effectiveness
4. Durability
5. Safety

**104.2.5.4.1 Fire safety equivalency.** Determination of safety equivalency, with respect to fire, shall be based on an analysis that includes applicable fire safety performance properties, such as but not limited to ignitability, flame spread, heat release rate, heat of combustion, smoke development, and fire resistance. Determination of safety equivalency, with respect to structural fire safety, shall also include a structural system analysis.

**104.2.5.5 Tests.** Tests conducted to demonstrate equivalency in support of an alternative material, design or method of construction application shall be of a scale that is sufficient to predict performance of the end use configuration. Tests shall be performed by a party acceptable to the authority having jurisdiction.

**104.2.5.6 Reports.** Supporting documentation, where necessary to assist in the approval of materials or assemblies not specifically provided for in this code, shall comply with Sections 104.2.5.6.1 and 104.2.5.6.2.

**104.2.5.6.1 Evaluation reports.** Evaluation reports shall be issued by an approved agency accredited to evaluate or certify products. The alternate material, design or method of construction and product evaluated shall be within the scope of accreditation of the approved agency. Criteria used for the evaluation shall be identified within the report, developed using a process that includes input from the public and made available for review by the public.

**104.2.5.6.2 Other reports.** Reports not complying with Section 104.2.5.6.1 shall describe criteria, including but not limited to any referenced testing or analysis, used to determine compliance with code intent and justify code equivalence, including but not limited to any referenced testing or analysis. The report shall be prepared by a qualified engineer, specialist, laboratory or specialty organization acceptable to the authority having jurisdiction. The authority having jurisdiction is authorized to require design submittals to be prepared by, and bear the stamp of, a registered design professional.

**104.2.5.7 Peer review.** The authority having jurisdiction is authorized to require submittal of a peer review report in conjunction with a request to use an alternative material, design or method of construction, prepared by a peer reviewer that is approved by the authority having jurisdiction.

**104.2.6 Modifications.** Where there are practical difficulties involved in carrying out the provisions of this code, the authority having jurisdiction shall have the authority to grant modifications for individual cases, provided the authority having jurisdiction shall first find that one or more special

individual reasons make the strict letter of this code impractical, that the modification is in compliance with the intent and purpose of this code, and that such modification does not lessen the minimum requirements of this code. The details of the written request for and granting modifications shall be recorded and entered in the files of the department.

**104.3 Enforcement.** The authority having jurisdiction shall enforce compliance with the provisions of this code as part of the enforcement of other applicable codes and regulations, including the referenced codes listed in Section 102.4.

**104.4 Inspections.** The authority having jurisdiction shall have the authority to conduct inspections, as required, to determine code compliance, or the authority having jurisdiction shall have the authority to accept reports of inspection by approved agencies or individuals.

**104.5 Right of entry.** Where it is necessary to make an inspection to enforce the provisions of this code, or where the authority having jurisdiction has reasonable cause to believe that there exists in a structure or on a premises any conditions or violations of this code that make the structure or premises unsafe, dangerous or hazardous, the authority having jurisdiction shall have the authority to enter the structure or premises at all reasonable times to inspect or to perform the duties imposed on the authority having jurisdiction by this code. If such structure or premises is occupied, the authority having jurisdiction shall present credentials to the occupant and request entry. If such structure or premises is unoccupied, the authority having jurisdiction shall first make a reasonable effort to locate the owner, the owner's authorized agent or other person having charge or control of the structure or premises and request entry. If entry is refused, the authority having jurisdiction has recourse to every remedy provided by law to secure entry.

**104.5.1 Warrant.** Where the authority having jurisdiction has first obtained a proper inspection warrant or other remedy provided by law to secure entry, an owner, the owner's authorized agent or occupant or person having charge, care or control of the building or premises shall not fail or neglect, after proper request is made as herein provided, to permit entry therein by the authority having jurisdiction for the purpose of inspection and examination pursuant to this code.

**104.6 Identification.** The authority having jurisdiction shall carry proper identification when inspecting structures or premises in the performance of duties under this code.

**104.7 Notices and orders.** The authority having jurisdiction shall issue all necessary notices or orders to ensure compliance with this code.

**104.8 Official records.** The authority having jurisdiction shall keep official records as required by Sections 104.8.1 through 104.8.5. Such official records shall be retained for not less than 5 years or for as long as the building or structure to which such records relate remains in existence, unless otherwise provided by other regulations.

**104.8.1 Approvals.** A record of approvals shall be maintained by the authority having jurisdiction and shall be available for public inspection during business hours in accordance with applicable laws.

**104.8.2 Inspections.** The authority having jurisdiction shall keep a record of each inspection made, including notices and orders issued, showing the findings and disposition of each.

**104.8.3 Code alternatives and modifications.** Application for alternative materials, design and methods of construction and equipment in accordance with Section 104.2.5; modifications in accordance with Section 104.2.6; and documentation of the final decision of the authority having jurisdiction for either shall be in writing and shall be retained in the official records.

**104.8.4 Tests.** The authority having jurisdiction shall keep a record of tests conducted to comply with Sections 104.2.2.4 and 104.2.5.5.

**104.8.5 Fees.** The authority having jurisdiction shall keep a record of fees collected and refunded in accordance with Section 108.

**104.9 Liability.** The authority having jurisdiction, 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 personally liable, either civilly or criminally, 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.

**104.9.1 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 under the provisions of this code or other laws or ordinances implemented through the enforcement of this code shall be defended by legal representatives of the jurisdiction until the final termination of the proceedings. The authority having jurisdiction 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.

**104.10 Approved materials and equipment.** Materials, equipment, devices and innovative approaches approved by the authority having jurisdiction shall be constructed, installed and maintained in accordance with such approval.

**104.10.1 Material, product and equipment reuse.** Materials, products, equipment and devices shall not be reused unless such elements are in good working condition and approved.

# ADM13-22 Part II

IRC: SECTION 202, R104

**Proponents:** Robert Marshall, representing FCAC (fcac@iccsafe.org); Mike Nugent, representing Building Code Action Committee (bcac@iccsafe.org); Jeffrey Shapiro, representing Lake Travis Fire Rescue (jeff.shapiro@intlcodeconsultants.com)

**Primary sections and titles shown as deleted include the deletion of all sections and subsections within them. For clarity, the full text of these deletions are not shown.**

## 2021 International Residential Code

**Revise as follows:**

**[RB] APPROVED AGENCY.** An established and recognized ~~agency~~ organization that is regularly engaged in conducting tests, furnishing inspection services or furnishing product evaluation or certification~~, and~~ where such organization has been *approved* ~~by the building official~~.

**Add new definition as follows:**

**PEER REVIEW.** An independent and objective technical review conducted by an approved third party.

**Revise as follows:**

**~~SECTION R104~~**
**~~DUTIES AND POWERS OF THE BUILDING OFFICIAL~~**
***(Delete entire section and replace as follows)***

**Add new text as follows:**

**SECTION R104**
**DUTIES AND POWERS OF THE BUILDING OFFICIAL**

**R104.1 General.** The building official is hereby authorized and directed to enforce the provisions of this code.

**R104.2 Determination of compliance.** The building official shall have the authority to determine compliance with this code, to render interpretations of this code and to adopt policies, procedures, rules and regulations in order to clarify the application of this code's provisions. Such interpretations, policies, procedures, rules and regulations:

1. Shall be in compliance with the intent and purpose of this code.
2. Shall not have the effect of waiving requirements specifically provided for in this code.

**R104.2.1 Listed compliance.** Determination of compliance for anything required by this code, or a reference standard, to be listed shall be based on a test standard or approved listing evaluation that is germane to the provision requiring the listing. Anything required by this code, or a reference standard, to be listed shall be installed in accordance with the listing and the manufacturer's instructions. Copies of the listing standard and manufacturer's instructions shall be made available to the building official upon request.

**R104.2.2 Technical assistance.** To determine compliance with this code, the building official is authorized to require the owner or owner's authorized agent to provide a technical opinion and report.

**R104.2.2.1 Cost.** A technical opinion and report shall be provided without charge to the jurisdiction.

**R104.2.2.2 Preparer qualifications.** The technical opinion and report shall be prepared by a qualified engineer, specialist, laboratory or specialty organization acceptable to the building official. The building official is authorized to require design submittals to be prepared by, and bear the stamp of, a registered design professional.

**R104.2.2.3 Content.** The technical opinion and report shall analyze the safety properties of the design, operation or use of the building or premises and the facilities and appurtenances situated thereon, to identify and propose necessary recommendations.

**R104.2.2.4 Tests.** Where there is insufficient evidence of compliance with the provisions of this code, the building official is authorized to require tests as evidence of compliance. Test methods shall be as specified in this code or by other recognized test standards. In the absence of recognized test standards, the building official shall approve the testing procedures. Tests shall be performed by a party acceptable to the building official.

**R104.2.3 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 is not specifically prohibited by this code and has been approved.

**R104.2.3.1 Approval authority.** An alternative material, design or method of construction shall be approved where the building official finds that the proposed alternative is satisfactory and complies with Sections 104.2.3 through 104.2.3.7, as applicable.

**R104.2.3.2 Application and disposition.** A request to use an alternative material, design or method of construction shall be submitted in writing to the building official for approval. Where the alternative material, design or method of construction is not approved, the building official shall respond in writing, stating the reasons the alternative was not approved.

**R104.2.3.3 Compliance with code intent.** An alternative material, design or method of construction shall comply with the intent of the provisions of this code.

**R104.2.3.4 Equivalency criteria.** An alternative material, design or method of construction shall, for the purpose intended, be not less than the equivalent of that prescribed in this code with respect to all the following, as applicable:

1. Quality
2. Strength
3. Effectiveness
4. Durability
5. Safety

**R104.2.3.4.1 Fire safety equivalency.** Determination of safety equivalency, with respect to fire, shall be based on an analysis that includes applicable fire safety performance properties, such as but not limited to flame spread, heat release rate, heat of combustion, smoke development and fire resistance.

**R104.2.3.5 Tests.** Tests conducted to demonstrate equivalency in support of an alternative material, design or method of construction application shall be of a scale that is sufficient to predict performance of the end use configuration. Tests shall be performed by a party acceptable to the building official.

**R104.2.3.6 Reports.** Supporting documentation, where necessary to assist in the approval of materials or assemblies not specifically provided for in this code, shall comply with Sections R104.2.3.6.1 and R104.2.3.6.2.

**R104.2.3.6.1 Evaluation reports.** Evaluation reports shall be issued by an approved agency accredited to evaluate or certify products. The alternate material, design or method of construction and product evaluated shall be within the scope of accreditation of the approved agency. Criteria used for the evaluation shall be identified within the report, developed using a process that includes input from the public and made available for review by the public.

**R104.2.3.6.2 Other reports.** Reports not complying with Section R104.2.3.6.1 shall describe criteria, including but not limited to any referenced testing or analysis, used to determine compliance with code intent and justify code equivalence, including but not limited to any referenced testing or analysis. The report shall be prepared by a qualified engineer, specialist, laboratory or specialty organization acceptable to the building official. The building official is authorized to require design submittals to be prepared by, and bear the stamp of, a registered design professional.

**R104.2.3.7 Peer review.** The building official is authorized to require submittal of a peer review report in conjunction with a request to use an alternative material, design or method of construction, prepared by a peer reviewer that is approved by the building official.

**R104.2.4 Modifications.** Where there are practical difficulties involved in carrying out the provisions of this code, the building official shall have the authority to grant modifications for individual cases, provided the building official shall first find that one or more special individual reasons make the strict letter of this code impractical, that the modification is in compliance with the intent and purpose of this code, and that the modification does not lessen health, life and fire safety or structural requirements. The details of the written request for and action granting modifications shall be recorded and entered in the files of the department of building safety.

**R104.2.4.1 Flood hazard areas.** The building official shall not grant modifications to any provisions required in flood hazard areas as established by Table R301.2 unless a determination has been made that:

1. There is good and sufficient cause showing that the unique characteristics of the size, configuration or topography of the site render the elevation standards of Section R322 inappropriate.
2. Failure to grant the modification would result in exceptional hardship by rendering the lot undevelopable.
3. The granting of modification will not result in increased flood heights, additional threats to public safety, extraordinary public expense, cause fraud on or victimization of the public, or conflict with existing laws or ordinances.
4. The modification is the minimum necessary to afford relief, considering the flood hazard.
5. Written notice specifying the difference between the design flood elevation and the elevation to which the building is to be built, stating that the cost of flood insurance will be commensurate with the increased risk resulting from the reduced floor elevation and stating that construction below the design flood elevation increases risks to life and property, has been submitted to the applicant.

**R104.3 Applications and permits.** The building official shall receive applications, review construction documents and issue permits for the erection and alteration of buildings and structures, inspect the premises for which such permits have been issued and enforce compliance with the provisions of this code.

**R104.4 Right of entry.** Where it is necessary to make an inspection to enforce the provisions of this code, or where the building official has reasonable cause to believe that there exists in a structure or upon a premises a condition that is contrary to or in violation of this code that makes the structure or premises unsafe, dangerous or hazardous, the building official is authorized to enter the structure or premises at all reasonable times to inspect or to perform the duties imposed by this code. If such structure or premises is occupied, the building official shall present credentials to the occupant and request entry. If such structure or premises is unoccupied, the building official shall first make a reasonable effort to locate the owner, the owner's authorized agent, or other person having charge or control of the structure or premises and request entry. If entry is refused, the building official shall have recourse to every remedy provided by law to secure entry.

**R104.4.1 Warrant.** Where the building code official has first obtained a proper inspection warrant or other remedy provided by law to secure entry, an owner, the owner's authorized agent or occupant or person having charge, care or control of the building or premises shall not fail or neglect, after proper request is made as herein provided, to permit entry therein by the building code official for the purpose of inspection and examination pursuant to this code.

**R104.5 Identification.** The building official shall carry proper identification when inspecting structures or premises in the performance of duties under this code.

**R104.6 Notices and orders.** The building official shall issue necessary notices or orders to ensure compliance with this code in accordance with Section R113.2.

**R104.7 Official records.** The building official shall keep official records as required in Sections R104.7.1 through R104.7.5. Such official records shall be retained for not less than 5 years or for as long as the building or structure to which such records relate remains in existence, unless otherwise provided by other regulations.

**R104.7.1 Approvals.** A record of approvals shall be maintained by the building official and shall be available for public inspection during business hours in accordance with applicable laws.

**R104.7.2 Inspections.** The building official shall keep a record of each inspection made, including notices and orders issued, showing the findings and disposition of each.

**R104.7.3 Code alternatives and modifications.** Application for alternative materials, design and methods of construction and equipment in accordance with Section R104.2.3; modifications in accordance with Section R104.2.4; and documentation of the final decision of the building official for either shall be in writing and shall be retained in the official records.

**R104.7.4 Tests.** The building official shall keep a record of tests conducted to comply with Sections R104.2.2.4 and R104.2.3.5.

**R104.7.5 Fees.** The building official shall keep a record of fees collected and refunded in accordance with Section R108.

**R104.8 Liability.** The building 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 personally liable, either civilly or criminally, 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.

**R104.8.1 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 or other laws or ordinances implemented through the enforcement of this code shall be defended by legal representatives of the jurisdiction until the final termination of the proceedings. The building 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.

**R104.9 Approved materials and equipment.** Materials, equipment and devices approved by the building official shall be constructed and installed in accordance with such approval.

**R104.9.1 Materials and equipment reuse.** Materials, equipment and devices shall not be reused unless such elements are in good working condition and approved.

**Reason Statement:** Section 104 (Section 105 in the IPMC) appears in the IFC, IWUIC, IBC, IEBC, IRC, IgCC and IPMC and contains general requirements for the authority and duties of the code official. Among these authorities and duties is the review and approval of alternate methods. The primary purpose of this code change is to update Section 104 to reflect the current manner that alternate methods and materials are evaluated, and to differentiate between evaluations from accredited evaluation agencies and evaluations from others, such as engineers. These provisions have basically been the same since the first edition in 2000, with the exception that the section on "Research Reports" was added in 2003. Industry terminology and methods have evolved over the years.

This proposal revises general code enforcement provisions to improve organization, improve clarity, and supplement existing provisions to better align the code text with how the code is commonly applied. The end goal is to provide the same wording and procedures in all of the I-Codes with regard to the Duties and Responsibilities of the Code Official. Some of the codes contain unique provisions applicable to only that code. Those nuances are retained so there are some slight differences, but the formatting will be the same in each code and the language will generally bee the

same in each code.

As stated earlier, this section has been in the code a long time, and it is believed that it initially envisioned an alternative product or method review and approval process on a project-by-project basis, with substantiating tests and calculations or analyses provided with each permit application. Currently, a more efficient system has evolved where the same product evaluation reports are used in numerous projects, across many jurisdictions, and for many conditions. This evolution causes the need to revise this section to reflect current procedures.

However, the need for designers to be able to apply for one-time approval needs to be maintained, and that is the reason that "research reports" is maintained. In this case, though, when a method or material is not addressed by the code, the code official needs more information on the process that the evaluator used to determine that the method or material complies with the intent of the code.

To achieve the common format, a template is shown below which includes comments on each of the sections. Since the wording in each code is intended to be the same, the outline is not shown for every code, however there is an underline/strikeout version for each code provided. The code change for each code is provided as delete and substitute. This was done because the autoformatting process in cdpACCESS did not provide a document to easily follow. The underline/strikeout versions show the specific changes.

The following template is from the IBC. The IBC, IFC, IRC, IEBC, IPMC, and IWUIC are formatted the same as this template, however some codes have additional unique provisions, and other codes don't contain all of these sections if they are not appropriate for the code content.

OUTLINE FOR PROPOSED SECTION 104

SECTION 104 DUTIES AND POWERS OF BUILDING OFFICIAL – same title used for each code

104.1 General. – This section has been subdivided with numbered/titled subsections to break up the existing paragraph and specifically state that the code official is authorized to determine compliance with the code. While always implied and applied in this manner, the code never specifically states this important fact.

104.2 Determination of Compliance. – reformatted to identify that when reviewing projects for compliance with the code, the code official can develop policies and procedures. It also specifically states that the developed policies and the project approvals are to be based on the intent of the code.

104.2.1 Listed compliance. – In cases where the code specifies a listing standard, it is common for a code official to accept things listed to that standard without further evaluating whether the standard is germane. When a product listing is appropriate, then the fact that the product is listed and installed in accordance with the listing specifications and the manufacturer's instructions becomes the approval of the product. This section is not included in all codes since not all codes require listed equipment.

104.2.2 Technical assistance. – Nearly all the codes provide for the code official to utilize technical assistance in some form or another. This section is included as a subsection for determining compliance and will be consistent throughout the I-Codes. It is derived from, and replaces, previous text that was originally developed for and limited to hazardous materials related provisions.

104.2.2.1 Cost. – the cost for technical assistance is borne by the applicant or owner. This was previously included in a preceding paragraph and has been separated into its own subsection.

104.2.2.2 Preparer qualifications. – states that the person or agency providing the technical report must be qualified. The code official has the ability to require that the report is stamped by a registered design professional, since not all reports may need to provide this. For example, a hazardous materials classification report often does not include engineering or design. The definition is added to codes that do not currently contain the definition, such as the IWUIC. This was previously included in a preceding paragraph and has been separated into its own subsection. The new text

goes beyond simply recommending changes, recognizing that the report may be a source document, as opposed to a review of documentation prepared by others.

104.2.2.3 Content. – the technical report shall include an analysis and any recommended or necessary changes.

104.2.2.4 Tests. – Tests can often provide valuable information. Where a test standard isn't specified by this code or a reference standard, the code official may wish to conduct further evaluation of the suitability of the test method used as a basis. Testing can be performed by an approved agency or by any other party/organization approved by the code official. Proposed provisions for tests are largely derived from existing code text on this topic.

104.2.3 ~~104.11~~ Alternative materials, design and methods of construction and equipment. – All codes make reference to accepting some type of alternative. This section is placed under the general compliance approval section and revised to state that a proposed alternative cannot be something that is specifically prohibited by the code. If ICC members have previously voted to specifically disallow something, alternative methods should not be a means of avoiding such a prohibition. Nevertheless, a code modification would still provide an option to make exceptions for unique cases, as opposed to the door being open for an applicant to end run the intent of the code by presenting an analysis or alternative that suggests an alternative to a prohibition is OK. It is important to note that something not contemplated by the code would not be impacted by this statement. Not contemplated is not the same as a specific prohibition in the code.

104.2.3.1 Approval authority. – if the alternative is acceptable, then it is to be approved by the code official. This is from existing text.

104.2.3.2 Application and disposition. – the submittal for an alternative must be accomplished in writing. If it is not approved, the code official must so state in writing and provide reasons why it was not acceptable. This is largely from existing text, however, the requirement for a written application for alternatives was not previously located in this section, where it is appropriate to reference.

104.2.3.3 Compliance with code intent. – the alternative must comply with the code's intent.

104.2.3.4 Equivalency criteria. – the alternative must provide equivalency to the code's provisions. The list of characteristics to be addressed is included from the current code. The reference to fire-resistance is removed from the list and fire-resistance is included under safety with additional criteria regarding fire characteristics identified in Section 104.2.3.4.1.

104.2.3.4.1 Fire safety equivalency. – this section was added because "fire-resistance" was removed from the list in Section 104.2.3.4 and recognizing that fire-resistance is not the only fire related characteristic to be addressed. Fire-resistance is only one characteristic of safety with respect to fire. This section is added to clarify that the entire issue of performance under fire conditions is the concern. Previously, aspects of fire safety beyond fire resistance would have been evaluated as part of "safety" in the list with no additional guidance on what to consider. Performance under fire conditions also includes equivalency as to how the alternate will perform structurally when exposed to fire.

104.2.3.5 Tests. – this section is added so the code official can ensure that any testing conducted is performed to a scale that adequately represents the end use of the alternate. This has primarily been added in response to concerns related to Code Change F60-21, which modified Section 2603 to defer alternatives related to fire performance of foam plastics to Section 104.

104.2.3.6 ~~104.11.1 Research~~ Reports. This section is relocated and revised to address two different types of reports currently submitted for alternatives.

104.2.3.6.1 Evaluation reports. – This section is added to address reports generate by an approved agency. The definition of “approved agency” was added to several codes in the 2018 editions. The definition is proposed to be revised, as in the IBC, or added as a new definition codes do not contain this definition, as in the IFC. This evaluation report is conducted by an approved agency that is accredited to conduct the tests or evaluations appropriate for the alternative involved. When the applicant provides a product evaluation from an accredited product evaluation agency that uses publicly developed and available criteria for the evaluation, the code official may have increased confidence that the method used for the evaluation does result in a method or material that meets the intent of the code and is at least equivalent to code-prescribed construction. Public development of criteria allows for input from industry experts, the public, and building officials in determining the methods used to evaluate code intent and equivalence, somewhat similar to the code development process where consensus is important. The accreditation ensures that the organization uses a consistent process to perform the evaluations. This section is meant to reflect the current use of evaluation reports from accredited evaluation agencies or organizations.

104.2.3.6.2 Other reports. – this section is added to address reports generated by persons or agencies other than an approved agency. It specifies that the person or agency providing the report must be qualified and must be approved by the code official. The code official has the authority to require the stamp of a registered design professional. When an applicant provides an evaluation from other than an accredited agency, or from a source that does not use publicly developed and available criteria, the code official needs more information in order to perform a proper review. Not only does the code official need to evaluate the product, but also evaluate the method that the applicant has used to determine compliance with code intent and code equivalence. So, in that case, it is proposed that the applicant would also have to provide the criteria that was used to do the evaluation, justification for use of that criteria, and data used for the evaluation, so a complete review can be made.

104.2.3.7 Peer review. – this section is added to address a method of review currently utilized by many jurisdictions. The peer review is an outside, third-party review that is submitted to the code official for use in cases where a jurisdiction may not have qualified resource in-house to perform a sufficient review of an alternative compliance proposal. Again, the peer reviewer must be qualified and approved by the code official.

104.2.4 ~~104.10~~ Modifications. – this section is relocated under the section of compliance. Minor edits occurred to provide consistent language throughout the codes.

104.2.4.1 ~~104.10.1~~ Flood hazard areas. – this section on flood hazard areas only appears in the IBC, IRC and IEBC. This section is relocated to follow the provisions for modifications.

104.3 ~~104.2~~ Applications and permits. – this section is relocated and revised to provide consistent wording.

104.3.1 ~~104.2.1~~ Determination of substantially improved or substantially damaged existing buildings and structures in flood hazard areas. – this section on flood hazard areas only appears in the IBC, IRC and IEBC. This section is relocated to follow the provisions for modifications.

104.4 ~~104.6~~ Right of entry. – This section is relocated and revised to provide consistent wording. The issue of right of entry is the same with all enforcement issues.

104.4.1 Warrant. – this section was not found in all codes, so it was added to the IBC to provide the ability to utilize a warrant. This function is allowed by the courts and currently utilized by jurisdictions.

104.5 Identification. – no change

104.6 ~~104.3~~ Notices and orders. – relocated and revised for consistent wording.

104.7 ~~Department~~ Official records. – This section revised to provide consistent wording and is reformatted by creating subsections. Each subsection addresses a different type of record that the is to be retained. This format clarifies that these records are required to be maintained.

104.7.1 Approvals.

104.7.2 Inspections.

104.7.3 Code alternatives and modifications.

104.7.4 Tests.

104.7.5 Fees.

104.8 Liability. – this section deals with protection from liability of the code official. The sections are revised to provide consistent wording throughout all I-Codes.

104.8.1 Legal defense. – this section deals with legal defense for the code official. The sections are revised to provide consistent wording throughout all I-Codes.

104.9 Approved materials and equipment. – no change

104.9.1 ~~Used materials~~ Material and equipment reuse. – this section addresses the reuse of materials and equipment. The section is revised to provide consistent wording throughout the codes to say that the code official must approve any materials to be reused.

~~104.4 Inspections.~~ – this section is relocated to 104.2.2. Some of the language in this section is not relocated since those portions are already covered in Section 110.

~~104.10 Modifications~~ – this section is relocated to 104.2.4 for formatting.

~~104.10.1 Flood hazard areas~~ – this section is relocated to 104.2.4.1 for formatting.

~~104.11 Alternative materials, design and methods of construction and equipment.~~ – this section is relocated to 104.2.3 for formatting.

~~104.11.1 Research reports.~~ – this section is relocated to 104.2.3.6 for formatting.

~~104.11.2 Tests.~~ – this section is relocated 104.2.2.4, 104.2.3.5 and 104.8.4 for formatting.

Additional unique changes are as follows:

1. Sections in IWUIC 105 are relocated to IWUIC 104, so Section 105 is deleted. This also occurs in the IgCC and IPMC.
2. The IZC has a completely different approach application and therefore, only the duplicated sections in the IZC are revised.
3. IWUIC 104.4 Subjects Not Regulated by this Code is relocated to Section 102.5 and IWUIC 104.5 Matters Not Provided For is relocated to Section 102.6 for consistency with IFC format. A minor change was made to the definition of “approved agency” which removes the repeat of the word that is to be defined, agency, and replaces it with organization. Another revision allows the agency to furnish product evaluation in addition to certification, since evaluation and certification are two different things. Evaluation is for materials and methods not addressed by the code, and certification is for materials and methods that are addressed by the code. It is intended that all I-Codes will be formatted in this fashion. There was not sufficient time to process these revisions through the PMG CAC, so only the codes under the review of the Fire CAC and Building CAC are submitted at this time. The revisions for the other codes will occur during Public Comment.

A strikeout/underline version of each code follows to identify specific revisions.

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. In 2020 and 2021 the BCAC has held several virtual meetings open to any interested party. In addition, there were numerous virtual Working Group meetings for the current code development cycle, which included members of the committee as well as interested parties. Related documents and reports are posted on the BCAC website at https://www.iccsafe.org/products-and-services/i-codes/code-development/cs/building-code-action-committee-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 and life safety in new and existing buildings and facilities as well as the protection of life and property in wildland urban interface areas. In 2020 and 2021 the Fire-CAC held multiple virtual meetings that were open to any interested party. In addition, there were numerous virtual specific working group meetings that were also open to any interested parties, to develop, discuss and debate the proposed changes. Related documentation and reports are posted on the FCAC website at: https://www.iccsafe.org/products-and-services/i-codes/code-development/cs/fire-code-action-committee-fcac/.

The proposal in strikeout and underline text format can be viewed here:

https://www.cdpaccess.com/proposal/8550/25693/files/download/2955/

**Cost Impact:** The code change proposal will not increase or decrease the cost of construction
This proposal simply reformats the code sections and provides consistency across the codes.

# ADM14-22

IMC: SECTION 104, 202; IFGC: SECTION 104, SECTION 105, 202; IPC: SECTION 104, 202; ISPSC: SECTION 104, 202; IPSDC: SECTION 104, 202

**Proponents:** Kevin Scott, representing KH Scott & Associates LLC (khscottassoc@gmail.com)

**Primary sections and titles shown as deleted include the deletion of all sections and subsections within them. For clarity, the full text of these deletions are not shown.**

## 2021 International Mechanical Code

**Revise as follows:**

**[A] APPROVED AGENCY.** An established and recognized ~~agency~~ organization that is regularly engaged in conducting tests, furnishing inspection services or furnishing product evaluation or certification where such ~~agency~~ organization has been approved by the code official.

**Add new definition as follows:**

**PEER REVIEW.** An independent and objective technical review conducted by an approved third party.

**Revise as follows:**

~~**SECTION 104**~~
~~**DUTIES AND POWERS OF THE CODE OFFICIAL**~~
***(Delete entire section and replace as follows)***

**Add new text as follows:**

**SECTION 104**
**DUTIES AND POWERS OF THE CODE OFFICIAL**

**[A] 104.1 General.** The code official is hereby authorized and directed to enforce the provisions of this code.

**[A] 104.2 Determination of compliance.** The code official shall have the authority to determine compliance with this code, to render interpretations of this code and to adopt policies, procedures, rules and regulations in order to clarify the application of this code's provisions. Such interpretations, policies, procedures, rules and regulations:

1. Shall be in compliance with the intent and purpose of this code.
2. Shall not have the effect of waiving requirements specifically provided for in this code or other applicable codes and ordinances.

**104.2.1 Listed compliance.** Determination of compliance for anything required by this code, or a reference standard, to be listed shall be based on a test standard or approved listing evaluation that is germane to the provision requiring the listing. Anything required by this code, or a reference standard, to be listed shall be installed in accordance with the listing and the manufacturer's instructions. Copies of the listing standard and manufacturer's instructions shall be made available to the code official upon request.

**[A] 104.2.2 Technical assistance.** To determine compliance with this code, the code official is authorized to require the owner or owner's authorized agent to provide a technical opinion and report.

**[A] 104.2.2.1 Cost.** A technical opinion and report shall be provided without charge to the jurisdiction.

**[A] 104.2.2.2 Preparer qualifications.** The technical opinion and report shall be prepared by a qualified engineer, specialist, laboratory or specialty organization acceptable to the code official. The code official is authorized to require design submittals to be prepared by and bear the stamp of a registered design professional.

**[A] 104.2.2.3 Content.** The technical opinion and report shall analyze the safety properties of the design, operation or use of the building or premises and the facilities and appurtenances situated thereon, to identify and propose necessary recommendations.

**[A] 104.2.2.4 Tests.** Where there is insufficient evidence of compliance with the provisions of this code, the code official is authorized to require tests as evidence of compliance. Test methods shall be as specified in this code or by other recognized test standards. In the absence of recognized test standards, the code official shall approve the testing procedures. Tests shall be performed by a party acceptable to the code official.

**[A] 104.2.3 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 is not specifically prohibited by this code and has been approved.

**[A] 104.2.3.1 Approval authority.** An alternative material, design or method of construction shall be approved where the code official finds that the proposed alternative is satisfactory and complies with Sections 104.2.3 through 104.2.3.7, as applicable.

**[A] 104.2.3.2 Application and disposition.** A request to use an alternative material, design or method of construction shall be submitted in writing to the code official for approval. Where the alternative material, design or method of construction is not approved, the code official shall respond in writing, stating the reasons the alternative was not approved.

**[A] 104.2.3.3 Compliance with code intent.** An alternative material, design or method of construction shall comply with the intent of the provisions of this code,

**[A] 104.2.3.4 Equivalency criteria.** An alternative material, design or method of construction shall, for the purpose intended, be not less than the equivalent of that prescribed in this code with respect to all of the following, as applicable:

1. Quality
2. Strength
3. Effectiveness
4. Durability
5. Safety

**[A] 104.2.3.4.1 Fire safety equivalency.** Determination of safety equivalency, with respect to fire, shall be based on an analysis that includes applicable fire safety performance properties, such as but not limited to ignitability, flame spread, heat release rate, heat of combustion, smoke development, and fire resistance. Determination of safety equivalency, with respect to structural fire safety, shall also include a structural system analysis.

**[A] 104.2.3.5 Tests.** Tests conducted to demonstrate equivalency in support of an alternative material, design or method of construction application shall be of a scale that is sufficient to predict performance of the end use configuration. Tests shall be performed by a party acceptable to the code official.

**[A] 104.2.3.6 Reports.** Supporting documentation, where necessary to assist in the approval of materials or assemblies not specifically provided for in this code, shall comply with Sections 104.2.3.6.1 and 104.2.3.6.2.

**[A] 104.2.3.6.1 Evaluation reports.** Evaluation reports shall be issued by an approved agency accredited to evaluate or certify products. The alternate material, design or method of construction and product evaluated shall be within the scope of accreditation of the approved agency. Criteria used for the evaluation shall be identified within the report, developed using a process that includes input from the public and made available for review by the public.

**[A] 104.2.3.6.2 Other reports.** Reports not complying with Section 104.2.3.6.1 shall describe criteria, including but not limited to any referenced testing or analysis, used to determine compliance with code intent and justify code equivalence, including but not limited to any referenced testing or analysis. The report shall be prepared by a qualified engineer, specialist, laboratory or specialty organization acceptable to the code official. The code official is authorized to require design submittals to be prepared by, and bear the stamp of, a registered design professional.

**[A] 104.2.3.7 Peer review.** The code official is authorized to require submittal of a peer review report in conjunction with a request to use an alternative material, design or method of construction, prepared by a peer reviewer that is approved by the code official.

**[A] 104.2.4 Modifications.** Where there are practical difficulties involved in carrying out the provisions of this code, the code official shall have the authority to grant modifications for individual cases provided that the code official shall first find that one or more special individual reasons make the strict letter of this code impractical, that the modification is in compliance with the intent and purpose of this code, and that such modification does not lessen health, accessibility, life and fire safety or structural requirements. The details of the written request for and action granting modifications shall be recorded and entered in the files of the department of building safety.

**[A] 104.2.4.1 Flood hazard areas.** The code official shall not grant modifications to any provision required in flood hazard areas as established by Section 1612.3 unless a determination has been made that:

1. A showing of good and sufficient cause that the unique characteristics of the size, configuration or topography of the site render the elevation standards of Section 1612 inappropriate.
2. A determination that failure to grant the variance would result in exceptional hardship by rendering the lot undevelopable.
3. A determination that the granting of a variance will not result in increased flood heights, additional threats to public safety, extraordinary public expense, cause fraud on or victimization of the public, or conflict with existing laws or ordinances.
4. A determination that the variance is the minimum necessary to afford relief, considering the flood hazard.
5. Submission to the applicant of written notice specifying the difference between the design flood elevation and the elevation to which the building is to be built, stating that the cost of flood insurance will be commensurate with the increased risk resulting from the reduced floor elevation, and stating that construction below the design flood elevation increases risks to life and property.

**[A] 104.3 Applications and permits.** The code official shall receive applications, review construction documents and issue permits for the

erection, and alteration, demolition and moving of buildings and structures, inspect the premises for which such permits have been issued and enforce compliance with the provisions of this code.

**[A] 104.3.1 Determination of substantially improved or substantially damaged existing buildings and structures in flood hazard areas.** For applications for reconstruction, rehabilitation, repair, alteration, addition or other improvement of existing buildings or structures located in flood hazard areas, the code official shall determine if the proposed work constitutes substantial improvement or repair of substantial damage. Where the code official determines that the proposed work constitutes substantial improvement or repair of substantial damage, and where required by this code, the code official shall require the building to meet the requirements of Section 1612 or Section R322 of the International Residential Code, as applicable.

**[A] 104.4 Right of entry.** Where it is necessary to make an inspection to enforce the provisions of this code, or where the code official has reasonable cause to believe that there exists in a structure or on a premises a condition that is contrary to or in violation of this code that makes the structure or premises unsafe, dangerous or hazardous, the code official is authorized to enter the structure or premises at all reasonable times to inspect or to perform the duties imposed by this code. If such structure or premises is occupied, the code official shall present credentials to the occupant and request entry. If such structure or premises is unoccupied, the code official shall first make a reasonable effort to locate the owner, the owner's authorized agent or other person having charge or control of the structure or premises and request entry. If entry is refused, the code official shall have recourse to every remedy provided by law to secure entry.

**[A] 104.4.1 Warrant.** Where the code official has first obtained a proper inspection warrant or other remedy provided by law to secure entry, an owner, the owner's authorized agent or occupant or person having charge, care or control of the building or premises shall not fail or neglect, after proper request is made as herein provided, to permit entry therein by the code official for the purpose of inspection and examination pursuant to this code.

**[A] 104.5 Identification.** The code official shall carry proper identification when inspecting structures or premises in the performance of duties under this code.

**[A] 104.6 Notices and orders.** The code official shall issue necessary notices or orders to ensure compliance with this code in accordance with Section 114.

**[A] 104.7 Official records.** The code official shall keep official records as required by Sections 104.7.1 through 104.7.5. Such official records shall be retained for not less than 5 years or for as long as the building or structure to which such records relate remains in existence, unless otherwise provided by other regulations.

**[A] 104.7.1 Approvals.** A record of approvals shall be maintained by the code official and shall be available for public inspection during business hours in accordance with applicable laws.

**[A] 104.7.2 Inspections.** The code official shall keep a record of each inspection made, including notices and orders issued, showing the findings and disposition of each.

**[A] 104.7.3 Code alternatives and modifications.** Application for alternative materials, design and methods of construction and equipment in accordance with Section 104.2.3; modifications in accordance with Section 104.2.4; and documentation of the final decision of the code official for either shall be in writing and shall be retained in the official records.

**[A] 104.7.4 Tests.** The code official shall keep a record of tests conducted to comply with Sections 104.2.2.4 and 104.2.3.5.

**[A] 104.7.5 Fees.** The code official shall keep a record of fees collected and refunded in accordance with Section 109.

**[A] 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 personally liable, either civilly or criminally, 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] 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 under the provisions of this code or other laws or ordinances implemented through the enforcement 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 costs in any action, suit or proceeding that is instituted in pursuance of the provisions of this code.

**[A] 104.9 Approved materials and equipment.** Materials, equipment and devices approved by the code official shall be constructed and installed in accordance with such approval.

**[A] 104.9.1 Material and equipment reuse.** Materials, equipment and devices shall not be reused unless such elements are in good working condition and approved.

## 2021 International Fuel Gas Code

**Revise as follows:**

**[A] APPROVED AGENCY.** An established and recognized ~~agency~~ organization that is regularly engaged in conducting tests, furnishing

inspection services or furnishing evaluation or certification, where such ~~agency~~ organization has been *approved* by the *code official*.

**Add new definition as follows:**

**PEER REVIEW.** An independent and objective technical review conducted by and approved third party.

**Revise as follows:**

## ~~SECTION 104~~
## ~~DUTIES AND POWERS OF THE CODE OFFICIAL~~
## *(Delete entire section and replace as follows)*

## ~~SECTION 105~~
## ~~APPROVAL~~
## *(Delete entire section and replace as follows)*

**Add new text as follows:**

## SECTION 104
## DUTIES AND POWERS OF THE CODE OFFICIAL

**[A] 104.1 General.** The code official is hereby authorized and directed to enforce the provisions of this code.

**[A] 104.2 Determination of Compliance.** The code official shall have the authority to determine compliance with this code, to render interpretations of this code and to adopt policies, procedures, rules and regulations in order to clarify the application of this code's provisions. Such interpretations, policies, procedures, rules and regulations:

1. Shall be in compliance with the intent and purpose of this code.
2. Shall not have the effect of waiving requirements specifically provided for in this code.

**[A] 104.2.1 Listed compliance.** Determination of compliance for anything required by this code, or a reference standard, to be listed shall be based on a test standard or approved listing evaluation that is germane to the provision requiring the listing. Anything required by this code, or a reference standard, to be listed shall be installed in accordance with the listing and the manufacturer's instructions. Copies of the listing standard and manufacturer's instructions shall be made available to the code official upon request.

**[A] 104.2.2 Technical assistance.** To determine compliance with this code, the code official is authorized to require the owner or owner's authorized agent to provide a technical opinion and report.

**[A] 104.2.2.1 Cost.** A technical opinion and report shall be provided without charge to the jurisdiction.

**[A] 104.2.2.2 Preparer qualifications.** The technical opinion and report shall be prepared by a qualified engineer, specialist, laboratory or specialty organization acceptable to the code official. The code official is authorized to require design submittals to be prepared by and bear the stamp of a registered design professional.

**[A] 104.2.2.3 Content.** The technical opinion and report shall analyze the safety properties of the design, operation or use of the building or premises and the facilities and appurtenances situated thereon, to identify and propose necessary recommendations.

**[A] 104.2.2.4 Tests.** Where there is insufficient evidence of compliance with the provisions of this code, the code official is authorized to require tests as evidence of compliance. Test methods shall be as specified in this code or by other recognized test standards. In the absence of recognized test standards, the code official shall approve the testing procedures. Tests shall be performed by a party acceptable to the code official.

**[A] 104.2.3 Alternative materials, design and methods of construction 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 is not specifically prohibited by this code and has been approved.

**[A] 104.2.3.1 Approved authority.** An alternative material, design or method of construction shall be approved where the code official finds that the proposed alternative is satisfactory and complies with Sections 104.2.3 through 104.2.3.7, as applicable.

**[A] 104.2.3.2 Application and disposition.** A request to use an alternative material, design or method of construction shall be submitted in writing to the code official for approval. Where the alternative material, design or method of construction is not approved, the code official shall respond in writing, stating the reasons the alternative was not approved.

**[A] 104.2.3.3 Compliance with code intent.** An alternative material, design or method of construction shall comply with the intent of the provisions of this code,

**[A] 104.2.3.4 Equivalency criteria.** An alternative material, design or method of construction shall, for the purpose intended, be not less than the equivalent of that prescribed in this code with respect to all of the following, as applicable:

1. Quality
2. Strength
3. Effectiveness
4. Durability
5. Safety

**[A] 104.2.3.4.1 Fire safety equivalency.** Determination of safety equivalency, with respect to fire, shall be based on an analysis that includes applicable fire safety performance properties, such as but not limited to ignitability, flame spread, heat release rate, heat of combustion, smoke development, and fire resistance. Determination of safety equivalency, with respect to structural fire safety, shall also include a structural system analysis.

**[A] 104.2.3.5 Tests.** Tests conducted to demonstrate equivalency in support of an alternative material, design or method of construction application shall be of a scale that is sufficient to predict performance of the end use configuration. Tests shall be performed by a party acceptable to the code official.

**[A] 104.2.3.6 Reports.** Supporting documentation, where necessary to assist in the approval of materials or assemblies not specifically provided for in this code, shall comply with Sections 104.2.3.6.1 and 104.2.3.6.2.

**[A] 104.2.3.6.1 Evaluation reports.** Evaluation reports shall be issued by an approved agency accredited to evaluate or certify products. The alternate material, design or method of construction and product evaluated shall be within the scope of accreditation of the approved agency. Criteria used for the evaluation shall be identified within the report, developed using a process that includes input from the public and made available for review by the public.

**[A] 104.2.3.6.2 Other reports.** Reports not complying with Section 104.2.3.6.1 shall describe criteria, including but not limited to any referenced testing or analysis, used to determine compliance with code intent and justify code equivalence, including but not limited to any referenced testing or analysis. The report shall be prepared by a qualified engineer, specialist, laboratory or specialty organization acceptable to the code official. The code official is authorized to require design submittals to be prepared by, and bear the stamp of, a registered design professional.

**[A] 104.2.3.7 Peer review.** The code official is authorized to require submittal of a peer review report in conjunction with a request to use an alternative material, design or method of construction, prepared by a peer reviewer that is approved by the code official.

**[A] 104.2.4 Modifications.** Where there are practical difficulties involved in carrying out the provisions of this code, the code official shall have the authority to grant modifications for individual cases provided that the code official shall first find that one or more special individual reasons make the strict letter of this code impractical, that the modification is in compliance with the intent and purpose of this code, and that such modification does not lessen health, accessibility, life and fire safety or structural requirements. The details of the written request for and action granting modifications shall be recorded and entered in the files of the department of building safety.

**[A] 104.2.4.1 Flood Hazard Areas.** The code official shall not grant modifications to any provision required in flood hazard areas as established by Section 1612.3 unless a determination has been made that:

1. A showing of good and sufficient cause that the unique characteristics of the size, configuration or topography of the site render the elevation standards of Section 1612 inappropriate.
2. A determination that failure to grant the variance would result in exceptional hardship by rendering the lot undevelopable.
3. A determination that the granting of a variance will not result in increased flood heights, additional threats to public safety, extraordinary public expense, cause fraud on or victimization of the public, or conflict with existing laws or ordinances.
4. A determination that the variance is the minimum necessary to afford relief, considering the flood hazard.
5. Submission to the applicant of written notice specifying the difference between the design flood elevation and the elevation to which the building is to be built, stating that the cost of flood insurance will be commensurate with the increased risk resulting from the reduced floor elevation, and stating that construction below the design flood elevation increases risks to life and property.

**[A] 104.3 Applications and permits.** The code official shall receive applications, review construction documents and issue permits for the erection, and alteration, demolition and moving of buildings and structures, inspect the premises for which such permits have been issued and enforce compliance with the provisions of this code.

**[A] 104.3.1 Determination of substantially damaged existing buildings and structures in flood hazard areas.** For applications for reconstruction, rehabilitation, repair, alteration, addition or other improvement of existing buildings or structures located in flood hazard areas, the code official shall determine if the proposed work constitutes substantial improvement or repair of substantial damage. Where the code official determines that the proposed work constitutes substantial improvement or repair of substantial damage, and where required by this code, the code official shall require the building to meet the requirements of Section 1612 or Section R322 of the International Residential Code, as applicable.

**[A] 104.4 Right of entry.** Where it is necessary to make an inspection to enforce the provisions of this code, or where the code official has reasonable cause to believe that there exists in a structure or on a premises a condition that is contrary to or in violation of this code that makes the structure or premises unsafe, dangerous or hazardous, the code official is authorized to enter the structure or premises at all reasonable times to inspect or to perform the duties imposed by this code. If such structure or premises is occupied, the code official shall present credentials to the occupant and request entry. If such structure or premises is unoccupied, the code official shall first make a reasonable effort to locate the owner, the owner's authorized agent or other person having charge or control of the structure or premises and request entry. If entry is refused, the code official shall have recourse to every remedy provided by law to secure entry.

**[A] 104.4.1 Warrant.** Where the code official has first obtained a proper inspection warrant or other remedy provided by law to secure entry, an owner, the owner's authorized agent or occupant or person having charge, care or control of the building or premises shall not fail or neglect, after proper request is made as herein provided, to permit entry therein by the code official for the purpose of inspection and examination pursuant to this code.

**[A] 104.5 Identification.** The code official shall carry proper identification when inspecting structures or premises in the performance of duties under this code.

**[A] 104.6 Notices and orders.** The code official shall issue necessary notices or orders to ensure compliance with this code in accordance with Section 114.

**[A] 104.7 Official records.** The code official shall keep official records as required by Sections 104.7.1 through 104.7.5. Such official records shall be retained for not less than 5 years or for as long as the building or structure to which such records relate remains in existence, unless otherwise provided by other regulations.

**[A] 104.7.1 Approvals.** A record of approvals shall be maintained by the code official and shall be available for public inspection during business hours in accordance with applicable laws.

**[A] 104.7.2 Inspections.** The code official shall keep a record of each inspection made, including notices and orders issued, showing the findings and disposition of each.

**[A] 104.7.3 Code alternatives and modifications.** Application for alternative materials, design and methods of construction and equipment in accordance with Section 104.2.3; modifications in accordance with Section 104.2.4; and documentation of the final decision of the code official for either shall be in writing and shall be retained in the official records.

**[A] 104.7.4 Tests.** The code official shall keep a record of tests conducted to comply with Sections 104.2.2.4 and 104.2.3.5.

**[A] 104.7.4 Fees.** The code official shall keep a record of fees collected and refunded in accordance with Section 109.

**[A] 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 personally liable, either civilly or criminally, 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] 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 under the provisions of this code or other laws or ordinances implemented through the enforcement 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 costs in any action, suit or proceeding that is instituted in pursuance of the provisions of this code.

**[A] 104.9 Approved materials and equipment.** Materials, equipment and devices approved by the code official shall be constructed and installed in accordance with such approval.

**[A] 104.9.1 Materials and equipment reuse.** Materials, equipment and devices shall not be reused unless such elements are in good working condition and approved.

## 2021 International Plumbing Code

**Revise as follows:**

**[A] APPROVED AGENCY.** An established and recognized ~~agency~~ organization that is regularly engaged in conducting tests or furnishing inspection services, or furnishing product evaluation or certification where such ~~agency~~ organization has been *approved* by the code official.

**Add new definition as follows:**

**PEER REVIEW.** An independent and objective technical review conducted by an approved third party.

**Revise as follows:**

### ~~SECTION 104~~
### ~~DUTIES AND POWERS OF THE CODE OFFICIAL~~

*(Delete entire section and replace as follows)*

**Add new text as follows:**

## SECTION 104
## DUTIES AND POWERS OF THE CODE OFFICIAL

**[A] 104.1 General.** The code official is hereby authorized and directed to enforce the provisions of this code.

**[A] 104.2 Determination of compliance.** The code official shall have the authority to determine compliance with this code, to render interpretations of this code and to adopt policies, procedures, rules and regulations in order to clarify the application of this code's provisions. Such interpretations, policies, procedures, rules and regulations:

1. Shall be in compliance with the intent and purpose of this code.
2. Shall not have the effect of waiving requirements specifically provided for in this code.

**[A] 104.2.1 Listed compliance.** Determination of compliance for anything required by this code, or a reference standard, to be listed shall be based on a test standard or approved listing evaluation that is germane to the provision requiring the listing. Anything required by this code, or a reference standard, to be listed shall be installed in accordance with the listing and the manufacturer's instructions. Copies of the listing standard and manufacturer's instructions shall be made available to the code official upon request.

**[A] 104.2.2 Technical assistance.** To determine compliance with this code, the code official is authorized to require the owner or owner's authorized agent to provide a technical opinion and report.

**[A] 104.2.2.1 Cost.** A technical opinion and report shall be provided without charge to the jurisdiction.

**[A] 104.2.2.2 Preparer qualifications.** The technical opinion and report shall be prepared by a qualified engineer, specialist, laboratory or specialty organization acceptable to the code official. The code official is authorized to require design submittals to be prepared by and bear the stamp of a registered design professional.

**[A] 104.2.2.3 Content.** The technical opinion and report shall analyze the safety properties of the design, operation or use of the building or premises and the facilities and appurtenances situated thereon, to identify and propose necessary recommendations.

**[A] 104.2.2.4 Tests.** Where there is insufficient evidence of compliance with the provisions of this code, the code official is authorized to require tests as evidence of compliance. Test methods shall be as specified in this code or by other recognized test standards. In the absence of recognized test standards, the code official shall approve the testing procedures. Tests shall be performed by a party acceptable to the code official.

**[A] 104.2.3 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 is not specifically prohibited by this code and has been approved.

**[A] 104.2.3.1 Approval authority.** An alternative material, design or method of construction shall be approved where the code official finds that the proposed alternative is satisfactory and complies with Sections 104.2.3 through 104.2.3.7, as applicable.

**[A] 104.2.3.2 Application and disposition.** A request to use an alternative material, design or method of construction shall be submitted in writing to the code official for approval. Where the alternative material, design or method of construction is not approved, the code official shall respond in writing, stating the reasons the alternative was not approved.

**[A] 104.2.3.3 Compliance with code intent.** An alternative material, design or method of construction shall comply with the intent of the provisions of this code,

**[A] 104.2.3.4 Equivalency criteria.** An alternative material, design or method of construction shall, for the purpose intended, be not less than the equivalent of that prescribed in this code with respect to all of the following, as applicable:

1. Quality
2. Strength
3. Effectiveness
4. Durability
5. Safety

**[A] 104.2.3.4.1 Fire safety equivalency.** Determination of safety equivalency, with respect to fire, shall be based on an analysis that includes applicable fire safety performance properties, such as but not limited to ignitability, flame spread, heat release rate, heat of combustion, smoke development, and fire resistance. Determination of safety equivalency, with respect to structural fire safety, shall also include a structural system analysis.

**[A] 104.2.3.5 Tests.** Tests conducted to demonstrate equivalency in support of an alternative material, design or method of construction application shall be of a scale that is sufficient to predict performance of the end use configuration. Tests shall be performed by a party acceptable to the code official.

**[A] 104.2.3.6 Reports.** Supporting documentation, where necessary to assist in the approval of materials or assemblies not specifically provided for in this code, shall comply with Sections 104.2.3.6.1 and 104.2.3.6.2.

**[A] 104.2.3.6.1 Evaluation reports.** Evaluation reports shall be issued by an approved agency accredited to evaluate or certify products. The alternate material, design or method of construction and product evaluated shall be within the scope of accreditation of the approved agency. Criteria used for the evaluation shall be identified within the report, developed using a process that includes input from the public and made available for review by the public.

**[A] 104.2.3.6.2 Other reports.** Reports not complying with Section 104.2.3.6.1 shall describe criteria, including but not limited to any referenced testing or analysis, used to determine compliance with code intent and justify code equivalence, including but not limited to any referenced testing or analysis. The report shall be prepared by a qualified engineer, specialist, laboratory or specialty organization acceptable to the code official. The code official is authorized to require design submittals to be prepared by, and bear the stamp of, a registered design professional.

**[A] 104.2.3.7 Peer review.** The code official is authorized to require submittal of a peer review report in conjunction with a request to use an alternative material, design or method of construction, prepared by a peer reviewer that is approved by the code official.

**[A] 104.2.4 Modifications.** Where there are practical difficulties involved in carrying out the provisions of this code, the code official shall have the authority to grant modifications for individual cases provided that the code official shall first find that one or more special individual reasons make the strict letter of this code impractical, that the modification is in compliance with the intent and purpose of this code, and that such modification does not lessen health, accessibility, life and fire safety or structural requirements. The details of the written request for and action granting modifications shall be recorded and entered in the files of the department of building safety.

**[A] 104.2.4.1 Flood hazard areas.** The code official shall not grant modifications to any provision required in flood hazard areas as established by Section 1612.3 unless a determination has been made that:

1. A showing of good and sufficient cause that the unique characteristics of the size, configuration or topography of the site render the elevation standards of Section 1612 inappropriate.
2. A determination that failure to grant the variance would result in exceptional hardship by rendering the lot undevelopable.
3. A determination that the granting of a variance will not result in increased flood heights, additional threats to public safety, extraordinary public expense, cause fraud on or victimization of the public, or conflict with existing laws or ordinances.
4. A determination that the variance is the minimum necessary to afford relief, considering the flood hazard.
5. Submission to the applicant of written notice specifying the difference between the design flood elevation and the elevation to which the building is to be built, stating that the cost of flood insurance will be commensurate with the increased risk resulting from the reduced floor elevation, and stating that construction below the design flood elevation increases risks to life and property.

**[A] 104.3 Applications and permits.** The code official shall receive applications, review construction documents and issue permits for the erection, and alteration, demolition and moving of buildings and structures, inspect the premises for which such permits have been issued and enforce compliance with the provisions of this code.

**[A] 104.3.1 Determination of substantially damaged existing buildings and structures in flood hazard areas.** For applications for reconstruction, rehabilitation, repair, alteration, addition or other improvement of existing buildings or structures located in flood hazard areas, the code official shall determine if the proposed work constitutes substantial improvement or repair of substantial damage. Where the code official determines that the proposed work constitutes substantial improvement or repair of substantial damage, and where required by this code, the code official shall require the building to meet the requirements of Section 1612 or Section R322 of the International Residential Code, as applicable.

**[A] 104.4 Right of entry.** Where it is necessary to make an inspection to enforce the provisions of this code, or where the code official has reasonable cause to believe that there exists in a structure or on a premises a condition that is contrary to or in violation of this code that makes the structure or premises unsafe, dangerous or hazardous, the code official is authorized to enter the structure or premises at all reasonable times to inspect or to perform the duties imposed by this code. If such structure or premises is occupied, the code official shall present credentials to the occupant and request entry. If such structure or premises is unoccupied, the code official shall first make a reasonable effort to locate the owner, the owner's authorized agent or other person having charge or control of the structure or premises and request entry. If entry is refused, the code official shall have recourse to every remedy provided by law to secure entry.

**[A] 104.4.1 Warrant.** Where the code official has first obtained a proper inspection warrant or other remedy provided by law to secure entry, an owner, the owner's authorized agent or occupant or person having charge, care or control of the building or premises shall not fail or neglect, after proper request is made as herein provided, to permit entry therein by the code official for the purpose of inspection and examination pursuant to this code.

**[A] 104.5 Identification.** The code official shall carry proper identification when inspecting structures or premises in the performance of duties under this code.

**[A] 104.6 Notices and orders.** The code official shall issue necessary notices or orders to ensure compliance with this code in accordance with Section 114.

**[A] 104.7 Official records.** The code official shall keep official records as required by Sections 104.7.1 through 104.7.5. Such official records shall be retained for not less than 5 years or for as long as the building or structure to which such records relate remains in existence, unless otherwise provided by other regulations.

**[A] 104.7.1 Approvals.** A record of approvals shall be maintained by the code official and shall be available for public inspection during business hours in accordance with applicable laws.

**[A] 104.7.2 Inspections.** The code official shall keep a record of each inspection made, including notices and orders issued, showing the findings and disposition of each.

**[A] 104.7.3 Code alternatives and modifications.** Application for alternative materials, design and methods of construction and equipment in accordance with Section 104.2.3; modifications in accordance with Section 104.2.4; and documentation of the final decision of the code official for either shall be in writing and shall be retained in the official records.

**[A] 104.7.4 Tests.** The code official shall keep a record of tests conducted to comply with Sections 104.2.2.4 and 104.2.3.5.

**[A] 104.7.5 Fees.** The code official shall keep a record of fees collected and refunded in accordance with Section 109.

**[A] 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 personally liable, either civilly or criminally, 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] 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 under the provisions of this code or other laws or ordinances implemented through the enforcement 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 costs in any action, suit or proceeding that is instituted in pursuance of the provisions of this code.

**[A] 104.9 Approved materials and equipment.** Materials, equipment and devices approved by the code official shall be constructed and installed in accordance with such approval.

**[A] 104.9.1 Material and equipment reuse.** Materials, equipment and devices shall not be reused unless such elements are in good working condition and approved.

## 2021 International Swimming Pool and Spa Code

**Revise as follows:**

**[A] APPROVED AGENCY.** An established and recognized ~~agency~~ organization regularly engaged in conducting tests or furnishing inspection services, or furnishing product evaluation or certification where such ~~agency~~ organization has been *approved* by the *code official*.

**Add new definition as follows:**

**PEER REVIEW.** An independent and objective technical review conducted by an approved third party.

**Add new text as follows:**

**REGISTERED DESIGN PROFESSIONAL.** An architect or engineer, registered or licensed to practice professional architecture or engineering, as defined by the statutory requirements of the professional registration laws of the state in which the project is to be constructed.

**Revise as follows:**

### ~~SECTION 104~~
### ~~DUTIES AND POWERS OF THE CODE OFFICIAL~~
### *(Delete entire section and replace as follows)*

**Add new text as follows:**

### SECTION 104
### DUTIES AND POWERS OF THE CODE OFFICIAL

**[A] 104.1 General.** The code official is hereby authorized and directed to enforce the provisions of this code.

**[A] 104.2 Determination of compliance.** The code official shall have the authority to determine compliance with this code, to render interpretations of this code and to adopt policies, procedures, rules and regulations in order to clarify the application of this code's provisions. Such interpretations,

policies, procedures, rules and regulations:

1. Shall be in compliance with the intent and purpose of this code.
2. Shall not have the effect of waiving requirements specifically provided for in this code.

**[A] 104.2.1 Listed compliance.** Determination of compliance for anything required by this code, or a reference standard, to be listed shall be based on a test standard or approved listing evaluation that is germane to the provision requiring the listing. Anything required by this code, or a reference standard, to be listed shall be installed in accordance with the listing and the manufacturer's instructions. Copies of the listing standard and manufacturer's instructions shall be made available to the code official upon request.

**[A] 104.2.2 Technical assistance.** To determine compliance with this code, the code official is authorized to require the owner or owner's authorized agent to provide a technical opinion and report.

**[A] 104.2.2.1 Cost.** A technical opinion and report shall be provided without charge to the jurisdiction.

**[A] 104.2.2.2 Preparer qualifications.** The technical opinion and report shall be prepared by a qualified engineer, specialist, laboratory or specialty organization acceptable to the code official. The code official is authorized to require design submittals to be prepared by and bear the stamp of a registered design professional.

**[A] 104.2.2.3 Content.** The technical opinion and report shall analyze the safety properties of the design, operation or use of the building or premises and the facilities and appurtenances situated thereon, to identify and propose necessary recommendations.

**[A] 104.2.2.4 Tests.** Where there is insufficient evidence of compliance with the provisions of this code, the code official is authorized to require tests as evidence of compliance. Test methods shall be as specified in this code or by other recognized test standards. In the absence of recognized test standards, the code official shall approve the testing procedures. Tests shall be performed by a party acceptable to the code official.

**[A] 104.2.3 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 is not specifically prohibited by this code and has been approved.

**[A] 104.2.3.1 Approval authority.** An alternative material, design or method of construction shall be approved where the code official finds that the proposed alternative is satisfactory and complies with Sections 104.2.3 through 104.2.3.7, as applicable.

**[A] 104.2.3.2 Application and disposition.** A request to use an alternative material, design or method of construction shall be submitted in writing to the code official for approval. Where the alternative material, design or method of construction is not approved, the code official shall respond in writing, stating the reasons the alternative was not approved.

**[A] 104.2.3.3 Compliance with code intent.** An alternative material, design or method of construction shall comply with the intent of the provisions of this code,

**[A] 104.2.3.4 Equivalency criteria.** An alternative material, design or method of construction shall, for the purpose intended, be not less than the equivalent of that prescribed in this code with respect to all of the following, as applicable:

1. Quality
2. Strength
3. Effectiveness
4. Durability
5. Safety

**[A] 104.2.3.4.1 Fire safety equivalency.** Determination of safety equivalency, with respect to fire, shall be based on an analysis that includes applicable fire safety performance properties, such as but not limited to ignitability, flame spread, heat release rate, heat of combustion, smoke development, and fire resistance. Determination of safety equivalency, with respect to structural fire safety, shall also include a structural system analysis.

**[A] 104.2.3.5 Tests.** Tests conducted to demonstrate equivalency in support of an alternative material, design or method of construction application shall be of a scale that is sufficient to predict performance of the end use configuration. Tests shall be performed by a party acceptable to the code official.

**[A] 104.2.3.6 Reports.** Supporting documentation, where necessary to assist in the approval of materials or assemblies not specifically provided for in this code, shall comply with Sections 104.2.3.6.1 and 104.2.3.6.2.

**[A] 104.2.3.6.1 Evaluation reports.** Evaluation reports shall be issued by an approved agency accredited to evaluate or certify products. The alternate material, design or method of construction and product evaluated shall be within the scope of accreditation of the approved agency. Criteria used for the evaluation shall be identified within the report, developed using a process that includes input from the public and made available for review by the public.

**[A] 104.2.3.6.2 Other reports.** Reports not complying with Section 104.2.3.6.1 shall describe criteria, including but not limited to any referenced testing or analysis, used to determine compliance with code intent and justify code equivalence, including but not limited to any referenced testing or analysis. The report shall be prepared by a qualified engineer, specialist, laboratory or specialty organization acceptable to the code official. The code official is authorized to require design submittals to be prepared by, and bear the stamp of, a registered design professional.

**[A] 104.2.3.7 Peer review.** The code official is authorized to require submittal of a peer review report in conjunction with a request to use an alternative material, design or method of construction, prepared by a peer reviewer that is approved by the code official.

**[A] 104.2.4 Modifications.** Where there are practical difficulties involved in carrying out the provisions of this code, the code official shall have the authority to grant modifications for individual cases provided that the code official shall first find that one or more special individual reasons make the strict letter of this code impractical, that the modification is in compliance with the intent and purpose of this code, and that such modification does not lessen health, accessibility, life and fire safety or structural requirements. The details of the written request for and action granting modifications shall be recorded and entered in the files of the department of building safety.

**[A] 104.2.4.1 Flood hazard areas.** The code official shall not grant modifications to any provision required in flood hazard areas as established by Section 1612.3 unless a determination has been made that:

1. A showing of good and sufficient cause that the unique characteristics of the size, configuration or topography of the site render the elevation standards of Section 1612 inappropriate.
2. A determination that failure to grant the variance would result in exceptional hardship by rendering the lot undevelopable.
3. A determination that the granting of a variance will not result in increased flood heights, additional threats to public safety, extraordinary public expense, cause fraud on or victimization of the public, or conflict with existing laws or ordinances.
4. A determination that the variance is the minimum necessary to afford relief, considering the flood hazard.
5. Submission to the applicant of written notice specifying the difference between the design flood elevation and the elevation to which the building is to be built, stating that the cost of flood insurance will be commensurate with the increased risk resulting from the reduced floor elevation, and stating that construction below the design flood elevation increases risks to life and property.

**[A] 104.3 Applications and permits.** The code official shall receive applications, review construction documents and issue permits for the erection, and alteration, demolition and moving of buildings and structures, inspect the premises for which such permits have been issued and enforce compliance with the provisions of this code.

**[A] 104.3.1 Determination of substantially damaged existing buildings and structures in flood hazard areas.** For applications for reconstruction, rehabilitation, repair, alteration, addition or other improvement of existing buildings or structures located in flood hazard areas, the code official shall determine if the proposed work constitutes substantial improvement or repair of substantial damage. Where the code official determines that the proposed work constitutes substantial improvement or repair of substantial damage, and where required by this code, the code official shall require the building to meet the requirements of Section 1612 or Section R322 of the International Residential Code, as applicable.

**[A] 104.4 Right of entry.** Where it is necessary to make an inspection to enforce the provisions of this code, or where the code official has reasonable cause to believe that there exists in a structure or on a premises a condition that is contrary to or in violation of this code that makes the structure or premises unsafe, dangerous or hazardous, the code official is authorized to enter the structure or premises at all reasonable times to inspect or to perform the duties imposed by this code. If such structure or premises is occupied, the code official shall present credentials to the occupant and request entry. If such structure or premises is unoccupied, the code official shall first make a reasonable effort to locate the owner, the owner's authorized agent or other person having charge or control of the structure or premises and request entry. If entry is refused, the code official shall have recourse to every remedy provided by law to secure entry.

**[A] 104.4.1 Warrant.** Where the code official has first obtained a proper inspection warrant or other remedy provided by law to secure entry, an owner, the owner's authorized agent or occupant or person having charge, care or control of the building or premises shall not fail or neglect, after proper request is made as herein provided, to permit entry therein by the code official for the purpose of inspection and examination pursuant to this code.

**[A] 104.5 Identification.** The code official shall carry proper identification when inspecting structures or premises in the performance of duties under this code.

**[A] 104.6 Notice and orders.** The code official shall issue necessary notices or orders to ensure compliance with this code in accordance with Section 114.

**[A] 104.7 Official records.** The code official shall keep official records as required by Sections 104.7.1 through 104.7.5. Such official records shall be retained for not less than 5 years or for as long as the building or structure to which such records relate remains in existence, unless otherwise provided by other regulations.

**[A] 104.7.1 Approvals.** A record of approvals shall be maintained by the code official and shall be available for public inspection during business hours in accordance with applicable laws.

**[A] 104.7.2 Inspections.** The code official shall keep a record of each inspection made, including notices and orders issued, showing the findings

and disposition of each.

**[A] 104.7.3 Code alternatives and modifications.** Application for alternative materials, design and methods of construction and equipment in accordance with Section 104.2.3; modifications in accordance with Section 104.2.4; and documentation of the final decision of the code official for either shall be in writing and shall be retained in the official records.

**[A] 104.7.4 Tests.** The code official shall keep a record of tests conducted to comply with Sections 104.2.2.4 and 104.2.3.5.

**[A] 104.7.5 Fees.** The code official shall keep a record of fees collected and refunded in accordance with Section 109.

**[A] 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 personally liable, either civilly or criminally, 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] 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 under the provisions of this code or other laws or ordinances implemented through the enforcement 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 costs in any action, suit or proceeding that is instituted in pursuance of the provisions of this code.

**[A] 104.9 Approved materials and equipment.** Materials, equipment and devices approved by the code official shall be constructed and installed in accordance with such approval.

**[A] 104.9.1 Material and equipment reuse.** Materials, equipment and devices shall not be reused unless such elements are in good working condition and approved.

## 2021 International Private Sewage Disposal Code

**Add new definition as follows:**

**APPROVED AGENCY.** An established and recognized organization that is regularly engaged in conducting tests, furnishing inspection services or furnishing product evaluation or certification where such organization has been approved by the code official.

**PEER REVIEW.** An independent and objective technical review conducted by an approved third party.

**Revise as follows:**

### ~~SECTION 104~~
### ~~DUTIES AND POWERS OF THE CODE OFFICIAL~~
### *(Delete entire section and replace as follows)*

**Add new text as follows:**

### SECTION 104
### DUTIES AND POWERS OF THE CODE OFFICIAL

**[A] 104.1 General.** The code official is hereby authorized and directed to enforce the provisions of this code.

**[A] 104.2 Determination of compliance.** The code official shall have the authority to determine compliance with this code, to render interpretations of this code and to adopt policies, procedures, rules and regulations in order to clarify the application of this code's provisions. Such interpretations, policies, procedures, rules and regulations:

1. Shall be in compliance with the intent and purpose of this code.
2. Shall not have the effect of waiving requirements specifically provided for in this code.

**[A] 104.2.1 Listed compliance.** Determination of compliance for anything required by this code, or a reference standard, to be listed shall be based on a test standard or approved listing evaluation that is germane to the provision requiring the listing. Anything required by this code, or a reference standard, to be listed shall be installed in accordance with the listing and the manufacturer's instructions. Copies of the listing standard and manufacturer's instructions shall be made available to the code official upon request.

**[A] 104.2.2 Technical assistance.** To determine compliance with this code, the code official is authorized to require the owner or owner's authorized agent to provide a technical opinion and report.

**[A] 104.2.2.1 Cost.** A technical opinion and report shall be provided without charge to the jurisdiction.

**[A] 104.2.2.2 Preparer qualifications.** The technical opinion and report shall be prepared by a qualified engineer, specialist, laboratory or specialty organization acceptable to the code official. The code official is authorized to require design submittals to be prepared by and bear the stamp of a

registered design professional.

**[A] 104.2.2.3 Content.** The technical opinion and report shall analyze the safety properties of the design, operation or use of the building or premises and the facilities and appurtenances situated thereon, to identify and propose necessary recommendations.

**[A] 104.2.2.4 Tests.** Where there is insufficient evidence of compliance with the provisions of this code, the code official is authorized to require tests as evidence of compliance. Test methods shall be as specified in this code or by other recognized test standards. In the absence of recognized test standards, the code official shall approve the testing procedures. Tests shall be performed by a party acceptable to the code official.

**[A] 104.2.3 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 is not specifically prohibited by this code and has been approved.

**[A] 104.2.3.1 Approval authority.** An alternative material, design or method of construction shall be approved where the code official finds that the proposed alternative is satisfactory and complies with Sections 104.2.3 through 104.2.3.7, as applicable.

**[A] 104.2.3.2 Application and disposition.** A request to use an alternative material, design or method of construction shall be submitted in writing to the code official for approval. Where the alternative material, design or method of construction is not approved, the code official shall respond in writing, stating the reasons the alternative was not approved.

**[A] 104.2.3.3 Compliance with code intent.** An alternative material, design or method of construction shall comply with the intent of the provisions of this code,

**[A] 104.2.3.4 Equivalency criteria.** An alternative material, design or method of construction shall, for the purpose intended, be not less than the equivalent of that prescribed in this code with respect to all of the following, as applicable:

1. Quality
2. Strength
3. Effectiveness
4. Durability
5. Safety

**[A] 104.2.3.4.1 Fire safety equivalency.** Determination of safety equivalency, with respect to fire, shall be based on an analysis that includes applicable fire safety performance properties, such as but not limited to ignitability, flame spread, heat release rate, heat of combustion, smoke development, and fire resistance. Determination of safety equivalency, with respect to structural fire safety, shall also include a structural system analysis.

**[A] 104.2.3.5 Tests.** Tests conducted to demonstrate equivalency in support of an alternative material, design or method of construction application shall be of a scale that is sufficient to predict performance of the end use configuration. Tests shall be performed by a party acceptable to the code official.

**[A] 104.2.3.6 Reports.** Supporting documentation, where necessary to assist in the approval of materials or assemblies not specifically provided for in this code, shall comply with Sections 104.2.3.6.1 and 104.2.3.6.2.

**[A] 104.2.3.6.1 Evaluation reports.** Evaluation reports shall be issued by an approved agency accredited to evaluate or certify products. The alternate material, design or method of construction and product evaluated shall be within the scope of accreditation of the approved agency. Criteria used for the evaluation shall be identified within the report, developed using a process that includes input from the public and made available for review by the public.

**[A] 104.2.3.6.2 Other reports.** Reports not complying with Section 104.2.3.6.1 shall describe criteria, including but not limited to any referenced testing or analysis, used to determine compliance with code intent and justify code equivalence, including but not limited to any referenced testing or analysis. The report shall be prepared by a qualified engineer, specialist, laboratory or specialty organization acceptable to the code official. The code official is authorized to require design submittals to be prepared by, and bear the stamp of, a registered design professional.

**[A] 104.2.3.7 Peer review.** The code official is authorized to require submittal of a peer review report in conjunction with a request to use an alternative material, design or method of construction, prepared by a peer reviewer that is approved by the code official.

**[A] 104.2.4 Modifications.** Where there are practical difficulties involved in carrying out the provisions of this code, the code official shall have the authority to grant modifications for individual cases provided that the code official shall first find that one or more special individual reasons make the strict letter of this code impractical, that the modification is in compliance with the intent and purpose of this code, and that such modification does not lessen health, accessibility, life and fire safety or structural requirements. The details of the written request for and action granting modifications shall be recorded and entered in the files of the department of building safety.

**[A] 104.2.4.1 Flood hazard areas.** The code official shall not grant modifications to any provision required in flood hazard areas as established by Section 1612.3 unless a determination has been made that:

1. A showing of good and sufficient cause that the unique characteristics of the size, configuration or topography of the site render the elevation standards of Section 1612 inappropriate.

2. A determination that failure to grant the variance would result in exceptional hardship by rendering the lot undevelopable.

3. A determination that the granting of a variance will not result in increased flood heights, additional threats to public safety, extraordinary public expense, cause fraud on or victimization of the public, or conflict with existing laws or ordinances.

4. A determination that the variance is the minimum necessary to afford relief, considering the flood hazard.

5. Submission to the applicant of written notice specifying the difference between the design flood elevation and the elevation to which the building is to be built, stating that the cost of flood insurance will be commensurate with the increased risk resulting from the reduced floor elevation, and stating that construction below the design flood elevation increases risks to life and property.

**[A] 104.3 Applications and permits.** The code official shall receive applications, review construction documents and issue permits for the erection, and alteration, demolition and moving of buildings and structures, inspect the premises for which such permits have been issued and enforce compliance with the provisions of this code.

**[A] 104.3.1 Determination of substantially damaged existing buildings and structures in flood hazard areas.** For applications for reconstruction, rehabilitation, repair, alteration, addition or other improvement of existing buildings or structures located in flood hazard areas, the code official shall determine if the proposed work constitutes substantial improvement or repair of substantial damage. Where the code official determines that the proposed work constitutes substantial improvement or repair of substantial damage, and where required by this code, the code official shall require the building to meet the requirements of Section 1612 or Section R322 of the International Residential Code, as applicable.

**[A] 104.4 Right of entry.** Where it is necessary to make an inspection to enforce the provisions of this code, or where the code official has reasonable cause to believe that there exists in a structure or on a premises a condition that is contrary to or in violation of this code that makes the structure or premises unsafe, dangerous or hazardous, the code official is authorized to enter the structure or premises at all reasonable times to inspect or to perform the duties imposed by this code. If such structure or premises is occupied, the code official shall present credentials to the occupant and request entry. If such structure or premises is unoccupied, the code official shall first make a reasonable effort to locate the owner, the owner's authorized agent or other person having charge or control of the structure or premises and request entry. If entry is refused, the code official shall have recourse to every remedy provided by law to secure entry.

**[A] 104.4.1 Warrant.** Where the code official has first obtained a proper inspection warrant or other remedy provided by law to secure entry, an owner, the owner's authorized agent or occupant or person having charge, care or control of the building or premises shall not fail or neglect, after proper request is made as herein provided, to permit entry therein by the code official for the purpose of inspection and examination pursuant to this code.

**104.5 Identification.** The code official shall carry proper identification when inspecting structures or premises in the performance of duties under this code.

**[A] 104.6 Notices and ordet.** The code official shall issue necessary notices or orders to ensure compliance with this code in accordance with Section 114.

**[A] 104.7 Official records.** The code official shall keep official records as required by Sections 104.7.1 through 104.7.5. Such official records shall be retained for not less than 5 years or for as long as the building or structure to which such records relate remains in existence, unless otherwise provided by other regulations.

**[A] 104.7.1 Approvals.** A record of approvals shall be maintained by the code official and shall be available for public inspection during business hours in accordance with applicable laws.

**[A] 104.7.2 Inspections.** The code official shall keep a record of each inspection made, including notices and orders issued, showing the findings and disposition of each.

**[A} 104.7.3 Code alternatives and modifications.** Application for alternative materials, design and methods of construction and equipment in accordance with Section 104.2.3; modifications in accordance with Section 104.2.4; and documentation of the final decision of the code official for either shall be in writing and shall be retained in the official records.

**[A] 104.7.4 Tests.** The code official shall keep a record of tests conducted to comply with Sections 104.2.2.4 and 104.2.3.5.

**[A] 104.7.5 Fees.** The code official shall keep a record of fees collected and refunded in accordance with Section 109.

**[A] 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 personally liable, either civilly or criminally, 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] 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 under the provisions of this code or other laws or ordinances implemented through the enforcement 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 costs in any action, suit or proceeding that is instituted in pursuance of the provisions of this code.

**[A] 104.9 Approved materials and equipment.** Materials, equipment and devices approved by the code official shall be constructed and installed in accordance with such approval.

**[A] 104.9.1 Material and equipment reuse.** Materials, equipment and devices shall not be reused unless such elements are in good working condition and approved.

**Reason Statement:** Section 104 appears in the IMC, IFGC, IPC, ISPSC and IPSDC and contains general requirements for the authority and duties of the code official. Among these authorities and duties is the review and approval of alternate methods. The primary purpose of this code change is to update Section 104 to reflect the current manner that alternate methods and materials are evaluated, and to differentiate between evaluations from accredited evaluation agencies and evaluations from others, such as engineers. These provisions have basically been the same since the first edition in 2000, with the exception that the section on "Research Reports" was added in 2003. Industry terminology and methods have evolved over the years.
This proposal revises general code enforcement provisions to improve organization, improve clarity, and supplement existing provisions to better align the code text with how the code is commonly applied. The end goal is to provide the same wording and procedures in all of the I-Codes with regard to the Duties and Responsibilities of the Code Official. Some of the codes contain unique provisions applicable to only that code. Those nuances are retained so there are some slight differences, but the formatting will be the same in each code and the language will generally be the same in each code.

A separate code change proposal was submitted for the IFC, IWUIC, IBC, IEBC, IRC, IgCC and IPMC. The proposals are separate, however, the content and purpose is the same. Time restraints did not allow for this package to be reviewed by the PMG CAC. Therefore, it is submitted separately, however the content and format is identical.

As stated earlier, this section has been in the code a long time, and it is believed that it initially envisioned an alternative product or method review and approval process on a project-by-project basis, with substantiating tests and calculations or analyses provided with each permit application. Currently, a more efficient system has evolved where the same product evaluation reports are used in numerous projects, across many jurisdictions, and for many conditions. This evolution causes the need to revise this section to reflect current procedures.

However, the need for designers to be able to apply for one-time approval needs to be maintained, and that is the reason that "research reports" is maintained. In this case, though, when a method or material is not addressed by the code, the code official needs more information on the process that the evaluator used to determine that the method or material complies with the intent of the code.

To achieve the common format, a template is shown below which includes comments on each of the sections. Since the wording in each code is intended to be the same, the outline is not shown for every code, however there is an underline/strikeout version for each code provided. The code change for each code is provided as delete and substitute. This was done because the autoformatting process in cdpACCESS did not provide a document to easily follow. The underline/strikeout versions show the specific changes.

The following template is from the IBC. The IMC, IFGC, IPC, ISPSC and IPSDC provisions are formatted the same as this template, however some codes have additional unique provisions, and other codes don't contain all of these sections if they are not appropriate for the code content. This is the same template used for the other code change for the remaining I-Codes.

OUTLINE FOR PROPOSED SECTION 104

SECTION 104 DUTIES AND POWERS OF BUILDING OFFICIAL – same title used for each code

104.1 General. – This section has been subdivided with numbered/titled subsections to break up the existing paragraph and specifically state that the code official is authorized to determine compliance with the code. While always implied and applied in this manner, the code never specifically states this important fact.

104.2 Determination of Compliance. – reformatted to identify that when reviewing projects for compliance with the code, the code official can develop policies and procedures. It also specifically states that the developed policies and the project approvals are to be based on the intent of the code.

104.2.1 Listed compliance. – In cases where the code specifies a listing standard, it is common for a code official to accept things listed to that standard without further evaluating whether the standard is germane. When a product listing is appropriate, then the fact that the product is listed and installed in accordance with the listing specifications and the manufacturer's instructions becomes the approval of the product. This section is not included in all codes since not all codes require listed equipment.

104.2.2 Technical assistance. – Nearly all the codes provide for the code official to utilize technical assistance in some form or another. This

section is included as a subsection for determining compliance and will be consistent throughout the I-Codes. It is derived from, and replaces, previous text that was originally developed for and limited to hazardous materials related provisions.

104.2.2.1 Cost. – the cost for technical assistance is borne by the applicant or owner. This was previously included in a preceding paragraph and has been separated into its own subsection.

104.2.2.2 Preparer qualifications. – states that the person or agency providing the technical report must be qualified. The code official has the ability to require that the report is stamped by a registered design professional, since not all reports may need to provide this. For example, a hazardous materials classification report often does not include engineering or design. The definition is added to codes that do not currently contain the definition, such as the IWUIC. This was previously included in a preceding paragraph and has been separated into its own subsection. The new text goes beyond simply recommending changes, recognizing that the report may be a source document, as opposed to a review of documentation prepared by others.

104.2.2.3 Content. – the technical report shall include an analysis and any recommended or necessary changes.

104.2.2.4 Tests. – Tests can often provide valuable information. Where a test standard isn't specified by this code or a reference standard, the code official may wish to conduct further evaluation of the suitability of the test method used as a basis. Testing can be performed by an approved agency or by any other party/organization approved by the code official. Proposed provisions for tests are largely derived from existing code text on this topic.

104.2.3 ~~104.11~~ Alternative materials, design and methods of construction and equipment. – All codes make reference to accepting some type of alternative. This section is placed under the general compliance approval section and revised to state that a proposed alternative cannot be something that is specifically prohibited by the code. If ICC members have previously voted to specifically disallow something, alternative methods should not be a means of avoiding such a prohibition. Nevertheless, a code modification would still provide an option to make exceptions for unique cases, as opposed to the door being open for an applicant to end run the intent of the code by presenting an analysis or alternative that suggests an alternative to a prohibition is OK. It is important to note that something not contemplated by the code would not be impacted by this statement. Not contemplated is not the same as a specific prohibition in the code.

104.2.3.1 Approval authority. – if the alternative is acceptable, then it is to be approved by the code official. This is from existing text.

104.2.3.2 Application and disposition. – the submittal for an alternative must be accomplished in writing. If it is not approved, the code official must so state in writing and provide reasons why it was not acceptable. This is largely from existing text, however, the requirement for a written application for alternatives was not previously located in this section, where it is appropriate to reference.

104.2.3.3 Compliance with code intent. – the alternative must comply with the code's intent.

104.2.3.4 Equivalency criteria. – the alternative must provide equivalency to the code's provisions. The list of characteristics to be addressed is included from the current code. The reference to fire-resistance is removed from the list and fire-resistance is included under safety with additional criteria regarding fire characteristics identified in Section 104.2.3.4.1.

104.2.3.4.1 Fire safety equivalency. – this section was added because "fire-resistance" was removed from the list in Section 104.2.3.4 and recognizing that fire-resistance is not the only fire related characteristic to be addressed. Fire-resistance is only one characteristic of safety with respect to fire. This section is added to clarify that the entire issue of performance under fire conditions is the concern. Previously, aspects of fire safety beyond fire resistance would have been evaluated as part of "safety" in the list with no additional guidance on what to consider. Performance under fire conditions also includes equivalency as to how the alternate will perform structurally when exposed to fire.

104.2.3.5 Tests. – this section is added so the code official can ensure that any testing conducted is performed to a scale that adequately represents the end use of the alternate. This has primarily been added in response to concerns related to Code Change F60-21, which modified Section 2603 to defer alternatives related to fire performance of foam plastics to Section 104.

104.2.3.6 ~~104.11.1 Research~~ Reports. This section is relocated and revised to address two different types of reports currently submitted for alternatives.

104.2.3.6.1 Evaluation reports. – This section is added to address reports generate by an approved agency. The definition of "approved agency" was added to several codes in the 2018 editions. The definition is proposed to be revised, as in the IBC, or added as a new definition codes do not contain this definition, as in the IFC. This evaluation report is conducted by an approved agency that is accredited to conduct the tests or evaluations appropriate for the alternative involved. When the applicant provides a product evaluation from an accredited product evaluation agency that uses publicly developed and available criteria for the evaluation, the code official may have increased confidence that the method used for the evaluation does result in a method or material that meets the intent of the code and is at least equivalent to code-prescribed construction. Public development of criteria allows for input from industry experts, the public, and building officials in determining the methods used to evaluate code intent and equivalence, somewhat similar to the code development process where consensus is important. The accreditation ensures that the organization uses a consistent process to perform the evaluations. This section is meant to reflect the current use of evaluation reports

from accredited evaluation agencies or organizations.

104.2.3.6.2 Other reports. – this section is added to address reports generated by persons or agencies other than an approved agency. It specifies that the person or agency providing the report must be qualified and must be approved by the code official. The code official has the authority to require the stamp of a registered design professional. When an applicant provides an evaluation from other than an accredited agency, or from a source that does not use publicly developed and available criteria, the code official needs more information in order to perform a proper review. Not only does the code official need to evaluate the product, but also evaluate the method that the applicant has used to determine compliance with code intent and code equivalence. So, in that case, it is proposed that the applicant would also have to provide the criteria that was used to do the evaluation, justification for use of that criteria, and data used for the evaluation, so a complete review can be made.

104.2.3.7 Peer review. – this section is added to address a method of review currently utilized by many jurisdictions. The peer review is an outside, third-party review that is submitted to the code official for use in cases where a jurisdiction may not have qualified resource in-house to perform a sufficient review of an alternative compliance proposal. Again, the peer reviewer must be qualified and approved by the code official.

104.2.4 ~~104.10~~ Modifications. – this section is relocated under the section of compliance. Minor edits occurred to provide consistent language throughout the codes.

104.3 ~~104.2~~ Applications and permits. – this section is relocated and revised to provide consistent wording.

~~104.4 Inspections.~~ – this section is relocated to 104.2.2. Some of the language in this section is not relocated since those portions are already covered in Section 110. 104.4 ~~104.6~~ Right of entry. – This section is relocated and revised to provide consistent wording. The issue of right of entry is the same with all enforcement issues.

104.4.1 Warrant. – this section was not found in all codes, so it was added to the IBC to provide the ability to utilize a warrant. This function is allowed by the courts and currently utilized by jurisdictions.

104.5 Identification. – no change

104.6 ~~104.3~~ Notices and orders. – relocated and revised for consistent wording.

104.7 ~~Department~~ Official records. – This section revised to provide consistent wording and is reformatted by creating subsections. Each subsection addresses a different type of record that the is to be retained. This format clarifies that these records are required to be maintained.

104.7.1 Approvals.

104.7.2 Inspections.

104.7.3 Code alternatives and modifications.

104.7.4 Tests.

104.7.5 Fees.

104.8 Liability. – this section deals with protection from liability of the code official. The sections are revised to provide consistent wording throughout all I-Codes.

104.8.1 Legal defense. – this section deals with legal defense for the code official. The sections are revised to provide consistent wording throughout all I-Codes.

104.9 ~~105.5~~ Approved materials and equipment. – no change

104.9.1 ~~105.4 Used materials~~ Material and equipment reuse. – this section addresses the reuse of materials and equipment. The section is revised to provide consistent wording throughout the codes to say that the code official must approve any materials to be reused.

~~104.10 Modifications~~ – this section is relocated to 104.2.4 for formatting.

~~104.11 Alternative materials, design and methods of construction and equipment.~~ – this section is relocated to 104.2.3 for formatting.

~~104.11.1 Research reports.~~ – this section is relocated to 104.2.3.6 for formatting.

~~104.11.2 Tests.~~ – this section is relocated 104.2.2.4, 104.2.3.5 and 104.8.4 for formatting.

Additional unique changes are as follows:

1. Sections in IMC 105 are relocated to IMC 104, so Section 105 is deleted. This also occurs in the IFGC and IPSDC.
2. A minor change was made to the definition of “approved agency” which removes the repeat of the word that is to be defined, agency, and replaces it with organization. Another revision allows the agency to furnish product evaluation in addition to certification, since evaluation and certification are two different things. Evaluation is for materials and methods not addressed by the code, and certification is for materials and methods that are addressed by the code.

A strikeout/underline version of each code follows to identify specific revisions.

The proposal in strikeout and underline text format can be viewed here:

https://www.cdpaccess.com/proposal/8835/25768/files/download/3016/

**Cost Impact:** The code change proposal will not increase or decrease the cost of construction
This proposal is a reformatting and clarification of the requirements already in the codes.

ADM14-22

# ADM15-22 Part I

**IBC: [A] 104.9, 104.9.1 (New), 104.9.1.1 (New), 104.9.1.2 (New), [A] 104.9.1; IEBC: [A] 104.9, 104.9.1 (New), 104.9.1.1 (New), 104.9.1.2 (New), [A] 104.9.1; IFC: [A] 104.8, 104.8.1 (New), 104.8.1.1 (New), 104.8.1.2 (New), [A] 104.8.1; IFGC: [A] 105.5, 105.4.1 (New), 105.4.1.1 (New), 105.4.1.2 (New), [A] 105.4; IGCC: 105.2, 105.2.1 (New), 105.2.1.1 (New), 105.2.1.2 (New), 105.2.1; IMC: [A] 105.4, 105.4.1 (New), 105.4.1.1 (New), 105.4.1.2 (New), [A] 105.5; IPC: [A] 105.4, 105.4.1 (New), 105.4.1.1 (New), 105.4.1.2 (New), [A] 105.4.1; IPSDC: [A] 105.5, 105.4.1 (New), 105.4.1.1 (New), 105.4.1.2 (New), [A] 105.4; IPMC: [A] 106.5, 106.4.1 (New), 106.4.1.1 (New), 106.4.1.2 (New), [A] 106.4; ISPSC: 104.9 (New), 104.9.1 (New), 104.9.1.1 (New), 104.9.1.2 (New), [A] 104.13; IWUIC: 105.3 (New), 105.3.1 (New), 105.3.1.1 (New), 105.3.1.2 (New), 105.3.2 (New)**

**Proponents:** Chris Chwedyk, representing Compliance Code Action Committee (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 IRC-BUILDING CODE COMMITTEE. SEE THE TENTATIVE HEARING ORDER FOR THESE COMMITTEES.**

## 2021 International Building Code

**[A] 104.9 Approved materials and equipment.** Materials, equipment and devices *approved* by the *building official* shall be constructed and installed in accordance with such approval.

**Add new text as follows:**

**104.9.1 Materials and equipment standards.** Materials, equipment and devices required by this code to conform to referenced standards shall comply with Section 104.9.1.1 and 104.9.1.2.

**104.9.1.1 Identification.** Materials, equipment and devices required to conform to standards referenced in this code shall bear the identification of the manufacturer and any markings required by those referenced standards.

**104.9.1.2 Listing and labeling.** Where the code requires listing and labeling, or where required by the *building official*, the materials, equipment and devices shall be certified as complying with those standards by an *approved agency*. The agency shall be accredited to provide certification of materials, equipment and devices that are within the scope of the agency's accreditation. Certification of materials, equipment and devices shall incorporate initial testing, assessment and surveillance of a manufacturer's quality control system. The use of these materials, equipment and devices shall be in accordance with their listing.

**Revise as follows:**

**[A] 104.9.2 ~~104.9.1 Used materials~~ Material and equipment reuse.** Materials that are reused shall comply with the requirements of this code for new materials. Used equipment and devices shall not be reused unless *approved* by the *building official*.

## 2021 International Existing Building Code

**Revise as follows:**

**[A] 104.9 Approved materials and equipment.** Materials, equipment and devices *approved* by the *code official* shall be constructed and installed in accordance with such approval.

**Add new text as follows:**

**104.9.1 Materials and equipment standards .** Materials, equipment and devices required by this code to conform to referenced standards shall comply with Sections 104.9.1.1 and 104.9.1.2.

**104.9.1.1 Identification.** Materials, equipment and devices required by this code to conform to referenced standards shall bear the identification of the manufacturer and any markings required by those referenced standards.

**104.9.1.2 Listing and labeling.** Where the code requires a product to be *listed* and *labeled*, or where required by the *building official*, these materials, equipment and devices shall be certified as complying with those standards by an *approved agency*. The agency shall be accredited to provide product certification, and the material and equipment shall be within the scope of the agency's accreditation. Certification shall incorporate initial product testing, assessment and surveillance of a manufacturer's quality control system.

**Revise as follows:**

**[A] ~~104.9.1~~ 104.9.2 ~~Used materials~~ Material and equipment reuse.** The use of used materials that meet the requirements of this code for new materials is permitted. Used equipment and devices shall be permitted to be reused subject to the approval of the *code official*.

## 2021 International Fire Code

**Revise as follows:**

**[A] 104.8 Approved materials and equipment.** Materials, equipment and devices *approved* by the *fire code official* shall be constructed and

installed in accordance with such approval.

**Add new text as follows:**

**104.8.1 Materials and equipment standards.** Materials, equipment and devices required by this code to conform to referenced standards shall comply with Sections 104.8.1.1 and 104.8.1.2.

**104.8.1.1 Identification.** Materials, equipment and devices required to conform to standards referenced in this code shall bear the identification of the manufacturer and any markings required by those referenced standards.

**104.8.1.2 Listing and labeling.** Where the code requires listing and labeling, or where required by the building official, the materials, equipment and devices shall be certified as complying with those standards by an approved agency. The agency shall be accredited to provide certification of materials, equipment and devices that are within the scope of the agency's accreditation. Certification of materials, equipment and devices shall incorporate initial testing, assessment and surveillance of a manufacturer's quality control system. The use of these materials, equipment and devices shall be in accordance with their listing.

**Revise as follows:**

**[A] ~~104.8.1~~ 104.8.2 Material and equipment reuse.** Materials, equipment and devices shall not be reused or reinstalled unless such elements have been reconditioned, tested and placed in good and proper working condition and *approved*.

# 2021 International Fuel Gas Code

**Revise as follows:**

**[A] ~~105.5~~ 105.4 Approved materials and equipment.** Materials, *equipment* and devices *approved* by the *code official* shall be constructed and installed in accordance with such approval.

**Add new text as follows:**

**105.4.1 Materials and equipment standards.** Materials, equipment and devices required by this code to conform to referenced standards shall comply with Sections 105.4.1.1 and 105.4.1.2.

**105.4.1.1 Identification.** Materials, equipment and devices required to conform to standards referenced in this code shall bear the identification of the manufacturer and any markings required by those referenced standards.

**105.4.1.2 Listing and labeling.** Where the code requires listing and labeling, or where required by the building official, the materials, equipment and devices shall be certified as complying with those standards by an approved agency. The agency shall be accredited to provide certification of materials, equipment and devices that are within the scope of the agency's accreditation. Certification of materials, equipment and devices shall incorporate initial testing, assessment and surveillance of a manufacturer's quality control system. The use of these materials, equipment and devices shall be in accordance with their listing.

**Revise as follows:**

**[A] ~~105.4~~ 105.4.2 ~~Used material~~ Material, appliances and equipment reuse.** The use of used materials that meet the requirements of this code for new materials is permitted. Used appliances, *equipment* and devices shall not be reused unless such elements have been reconditioned, tested and placed in good and proper working condition, and *approved* by the *code official*.

# 2021 International Green Construction Code

**105.2 Approved materials and equipment.** Materials, equipment, devices and innovative approaches *approved* by the authority having jurisdiction shall be constructed, installed and maintained in accordance with such approval.

**Add new text as follows:**

**105.2.1 Materials and equipment standards .** Materials, equipment and devices required by this code to conform to referenced standards shall comply with Sections 105.2.1.1 and 105.2.1.2.

**105.2.1.1 Identification.** Materials, equipment and devices required to conform to standards referenced in this code shall bear the identification of the manufacturer and any markings required by those referenced standards.

**105.2.1.2 Listing and labeling.** Where the code requires listing and labeling, or where required by the building official, the materials, equipment and devices shall be certified as complying with those standards by an approved agency. The agency shall be accredited to provide certification of materials, equipment and devices that are within the scope of the agency's accreditation. Certification of materials, equipment and devices shall incorporate initial testing, assessment and surveillance of a manufacturer's quality control system. The use of these materials, equipment and devices shall be in accordance with their listing.

**Revise as follows:**

~~105.2.1~~ 105.2.2 ~~Used materials~~ Material, products and equipment reuse. Used materials, products and equipment that are to be reused shall meet the requirements of this code for new materials. Used equipment and devices that are to be reused are subject to the approval of the authority having jurisdiction.

## 2021 International Mechanical Code

**[A] 105.4 Approved materials and equipment.** Materials, *equipment* and devices *approved* by the code official shall be constructed and installed in accordance with such approval.

**Add new text as follows:**

105.4.1 **Materials and equipment standards.** Materials, equipment and devices required by this code to conform to referenced standards shall comply with Sections 105.4.1.1 and 105.4.1.2.

105.4.1.1 **Identification.** Materials, equipment and devices required to conform to standards referenced in this code shall bear the identification of the manufacturer and any markings required by those referenced standards.

105.4.1.2 **Listing and labeling.** Where the code requires listing and labeling, or where required by the building official, the materials, equipment and devices shall be certified as complying with those standards by an approved agency. The agency shall be accredited to provide certification of materials, equipment and devices that are within the scope of the agency's accreditation. Certification of materials, equipment and devices shall incorporate initial testing, assessment and surveillance of a manufacturer's quality control system. The use of these materials, equipment and devices shall be in accordance with their listing.

**Revise as follows:**

**[A] ~~105.5~~ 105.4.2 ~~Material~~ Used material, equipment and appliance ~~reuse~~.** Materials, *equipment*, *appliances* and devices shall not be reused unless such elements have been reconditioned, tested and placed in good and proper working condition and *approved*.

## 2021 International Plumbing Code

**[A] 105.4 Approved materials and equipment.** Materials, equipment and devices *approved* by the code official shall be constructed and installed in accordance with such approval.

**Add new text as follows:**

105.4.1 **Materials and equipment standards.** Materials, equipment and devices required by this code to conform to referenced standards shall comply with Sections 105.4.1.1 and 105.4.1.2.

105.4.1.1 **Identification.** Materials, equipment and devices required to conform to standards referenced in this code shall bear the identification of the manufacturer and any markings required by those referenced standards.

105.4.1.2 **Listing and labeling.** Where the code requires listing and labeling, or where required by the building official, the materials, equipment and devices shall be certified as complying with those standards by an approved agency. The agency shall be accredited to provide certification of materials, equipment and devices that are within the scope of the agency's accreditation. Certification of materials, equipment and devices shall incorporate initial testing, assessment and surveillance of a manufacturer's quality control system. The use of these materials, equipment and devices shall be in accordance with their listing.

**Revise as follows:**

**[A] ~~105.4.1~~ 105.4.2 Material and equipment reuse.** Materials, equipment and devices shall not be reused unless such elements have been reconditioned, tested, placed in good and proper working condition and *approved*.

## 2021 International Private Sewage Disposal Code

**Revise as follows:**

**[A] ~~105.5~~ 105.4 Approved materials and equipment.** Materials, equipment and devices approved by the *code official* shall be constructed and installed in accordance with such approval.

**Add new text as follows:**

105.4.1 **Materials and equipment standards.** Materials, equipment and devices required by this code to conform to referenced standards shall comply with Sections 105.4.1.1 and 105.4.1.2.

105.4.1.1 **Identification.** Materials, equipment and devices required to conform to standards referenced in this code shall bear the identification of the manufacturer and any markings required by those referenced standards.

105.4.1.2 **Listing and labeling.** Where the code requires listing and labeling, or where required by the building official, the materials, equipment and devices shall be certified as complying with those standards by an approved agency. The agency shall be accredited to provide certification of

materials, equipment and devices that are within the scope of the agency's accreditation. Certification of materials, equipment and devices shall incorporate initial testing, assessment and surveillance of a manufacturer's quality control system. The use of these materials, equipment and devices shall be in accordance with their listing.

**Revise as follows:**

**[A] ~~105.4~~ 105.4.2 ~~Used material~~ Material and equipment reuse.** Materials that are reused shall comply with the requirements of this code for new materials. Materials, equipment and devices shall not be reused unless such elements have been reconditioned, tested and placed in good and proper working condition and approved by the *code official*.

## 2021 International Property Maintenance Code

**Revise as follows:**

**[A] ~~106.5~~ 106.4 Approved materials and equipment.** Materials, equipment and devices *approved* by the *code official* shall be constructed and installed in accordance with such approval.

**Add new text as follows:**

**106.4.1 Materials and equipment standards .** Materials, equipment and devices required by this code to conform to referenced standards shall comply with Sections 106.4.1.1 and 106.4.1.2.

**106.4.1.1 Identification.** Materials, equipment and devices required to conform to standards referenced in this code shall bear the identification of the manufacturer and any markings required by those referenced standards.

**106.4.1.2 Listing and labeling.** Where the code requires listing and labeling, or where required by the building official, the materials, equipment and devices shall be certified as complying with those standards by an approved agency. The agency shall be accredited to provide certification of materials, equipment and devices that are within the scope of the agency's accreditation. Certification of materials, equipment and devices shall incorporate initial testing, assessment and surveillance of a manufacturer's quality control system. The use of these materials, equipment and devices shall be in accordance with their listing.

**Revise as follows:**

**[A] ~~106.4~~ 106.4.2 ~~Used material~~ Material and equipment reuse.** Materials that are reused shall comply with the requirements of this code for new materials. Materials, equipment and devices shall not be reused unless such elements are in good repair or have been reconditioned and tested where necessary, placed in good and proper working condition and *approved* by the *code official*.

## 2021 International Swimming Pool and Spa Code

**Add new text as follows:**

**104.9 Approved materials and equipment.** Materials, equipment and devices approved by the code official shall be constructed and installed in accordance with such approval.

**104.9.1 Materials and equipment standards.** Materials, equipment and devices required by this code to conform to referenced standards shall comply with Sections 104.9.1.1 and 104.9.1.2.

**104.9.1.1 Identification.** Materials, equipment and devices required to conform to standards referenced in this code shall bear the identification of the manufacturer and any markings required by those referenced standards.

**104.9.1.2 Listing and labeling.** Where the code requires listing and labeling, or where required by the building official, the materials, equipment and devices shall be certified as complying with those standards by an approved agency. The agency shall be accredited to provide certification of materials, equipment and devices that are within the scope of the agency's accreditation. Certification of materials, equipment and devices shall incorporate initial testing, assessment and surveillance of a manufacturer's quality control system. The use of these materials, equipment and devices shall be in accordance with their listing.

**Revise as follows:**

**[A] ~~104.13~~ 104.9.2 Material and equipment reuse.** Materials, equipment and devices shall not be reused unless such elements have been reconditioned, tested, placed in good and proper working condition and *approved*.

## 2021 International Wildland-Urban Interface Code

**Add new text as follows:**

**105.3 Approved materials and equipment.** Materials, equipment and devices approved by the code official shall be constructed and installed in accordance with such approval.

**105.3.1 Materials and equipment standards .** Materials, equipment and devices required by this code to conform to referenced standards shall

comply with Sections 105.3.1.1 and 105.3.1.2.

**105.3.1.1 Identification.** Materials, equipment and devices required to conform to standards referenced in this code shall bear the identification of the manufacturer and any markings required by those referenced standards.

**105.3.1.2 Listing and labeling.** Where the code requires listing and labeling, or where required by the building official, the materials, equipment and devices shall be certified as complying with those standards by an approved agency. The agency shall be accredited to provide certification of materials, equipment and devices that are within the scope of the agency's accreditation. Certification of materials, equipment and devices shall incorporate initial testing, assessment and surveillance of a manufacturer's quality control system. The use of these materials, equipment and devices shall be in accordance with their listing.

**105.3.2 Materials and equipment reuse.** Materials that are reused shall comply with the requirements of this code for new materials. Used equipment and devices shall not be reused unless approved by the code official.

# ADM15-22 Part II

**IRC: R104.9, R104.9.1 (New), R104.9.1.1 (New), R104.9.1.2 (New), R104.9.1**

**Proponents:** Chris Chwedyk, representing Compliance Code Action Committee (ccac@iccsafe.org)

## 2021 International Residential Code

**R104.9 Approved materials and equipment.** Materials, *equipment* and devices *approved* by the *building official* shall be constructed and installed in accordance with such approval.

**Add new text as follows:**

**R104.9.1 Materials and equipment standards .** Materials, equipment and devices required by this code to conform to referenced standards shall comply with Sections R104.9.1.1 and R104.9.1.2.

**R104.9.1.1 Identification.** Materials, equipment and devices required to conform to standards referenced in this code shall bear the identification of the manufacturer and any markings required by those referenced standards.

**R104.9.1.2 Listing and labeling.** Where the code requires listing and labeling, or where required by the *building official*, the materials, equipment and devices shall be certified as complying with those standards by an *approved agency*. The agency shall be accredited to provide certification of materials, equipment and devices that are within the scope of the agency's accreditation. Certification of materials, equipment and devices shall incorporate initial testing, assessment and surveillance of a manufacturer's quality control system. The use of these materials, equipment and devices shall be in accordance with their listing.

**Revise as follows:**

~~**R104.9.1**~~ **R104.9.2** ~~**Used materials**~~ **Material and equipment reuse.** Used materials, *equipment* and devices shall not be reused unless *approved* by the *building official.*

**Reason Statement:** The code is currently silent on how the building official is to determine code compliance of products that are required to meet certain standards in the code. In all codes, there is currently a section on Alternate Materials and Methods, which might be used for this process, but that section clearly states that it applies to "*any design or method of construction not specifically prescribed by this code*." So for products that have requirements that ARE prescribed by the code, the code is currently silent on how to determine code compliance.
This change proposes to add a section to "*Approved materials and equipment*" that does three things. First, it reinforces the information required on the product or its packaging. Second, it requires that where the code requires listing and labeling, or when required by the building official, the manufacturer must provide a product certification from an approved agency. Finally, it clarifies that the approved agency must be accredited to certify the type of product that is being evaluated. This proposal is describing the typical process currently used in the industry and will help to clarify better understanding of certification requirements.

It is important to include "*where required by the building official*", because there are some products that are minor in nature and are not related to life safety that should not always require certification. The term "*approved agency*" is already defined by the code and clearly already describes the type of organization that provides this type of certification. Requirements that the agency be accredited to provide certification of materials, equipment and devices better ensure that the agency's processes are consistent, transparent, and impartial.

Further, it is important to spell out exactly what the certification entails. The next to last sentence in the section on Listing and Labeling ensures that the certification of the product includes any required testing and other assessment, and also review of the manufacturer's quality control system to ensure that the product that was tested will continue to be produced in the same way so it will continue to comply with the code. This matches the wording in the International Plumbing Code in the definition of "Third-party Certification Agency".

Finally, the last sentence ensures that the materials, equipment and devices are installed in accordance with their listing which ensures that the installation complies with the code.

This change provides some consistency with other International Codes on how product certification is handled. For example, the International Plumbing Code, in Section 303.4, states "*Plumbing products and materials required by the code to be in compliance with a referenced standard shall be listed by a third-party certification agency as complying with the referenced standards. Products and materials shall be identified in accordance with Section 303.1.*"

The International Mechanical Code contains similar requirements. Section 301.5 states "*Piping, tubing and fittings shall comply with the applicable referenced standards, specifications and performance criteria of this code and shall be identified in accordance with Section 301.3. Piping, tubing and fittings shall either be tested by an approved third-party testing agency or certified by an approved third-party certification agency.*" Further, Section 301.7 states that "*Appliances regulated by this code shall be listed and labeled for the application in which they are installed and used, unless otherwise approved in accordance with Section 105.*"

The change to the section for "Material and equipment reuse" is to make this a subsection of "Approved materials and equipment" and to provide a section title that is similar across codes. There are no proposed changes to the text in these sections in this proposal.

The proposal in strikeout and underline text format can be viewed here:

https://www.cdpaccess.com/proposal/8552/25322/files/download/2907/

**Cost Impact:** The code change proposal will not increase or decrease the cost of construction
The cost of this requirement is primarily on the manufacturer and the certification agency and is fairly negligible as many material manufacturers and certification organizations already engage in the described process.

# ADM16-22 Part I

**IBC: SECTION 202, [A] 104.11, 104.11.1 (New), [A] 104.11.1, 104.11.1.2 (New), [A] 104.11.2, 104.12.1 (New), 104.12.2 (New), 104.12.3 (New); IEBC: SECTION 202 (New), [A] 104.11, 104.11.1 (New), [A] 104.11.1, 104.11.1.2 (New), [A] 104.11.2, 1104.12.1 (New), 104.12.2 (New), 104.12.3 (New); IFC: SECTION 202 (New), [A] 104.10, 104.10.1 (New), [A] 104.10.1, 104.10.1.2 (New), [A] 104.10.2, 104.11.1 (New), 104.11.2 (New), 104.11.3 (New); IFGC: SECTION 202, SECTION 202 (New), [A] 105.2, 105.2.1 (New), [A] 105.2.1, 105.2.1.2 (New), [A] 105.3, [A] 105.3.1, [A] 105.3.2, [A] 105.3.3; IGCC: 105.4, 105.4.1 (New), 105.4.1, 105.4.1.2 (New), 105.4.2, 105.5.1 (New), 105.5.2 (New), 105.5.3 (New); IMC: SECTION 202, SECTION 202 (New), [A] 105.2, 105.2.1 (New), [A] 105.2.1, 105.2.1.2 (New), [A] 105.3, [A] 105.3.1, [A] 105.3.2, [A] 105.3.3; IPSDC: SECTION 202 (New), [A] 105.2, 105.2.1 (New), [A] 105.2.1, 105.2.1.2 (New), [A] 105.3, [A] 105.3.1, [A] 105.3.2, [A] 105.3.3; IPC: SECTION 202, SECTION 202 (New), [A] 105.2, 105.2.1 (New), [A] 105.2.1, 105.2.1.2 (New), [A] 105.3, [A] 105.3.1, [A] 105.3.2, [A] 105.3.3; IPMC: SECTION 202 (New), [A] 106.2, 106.2.1 (New), [A] 106.6, 106.2.1.2 (New), [A] 106.3, [A] 106.3.1, 106.3.2 (New), [A] 106.3.2; ISPSC: SECTION 202, SECTION 202 (New), [A] 104.10, 104.10.1 (New), 104.10.1.1 (New), 104.10.1.2 (New), [A] 104.11, [A] 104.11.1, [A] 104.11.2, [A] 104.11.3; IWUIC: SECTION 202 (New), [A] 105.3, 105.3.1 (New), 105.3.1.1 (New), 105.3.1.2 (New), 105.4 (New), 105.4.1 (New), 105.4.2 (New), 105.4.3 (New)**

**Proponents:** Chris Chwedyk, representing Compliance Code Action Committee (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 IRC-BUILDING CODE COMMITTEE. SEE THE TENTATIVE HEARING ORDER FOR THESE COMMITTEES.**

## 2021 International Building Code

**Revise as follows:**

**[A] APPROVED AGENCY.** An established and recognized ~~agency~~ organization that is regularly engaged in conducting tests, furnishing inspection services or furnishing product evaluation or certification where such ~~agency~~ organization has been *approved* by the *building official*.

**[A] APPROVED SOURCE.** An independent person, firm or corporation, *approved* by the *building official*, who is competent and experienced in the application of engineering principles to materials, methods or systems analyses.

**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 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.~~

**Add new text as follows:**

**104.11.1 Verification of code intent and equivalence.** Demonstration of compliance with code intent and code equivalence of a material, design or method of construction and equipment not specifically provided for in this code shall be through either research reports from an approved source in accordance with Section 104.11.1.1 or evaluation reports from an approved agency in accordance with Section 104.11.1.2. The building official shall notify the permit holder or permit holder's agent when an alternate material, design, or method of construction is not approved.

**Delete and substitute as follows:**

~~**[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.~~

**[A] 104.11.1.1 Research reports.** Research reports shall describe the test standards or methods and criteria used to determine compliance with code intent and code equivalence, justification for such criteria, and supporting tests and analysis necessary to assist in the building official's review of the materials, design or method of construction and equipment.

**Add new text as follows:**

**104.11.1.2 Evaluation reports.** Evaluation reports shall be issued by an approved agency accredited to evaluate or certify products. The alternate material, design or method of construction and equipment evaluated shall be within the scope of accreditation of the approved agency. Criteria used for the evaluation shall be identified within the report, developed using a process that includes input from the public, and available for review by the public.

**Revise as follows:**

**[A] ~~104.11.2~~ 104.12 ~~Tests~~ Required testing.** 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.

**104.12.1 Test methods.** 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 code official shall approve the testing procedures.

**104.12.2 Testing agency.** Tests shall be performed by an approved agency.

**104.12.3 Test reports.** Reports of tests shall be retained by the code official for the period required for retention of public records.

# 2021 International Existing Building Code

**Add new definition as follows:**

**APPROVED AGENCY.** An established and recognized organization that is regularly engaged in conducting tests, furnishing inspection services or furnishing product evaluation or certification where such organization has been *approved* by the *building official.*

**APPROVED SOURCE.** An independent person, firm or corporation, *approved* by the *code official*, who is competent and experienced in the application of engineering principles to materials, methods or systems analyses.

**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 *code 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 *code official* shall respond in writing, stating the reasons why the alternative was not *approved*.~~

**Add new text as follows:**

**104.11.1 Verification of code intent and equivalence.** Demonstration of compliance with code intent and code equivalence of a material, design or method of construction and equipment not specifically provided for in this code shall be through either research reports from an approved source in accordance with Section 104.11.1.1 or evaluation reports from an approved agency in accordance with Section 104.11.1.2. The code official shall notify the permit holder or permit holder's agent when an alternate material, design, or method of construction is not approved.

**Delete and substitute as follows:**

~~**[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.~~

**[A] 104.11.1.1 Research reports.** Research reports shall describe the test standards or methods and criteria used to determine compliance with code intent and code equivalence, justification for such criteria, and supporting tests and analysis necessary to assist in the code official's review of the materials, design or method of construction and equipment.

**Add new text as follows:**

**104.11.1.2 Evaluation reports.** Evaluation reports shall be issued by an approved agency accredited to evaluate or certify products. The alternate material, design or method of construction and equipment evaluated shall be within the scope of accreditation of the approved agency. Criteria used for the evaluation shall be identified within the report, developed using a process that includes input from the public, and available for review by the public.

**Revise as follows:**

**[A]** ~~**104.11.2**~~ **104.12** ~~**Tests**~~ **Required testing.** Where 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 *code official* shall have the authority to require tests as evidence of compliance to be made without expense to the jurisdiction.

**1104.12.1 Test methods.** 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 code official shall approve the testing procedures.

**104.12.2 Testing agency.** Tests shall be performed by an approved agency.

**104.12.3 Test reports.** Reports of tests shall be retained by the code official for the period required for retention of public records.

# 2021 International Fire Code

**Add new definition as follows:**

**APPROVED AGENCY.** An established and recognized organization that is regularly engaged in conducting tests, furnishing inspection services or furnishing product evaluation or certification where such organization has been *approved* by the *building official.*

**APPROVED SOURCE.** An independent person, firm or corporation, *approved* by the *code official*, who is competent and experienced in the application of engineering principles to materials, methods or systems analyses.

**Revise as follows:**

**[A] 104.10 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 *fire code 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 *fire code official* shall respond in writing, stating the reasons why the alternative was not *approved*.~~

**Add new text as follows:**

**104.10.1 Verification of code intent and equivalence.** Demonstration of compliance with code intent and code equivalence of a material, design or method of construction and equipment not specifically provided for in this code shall be through either research reports from an approved source in accordance with Section 104.10.1.1 or evaluation reports from an approved agency in accordance with Section 104.10.1.2. The code official shall notify the permit holder or permit holder's agent when an alternate material, design, or method of construction is not approved.

**Delete and substitute as follows:**

~~**[A] 104.10.1 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.~~

**[A] 104.10.1.1 Research reports.** Research reports shall describe the test standards or methods and criteria used to determine compliance with code intent and code equivalence, justification for such criteria, and supporting tests and analysis necessary to assist in the code official's review of the materials, design or method of construction and equipment.

**Add new text as follows:**

**104.10.1.2 Evaluation reports.** Evaluation reports shall be issued by an approved agency accredited to evaluate or certify products. The alternate material, design or method of construction and equipment evaluated shall be within the scope of accreditation of the approved agency. Criteria used for the evaluation shall be identified within the report, developed using a process that includes input from the public, and available for review by the public.

**Revise as follows:**

**[A]** ~~**104.10.2**~~ **104.11** ~~**Tests**~~ **Required testing.** Where 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 *fire code official* shall have the authority to require tests as evidence of compliance to be made without expense to the jurisdiction.

**104.11.1 Test methods.** 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 code official shall approve the testing procedures.

**104.11.2 Testing agency.** Tests shall be performed by an approved agency.

**104.11.3 Test reports.** Reports of tests shall be retained by the code official for the period required for retention of public records.

# 2021 International Fuel Gas Code

**Revise as follows:**

**[A] APPROVED AGENCY.** An established and recognized ~~agency~~ organization that is regularly engaged in conducting tests, furnishing inspection services or furnishing product evaluation or certification where such ~~agency~~ organization has been *approved* by the *code official*.

**Add new definition as follows:**

**APPROVED SOURCE.** An independent person, firm or corporation, *approved* by the *code official*, who is competent and experienced in the application of engineering principles to materials, methods or systems analyses.

**Revise as follows:**

**[A] 105.2 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 *code 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 *code official* shall respond in writing, stating the reasons why the alternative was not *approved*.~~

**Add new text as follows:**

**105.2.1 Verification of code intent and equivalence.** Demonstration of compliance with code intent and code equivalence of a material, design or method of construction and equipment not specifically provided for in this code shall be through either research reports from an approved source in accordance with Section 105.2.1.1 or evaluation reports from an approved agency in accordance with Section 105.2.1.2. The code official shall notify the permit holder or permit holder's agent when an alternate material, design, or method of construction is not approved.

**Delete and substitute as follows:**

~~**[A] 105.2.1 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.~~

**[A] 105.2.1.1 Research reports.** Research reports shall describe the test standards or methods and criteria used to determine compliance with code intent and code equivalence, justification for such criteria, and supporting tests and analysis necessary to assist in the code official's review of the materials, design or method of construction and equipment.

**Add new text as follows:**

**105.2.1.2 Evaluation reports.** Evaluation reports shall be issued by an approved agency accredited to evaluate or certify products. The alternate material, design or method of construction and equipment evaluated shall be within the scope of accreditation of the approved agency. Criteria used for the evaluation shall be identified within the report, developed using a process that includes input from the public, and available for review by the public.

**[A] 105.3 Required testing.** Where 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 *code official* shall have the authority to require tests as evidence of compliance to be made at no expense to the jurisdiction.

**Revise as follows:**

**[A] 105.3.1 Test methods.** 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 *code official* shall approve the testing procedures.

**[A] 105.3.2 Testing agency.** Tests shall be performed by an *approved* agency.

**[A] 105.3.3 Test reports.** Reports of tests shall be retained by the *code official* for the period required for retention of public records.

# 2021 International Green Construction Code

**Revise as follows:**

**105.4 ~~Innovative approaches and alternative~~ 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~~, innovative approach,~~ or method of construction not specifically prescribed by this code, provided that any such alternative has been *approved*. An alternative material, design~~, innovative approach~~ or method of construction shall be reviewed and *approved* where the authority having jurisdiction finds that the proposed design is satisfactory and complies with the intent of the provisions of this code, and that the material, design, method or work offered is, for the purpose intended, at least the equivalent of that prescribed in this code The details of granting the use of alternative materials, designs, innovative approach and methods of construction shall be recorded and entered in the files of the department. ~~Where the alternative material, design or method of construction is not approved, the building official shall respond in writing, stating the reasons the alternative was not approved.~~

**Add new text as follows:**

**105.4.1 Verification of code intent and equivalence.** Demonstration of compliance with code intent and code equivalence of a material, design or method of construction and equipment not specifically provided for in this code shall be through either research reports from an approved source in accordance with Section 105.4.1.1 or evaluation reports from an approved agency in accordance with Section 105.4.1.2. The code official shall notify the permit holder or permit holder's agent when an alternate material, design, or method of construction is not approved.

**Delete and substitute as follows:**

~~**105.4.1 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.~~

**105.4.1.1 Research reports.** Research reports shall describe the test standards or methods and criteria used to determine compliance with code intent and code equivalence, justification for such criteria, and supporting tests and analysis necessary to assist in the code official's review of the materials, design or method of construction and equipment.

**Add new text as follows:**

**105.4.1.2 Evaluation reports.** Evaluation reports shall be issued by an approved agency accredited to evaluate or certify products. The alternate material, design or method of construction and equipment evaluated shall be within the scope of accreditation of the approved agency. Criteria used for the evaluation shall be identified within the report, developed using a process that includes input from the public, and available for review by the public.

**Revise as follows:**

~~**105.4.2**~~ **105.5** ~~**Tests**~~ **Required testing.** Where 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 authority having jurisdiction shall have the authority to require tests as evidence of compliance to be made at no expense to the jurisdiction.

**105.5.1 Test methods.** 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 code official shall approve the testing procedures.

**105.5.2 Testing agency.** Tests shall be performed by an approved agency.

**105.5.3 Test reports.** Reports of tests shall be retained by the code official for the period required for retention of public records.

# 2021 International Mechanical Code

**Revise as follows:**

**[A] APPROVED AGENCY.** An established and recognized ~~agency~~ organization that is regularly engaged in conducting tests, furnishing inspection services or furnishing product evaluation or certification where such ~~agency~~ organization has been *approved* by the *code official*.

**Add new definition as follows:**

**APPROVED SOURCE.** An independent person, firm or corporation, *approved* by the *code official*, who is competent and experienced in the application of engineering principles to materials, methods or systems analyses.

**Revise as follows:**

**[A] 105.2 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 code 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 *code official* shall respond in writing, stating the reasons why the alternative was not *approved*.~~

**Add new text as follows:**

**105.2.1 Verification of code intent and equivalence.** Demonstration of compliance with code intent and code equivalence of a material, design or method of construction and equipment not specifically provided for in this code shall be through either research reports from an approved source in accordance with Section 105.2.1.1 or evaluation reports from an approved agency in accordance with Section 105.2.1.2. The code official shall notify the permit holder or permit holder's agent when an alternate material, design, or method of construction is not approved.

**Delete and substitute as follows:**

~~**[A] 105.2.1 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.~~

**[A] 105.2.1.1 Research reports.** Research reports shall describe the test standards or methods and criteria used to determine compliance with code intent and code equivalence, justification for such criteria, and supporting tests and analysis necessary to assist in the code official's review of the materials, design or method of construction and equipment.

**Add new text as follows:**

**105.2.1.2 Evaluation reports.** Evaluation reports shall be issued by an approved agency accredited to evaluate or certify products. The alternate material, design or method of construction and equipment evaluated shall be within the scope of accreditation of the approved agency. Criteria used for the evaluation shall be identified within the report, developed using a process that includes input from the public, and available for review by the public.

**[A] 105.3 Required testing.** Where 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 code official shall have the authority to require tests as evidence of compliance to be made at no expense to the jurisdiction.

**[A] 105.3.1 Test methods.** 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 code official shall approve the testing procedures.

**[A] 105.3.2 Testing agency.** Tests shall be performed by an *approved* agency.

**[A] 105.3.3 Test reports.** Reports of tests shall be retained by the code official for the period required for retention of public records.

## 2021 International Private Sewage Disposal Code

**Add new definition as follows:**

**APPROVED AGENCY.** An established and recognized organization that is regularly engaged in conducting tests, furnishing inspection services or furnishing product evaluation or certification where such organization has been *approved* by the *code official*.

**APPROVED SOURCE.** An independent person, firm or corporation, *approved* by the *code official*, who is competent and experienced in the application of engineering principles to materials, methods or systems analyses.

**Revise as follows:**

**[A] 105.2 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 *code 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 *code official* shall respond in writing, stating the reasons why the alternative was not approved.~~

**Add new text as follows:**

**105.2.1 Verification of code intent and equivalence.** Demonstration of compliance with code intent and code equivalence of a material, design or method of construction and equipment not specifically provided for in this code shall be through either research reports from an approved source in accordance with Section 105.2.1.1 or evaluation reports from an approved agency in accordance with Section 105.2.1.2. The code official shall notify the permit holder or permit holder's agent when an alternate material, design, or method of construction is not approved.

**Delete and substitute as follows:**

~~**[A] 105.2.1 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.~~

**[A] 105.2.1.1 Research reports.** Research reports shall describe the test standards or methods and criteria used to determine compliance with code intent and code equivalence, justification for such criteria, and supporting tests and analysis necessary to assist in the code official's review of the materials, design or method of construction and equipment.

**Add new text as follows:**

**105.2.1.2 Evaluation reports.** Evaluation reports shall be issued by an approved agency accredited to evaluate or certify products. The alternate material, design or method of construction and equipment evaluated shall be within the scope of accreditation of the approved agency. Criteria used for the evaluation shall be identified within the report, developed using a process that includes input from the public, and available for review by the public.

**[A] 105.3 Required testing.** Where 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 alternate materials or methods, the *code official* shall have the authority to require testing as evidence of compliance at no expense to the jurisdiction.

**[A] 105.3.1 Test methods.** 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 *code official* shall approve the testing procedures.

**[A] 105.3.2 Testing agency.** Tests shall be performed by an approved agency.

**[A] 105.3.3 Test reports.** Reports of tests shall be retained by the *code official* for the period required for retention of public records.

# 2021 International Plumbing Code

**Revise as follows:**

**[A] APPROVED AGENCY.** An established and recognized ~~agency~~ organization that is regularly engaged in conducting tests, furnishing inspection services or furnishing product evaluation or certification where such ~~agency~~ organization has been *approved* by the *code official*.

**Add new definition as follows:**

**APPROVED SOURCE.** An independent person, firm or corporation, *approved* by the *code official*, who is competent and experienced in the application of engineering principles to materials, methods or systems analyses.

**Revise as follows:**

**[A] 105.2 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 or method of construction shall be *approved* where the code 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 code official shall respond in writing, stating the reasons why the alternative was not *approved*.~~

**Add new text as follows:**

**105.2.1 Verification of code intent and equivalence.** Demonstration of compliance with code intent and code equivalence of a material, design or method of construction and equipment not specifically provided for in this code shall be through either research reports from an approved source in accordance with Section 104.11.1.1 or evaluation reports from an approved agency in accordance with Section 104.11.1.2. The code official shall notify the permit holder or permit holder's agent when an alternate material, design, or method of construction is not approved.

**Delete and substitute as follows:**

~~**[A] 105.2.1 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.~~

**[A] 105.2.1.1 Research reports.** Research reports shall describe the test standards or methods and criteria used to determine compliance with code intent and code equivalence, justification for such criteria, and supporting tests and analysis necessary to assist in the code official's review of the materials, design or method of construction and equipment.

**Add new text as follows:**

**105.2.1.2 Evaluation reports.** Evaluation reports shall be issued by an approved agency accredited to evaluate or certify products. The alternate material, design or method of construction and equipment evaluated shall be within the scope of accreditation of the approved agency. Criteria used for the evaluation shall be identified within the report, developed using a process that includes input from the public, and available for review by the public.

**[A] 105.3 Required testing.** Where 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 code official shall have the authority to require tests as evidence of compliance to be made at no expense to the jurisdiction.

**[A] 105.3.1 Test methods.** 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 code official shall approve the testing procedures.

**[A] 105.3.2 Testing agency.** Tests shall be performed by an *approved agency*.

**[A] 105.3.3 Test reports.** Reports of tests shall be retained by the code official for the period required for retention of public records.

# 2021 International Property Maintenance Code

**Add new definition as follows:**

**APPROVED AGENCY.** An established and recognized organization that is regularly engaged in conducting tests, furnishing inspection services or furnishing product evaluation or certification where such organization has been *approved* by the *code official*.

**APPROVED SOURCE.** An independent person, firm or corporation, *approved* by the *code official*, who is competent and experienced in the application of engineering principles to materials, methods or systems analyses.

**Revise as follows:**

**[A] 106.2 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 *code 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 *code official* shall respond in writing, stating the reasons why the alternative was not *approved*.~~

**Add new text as follows:**

**106.2.1 Verification of code intent and equivalence.** Demonstration of compliance with code intent and code equivalence of a material, design or method of construction and equipment not specifically provided for in this code shall be through either research reports from an approved source in accordance with Section 104.11.1.1 or evaluation reports from an approved agency in accordance with Section 104.11.1.2. The code official shall notify the permit holder or permit holder's agent when an alternate material, design, or method of construction is not approved.

**Delete and substitute as follows:**

~~**[A] 106.6 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.~~

**[A] 106.2.1.1 Research reports.** Research reports shall describe the test standards or methods and criteria used to determine compliance with code intent and code equivalence, justification for such criteria, and supporting tests and analysis necessary to assist in the code official's review of the materials, design or method of construction and equipment.

**Add new text as follows:**

**106.2.1.2 Evaluation reports.** Evaluation reports shall be issued by an approved agency accredited to evaluate or certify products. The alternate material, design or method of construction and equipment evaluated shall be within the scope of accreditation of the approved agency. Criteria used for the evaluation shall be identified within the report, developed using a process that includes input from the public, and available for review by the public.

**[A] 106.3 Required testing.** 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 *code official* shall have the authority to require tests to be made as evidence of compliance without expense to the jurisdiction.

**Revise as follows:**

**[A] 106.3.1 Test methods.** 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 *code official* shall ~~be permitted to~~ approve ~~appropriate~~ the testing procedures ~~performed by an *approved* agency~~.

**Add new text as follows:**

**106.3.2 Testing agency.** Tests shall be performed by an approved agency.

**Revise as follows:**

**[A] ~~106.3.2~~ 106.3.3 Test reports.** Reports of tests shall be retained by the *code official* for the period required for retention of public records.

# 2021 International Swimming Pool and Spa Code

**Revise as follows:**

**[A] APPROVED AGENCY.** An established and recognized ~~agency~~ organization that is regularly engaged in conducting tests, furnishing inspection services or furnishing product evaluation or certification where such ~~agency~~ organization has been *approved* by the *code official*.

**Add new definition as follows:**

**APPROVED SOURCE.** An independent person, firm or corporation, *approved* by the *code official*, who is competent and experienced in the application of engineering principles to materials, methods or systems analyses.

**Revise as follows:**

**[A] 104.10 Alternative materials, design and methods of construction and equipment.** The provisions of this code are not intended to prevent the installation of any design or material or to prohibit any 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 *code 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, durability and safety. ~~Where the alternative material, design or method of construction is not *approved*, the *code official* shall respond in writing, stating the reasons why the alternative was not *approved*.~~

**Add new text as follows:**

**104.10.1 Verification of code intent and equivalence.** Demonstration of compliance with code intent and code equivalence of a material, design or method of construction and equipment not specifically provided for in this code shall be through either research reports from an approved source in accordance with Section 104.10.1.1 or evaluation reports from an approved agency in accordance with Section 104.10.1.2. The code official shall notify the permit holder or permit holder's agent when an alternate material, design, or method of construction is not approved.

**104.10.1.1 Research reports.** Research reports shall describe the test standards or methods and criteria used to determine compliance with code intent and code equivalence, justification for such criteria, and supporting tests and analysis necessary to assist in the code official's review of the materials, design or method of construction and equipment.

**104.10.1.2 Evaluation reports.** Evaluation reports shall be issued by an approved agency accredited to evaluate or certify products. The alternate material, design or method of construction and equipment evaluated shall be within the scope of accreditation of the approved agency. Criteria used for the evaluation shall be identified within the report, developed using a process that includes input from the public, and available for review by the public.

**Revise as follows:**

**[A] 104.11 Required testing.** Where 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 *code official* shall have the authority to require tests as evidence of compliance to be made at no expense to the jurisdiction.

**[A] 104.11.1 Test methods.** 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 *code official* shall approve the testing procedures.

**[A] 104.11.2 Testing agency.** Tests shall be performed by an *approved* agency.

**[A] 104.11.3 Test reports.** Reports of tests shall be retained by the *code official* for the period required for retention of public records.

# 2021 International Wildland-Urban Interface Code

**Add new definition as follows:**

**APPROVED AGENCY.** An established and recognized organization that is regularly engaged in conducting tests, furnishing inspection services or furnishing product evaluation or certification where such organization has been *approved* by the *code official*.

**APPROVED SOURCE.** An independent person, firm or corporation, *approved* by the *code official*, who is competent and experienced in the application of engineering principles to materials, methods or systems analyses.

**Revise as follows:**

**[A] 105.3 Alternative materials, design and methods.** The provisions of this code are not intended to prevent the installation of any material or to prohibit any design or method not specifically prescribed by this code, provided that any such alternative has been *approved*. An alternative material, design or method shall be *approved* where the *building official* in concurrence with the fire chief 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 is not *approved*, the *building official* shall respond in writing, stating the reasons why the alternative was not *approved*.~~

**Add new text as follows:**

**105.3.1 Verification of code intent and equivalence.** Demonstration of compliance with code intent and code equivalence of a material, design or method of construction and equipment not specifically provided for in this code shall be through either research reports from an approved source in accordance with Section 105.3.1.1 or evaluation reports from an approved agency in accordance with Section 105.3.1.2. The code official shall notify the permit holder or permit holder's agent when an alternate material, design, or method of construction is not approved.

**105.3.1.1 Research reports.** Research reports shall describe the test standards or methods and criteria used to determine compliance with code intent and code equivalence, justification for such criteria, and supporting tests and analysis necessary to assist in the code official's review of the materials, design or method of construction and equipment.

**105.3.1.2 Evaluation reports.** Evaluation reports shall be issued by an approved agency accredited to evaluate or certify products. The alternate material, design or method of construction and equipment evaluated shall be within the scope of accreditation of the approved agency. Criteria used

for the evaluation shall be identified within the report, developed using a process that includes input from the public, and available for review by the public.

**105.4 Required testing.** Where 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 code official shall have the authority to require tests as evidence of compliance to be made at no expense to the jurisdiction.

**105.4.1 Test methods.** 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 code official shall approve the testing procedures.

**105.4.2 Testing agency.** Tests shall be performed by an approved agency.

**105.4.3 Test reports.** Reports of tests shall be retained by the code official for the period required for retention of public records.

# ADM16-22 Part II

**IRC: SECTION 202, R104.11, R104.11.1 (New), R104.11.1.2 (New), R104.11.1, R104.12.1 (New), R104.12.2 (New), R104.12.3 (New)**

**Proponents:** Chris Chwedyk, representing Compliance Code Action Committee (ccac@iccsafe.org)

## 2021 International Residential Code

**Revise as follows:**

**[RB] APPROVED AGENCY.** An established and recognized ~~agency~~ organization that is regularly engaged in conducting tests, furnishing inspection services or furnishing product evaluation or certification where such ~~agency~~ organization has been *approved* by the *building official*.

**[MP] APPROVED SOURCE.** An independent person, firm or corporation, *approved* by the *building official*, who is competent and experienced in the application of engineering principles to materials, methods or systems analyses.

**Revise as follows:**

**R104.11 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. The *building official* shall have the authority to approve an alternative material, design or method of construction upon application of the *owner* or the owner's authorized agent. The *building official* shall first find 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. Compliance with the specific performance-based provisions of the International Codes shall be an alternative to the specific requirements of this code. ~~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*.~~

**Add new text as follows:**

**R104.11.1 Verification of code intent and equivalence.** Demonstration of compliance with code intent and code equivalence of a material, design or method of construction and equipment not specifically provided for in this code shall be through either research reports from an approved source in accordance with Section R104.11.1.1 or evaluation reports from an approved agency in accordance with Section R104.11.1.2. The building official shall notify the permit holder or permit holder's agent when an alternate material, design, or method of construction is not approved.

**R104.11.1 Research reports.** Research reports shall describe the test standards or methods and criteria used to determine compliance with code intent and code equivalence, justification for such criteria, and supporting tests and analysis necessary to assist in the building official's review of the materials, design or method of construction and equipment.

**R104.11.1.2 Evaluation reports.** Evaluation reports shall be issued by an approved agency accredited to evaluate or certify products. The alternate material, design or method of construction and equipment evaluated shall be within the scope of accreditation of the approved agency. Criteria used for the evaluation shall be identified within the report, developed using a process that includes input from the public, and available for review by the public.

**Revise as follows:**

**~~R104.11.1~~ R104.12 ~~Tests~~ Required testing.** Where 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 at no expense to the *jurisdiction*.

**R104.12.1 Test methods.** 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 code official shall approve the testing procedures.

**R104.12.2 Testing agency.** Tests shall be performed by an approved agency.

**R104.12.3 Test reports.** Reports of tests shall be retained by the building official for the period required for retention of public records.

**Reason Statement:** The reason for this code change is to update the Alternate Methods and Materials Section to reflect the current way that alternate methods and materials are evaluated, and to differentiate between evaluations from accredited evaluation agencies and evaluations from others, such as engineers. The section on Alternate Methods and Materials has basically been the same since the codes were first combined in 2000, with the exception that the section on "Research Reports" was added in 2003 to some codes. The industry now uses some different terminology and methods.
This section governs materials, designs, and methods of construction that are not currently addressed by the code, either with design requirements or referenced standards. So it is important that the building official understand what methods the approved agency or source used to determine that the method or material meets code intent and equivalence. The intent of this change is to recognize the two primary processes of alternative material and method approval used in the industry currently:

1. When the applicant provides a product evaluation from an accredited product evaluation agency that uses publically developed and available criteria for the evaluation, the building official can have more confidence that the method used for the evaluation does result in a method or material

that meets the intent of the code and is at least equivalent to code-prescribed construction. Public development of criteria allows for input from industry experts, the public, and building officials in determining the methods used to evaluate code intent and equivalence, somewhat similar to the code development process where consensus is important. The accreditation ensures that the organization uses a consistent process to perform the evaluations. This section is meant to reflect the current use of evaluation reports from accredited evaluation agencies or organizations.

2. When an applicant provides an evaluation from other than an accredited agency, or from a source that does not use publically developed and available criteria, the building official needs more information in order to perform a proper review. Not only does the building official need to evaluate the product, but also evaluate the method that the applicant has used to determine compliance with code intent and code equivalence. So in that case, it is proposed that the applicant would also have to provide the criteria that was used to do the evaluation, justification for use of that criteria, and data used for the evaluation, so a complete review can be made.

As stated earlier, this section has been in the code a long time, and we believe that it initially envisioned an alternative product or method review and approval process on a project-by-project basis, with substantiating tests and calculations or analyses provided with each permit application. Currently, a more efficient system has evolved where the same product evaluation reports are used in numerous projects, across many jurisdictions, and for many conditions. This evolution causes the need to revise this section to reflect current procedures.

However, the need for designers to be able to apply for one-time approval needs to be maintained, and that is the reason that “research reports” is maintained. In this case, though, when a method or material is not addressed by the code, the building official needs more information on the process that the evaluator used to determine that the method or material complies with the intent of the code.

The part of this section that deals with notification was revised to be consistent with Section 110.6, which states that when an inspection has failed, the building official has to “notify the permit holder or the permit holder’s agent”. It seems like disapproval of an alternate method or material is very similar to disapproval of an inspection, so the notification should be the same.

Finally, a minor change to the definition of “approved agency” removes the repeat of the word that is to be defined, agency, and replaces it with organization. Another revision allows the agency to furnish product evaluation in addition to certification, since evaluation and certification are two different things. Evaluation is for materials and methods not addressed by the code, and certification is for materials and methods that are addressed by the code.

For some codes, the definition of “approved agency” and “approved source” needed to be added.

The section on testing was renumbered to follow these new sections and put in the same format in all the codes. There are no technical changes.

There is a separate CCAC code change proposal that clarifies the use of certification, so that is not covered here.

**Cost Impact:** The code change proposal will not increase or decrease the cost of construction
The cost of this requirement is primarily on the manufacturer and the certification agency and is fairly negligible as many material manufacturers and certification organizations already engage in the described process.

# ADM17-22 Part I

**IBC: [A] 104.1; IEBC: [A] 104.1; IFC: [A] 104.1; IFGC: [A] 104.1; IMC: [A] 104.1; IPC: [A] 104.1; IPMC: [A] 105.1; IPSDC: [A] 104.1; ISPSC: [A] 104.1; IWUIC: [A] 104.1; IGCC: 104.1**

**Proponents:** John-Jozef Proczka, representing Self (john-jozef.proczka@phoenix.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 IRC-BUILDING CODE COMMITTEE. SEE THE TENTATIVE HEARING ORDER FOR THESE COMMITTEES.**

## 2021 International Building Code

**Revise as follows:**

**[A] 104.1 General.** The *building official* is hereby authorized and directed to enforce the provisions of this code. The *building official* shall have the authority to render interpretations of this code and to adopt policies and procedures in order to clarify the application of its provisions. Such interpretations, policies and procedures shall be in compliance with the intent and purpose of this code. Such interpretations, policies and procedures shall not have the effect of waiving requirements specifically provided for in this code.

## 2021 International Existing Building Code

**Revise as follows:**

**[A] 104.1 General.** The *code official* is hereby authorized and directed to enforce the provisions of this code. The *code official* shall have the authority to render interpretations of this code and to adopt policies and procedures in order to clarify the application of its provisions. Such interpretations, policies and procedures shall be in compliance with the intent and purpose of this code. Such interpretations, policies and procedures shall not have the effect of waiving requirements specifically provided for in this code.

## 2021 International Fire Code

**Revise as follows:**

**[A] 104.1 General.** The *fire code official* is hereby authorized to enforce the provisions of this code. The *fire code official* shall have the authority to render interpretations of this code and to adopt policies, procedures, rules and regulations in order to clarify the application of its provisions. Such interpretations, policies, procedures, rules and regulations shall be in compliance with the intent and purpose of this code. Such interpretations, policies, procedures, rules and regulations shall not have the effect of waiving requirements specifically provided for in this code.

## 2021 International Fuel Gas Code

**Revise as follows:**

**[A] 104.1 General.** The *code official* is hereby authorized and directed to enforce the provisions of this code. The *code official* shall have the authority to render interpretations of this code and to adopt policies and procedures in order to clarify the application of its provisions. Such interpretations, policies and procedures shall be in compliance with the intent and purpose of this code. Such interpretations, policies and procedures shall not have the effect of waiving requirements specifically provided in this code.

## 2021 International Mechanical Code

**Revise as follows:**

**[A] 104.1 General.** The code official is hereby authorized and directed to enforce the provisions of this code. The code official shall have the authority to render interpretations of this code and to adopt policies and procedures in order to clarify the application of its provisions. Such interpretations, policies and procedures shall be in compliance with the intent and purpose of this code. Such interpretations, policies and procedures shall not have the effect of waiving requirements specifically provided for in this code.

## 2021 International Plumbing Code

**Revise as follows:**

**[A] 104.1 General.** The code official is hereby authorized and directed to enforce the provisions of this code. The code official shall have the authority to render interpretations of this code and to adopt policies and procedures in order to clarify the application of its provisions. Such interpretations, policies and procedures shall be in compliance with the intent and purpose of this code. Such interpretations, policies and procedures shall not have the effect of waiving requirements specifically provided for in this code.

## 2021 International Property Maintenance Code

**Revise as follows:**

**[A] 105.1 General.** The *code official* is hereby authorized and directed to enforce the provisions of this code. The *code official* shall have the authority to render interpretations of this code and to adopt policies and procedures in order to clarify the application of its provisions. Such interpretations, policies and procedures shall be in compliance with the intent and purpose of this code. Such interpretations, policies and procedures shall not have the effect of waiving requirements specifically provided for in this code.

## 2021 International Private Sewage Disposal Code

**Revise as follows:**

**[A] 104.1 General.** The *code official* is hereby authorized and directed to enforce the provisions of this code. The *code official* shall have the authority to render interpretations of this code and to adopt policies and procedures in order to clarify the application of its provisions. Such interpretations, policies and procedures shall be in compliance with the intent and purpose of this code. Such interpretations, policies and procedures shall not have the effect of waiving requirements specifically provided for in this code.

## 2021 International Swimming Pool and Spa Code

**Revise as follows:**

**[A] 104.1 General.** The *code official* is hereby authorized and directed to enforce the provisions of this code. The *code official* shall have the authority to render interpretations of this code and to adopt policies and procedures in order to clarify the application of its provisions. Such interpretations, policies and procedures shall be in compliance with the intent and purpose of this code. Such interpretations, policies and procedures shall not have the effect of waiving requirements specifically provided for in this code.

## 2021 International Wildland-Urban Interface Code

**Revise as follows:**

**[A] 104.1 Powers and duties of the code official.** The *code official* is hereby authorized to enforce the provisions of this code. The *code official* shall have the authority to render interpretations of this code and to adopt policies and procedures in order to clarify the application of its provisions. Such interpretation s, polic iesy and procedures shall not have the effect of waiving requirements specifically provided for in this code.

## 2021 International Green Construction Code

**Revise as follows:**

**104.1 General.** The authority having jurisdiction is hereby authorized and directed to enforce the provisions of this code. The authority having jurisdiction shall have the authority to render interpretations of this code and to adopt policies and procedures in order to clarify the application of its provisions and how this code relates to other applicable codes and ordinances. Such interpretations, policies and procedures shall be in compliance with the intent and purpose of this code and other applicable codes and ordinances. Such interpretations, policies and procedures shall not have the effect of waiving requirements specifically provided for in this code or other applicable codes and ordinances.

ADM17-22 Part I

# ADM17-22 Part II

**IRC: R104.1**

**Proponents:** John-Jozef Proczka, representing Self (john-jozef.proczka@phoenix.gov)

## 2021 International Residential Code

**Revise as follows:**

**R104.1 General.** The *building official* is hereby authorized and directed to enforce the provisions of this code. The *building official* shall have the authority to render interpretations of this code and to adopt policies and procedures in order to clarify the application of its provisions. Such interpretations, policies and procedures shall be in compliance with the intent and purpose of this code. Such interpretations, policies and procedures shall not have the effect of waiving requirements specifically provided for in this code.

**Reason Statement:** Not only can policies and procedures not waive requirements of the code, but it is also the intent that individual case-by-case interpretations not waive the specific requirements of the code. The current absence of this word leaves an odd situation where it is potentially OK for a building or code official to waive code requirements on case-by-case situations, but not in policies. This type of approach could leave to favoritism in enforcement of the code and every code section being optional and up to the discretion of the building or code official.
Code modifications and alternatives are already present in the code, and as such when those provisions are used code requirements are not being waived.

This one word change is already present in the International Wildland-Urban Interface Code (good job IWUIC!) and this proposal only slightly changes the wording in that code to exactly agree.

**Cost Impact:** The code change proposal will not increase or decrease the cost of construction
There is no cost impact since the proposed word addition is only clarifying what is already stated and required by the code section.

# ADM18-22

**IFC: [A] 104.1, [A] 104.9, [A] 104.9.1 (New), [A] 104.9.2 (New)**

**Proponents:** Jeffrey Shapiro, Lake Travis Fire Rescue, representing Lake Travis Fire Rescue (jshapiro@ltfr.org)

## 2021 International Fire Code

**Revise as follows:**

**[A] 104.1 General.** The *fire code official* is hereby authorized to enforce the provisions of this code. The *fire code official* shall have the authority to render interpretations of this code and to adopt policies, procedures, rules and regulations in order to clarify the application of its provisions. Such interpretations, policies, procedures, rules and regulations shall be in compliance with the intent and purpose of this code. Such policies, procedures, rules and regulations shall not have the effect of waiving requirements specifically provided for in this code , except as provided in Section 104.9.

**[A] 104.9 Modifications.** Where there are practical difficulties involved in carrying out the provisions of this code, the *fire code official* shall have the authority to grant modifications. ~~The *fire code official* shall have the authority to grant modifications for individual cases, provided that the *fire code official* shall first find that special individual reason makes the strict letter of this code impractical and the modification is in compliance with the intent and purpose of this code and that such modification does not lessen health, life and fire safety requirements. The details of action granting modifications shall be recorded and entered in the files of the department of fire prevention.~~

**Add new text as follows:**

**[A] 104.9.1 Individual cases.** The *fire code official* shall have the authority to grant modifications for individual cases, provided that the *fire code official* shall first find that special individual reason makes the strict letter of this code impractical and the modification is in compliance with the intent and purpose of this code and that such modification does not lessen health, life and fire safety requirements. The details of action granting modifications shall be recorded and entered in the files of the department of fire prevention.

**[A] 104.9.2 Natural disasters.** In preparation for, during and after a natural disaster event, as determined by the *fire code official*, the *fire code official* shall have the authority to issue written policies, procedures, rules or regulations that modify this code as necessary to protect life and property. Such policies, procedures, rules or regulations shall be made available to the public and shall include start and end dates, which can be extended at the *fire code official's discretion.*

**Reason Statement:** Winter Storm Uri in 2021 is a good example demonstrating the need for granting authority to the fire code official to allow, by policy, conditions that would otherwise constitute code violations. For example, long-term power outages will eventually render many alarm systems non-functional, and extended loss of heat in buildings can lead to catastrophic freezing of fire suppression systems. Shutting down such systems and draining them can prevent catastrophic damage, allowing a system that might otherwise take months to repair to be placed back into service more quickly. If water remains in a system and freezing occurs, the system is non-functional anyway, so whether drained or not, protection is going to be impaired for some period of time. But, allowing more of a system to freeze vs. draining can be expected to result in increased water damage when the system thaws and much more extensive and time consuming repairs, This section could also be used to allow temporary emergency shelters that may not fully meet code requirements for a congregate residential use.
By adding text to the code that specifically addresses this concern, the fire code official will be guided to develop written documentation that should globally address special allowances that will be permitted during a disaster event, and as written, the authority to make any such allowances will remain solely in the hands of the fire code official.

This text is proposed only for the IFC because the IFC is unique among ICC codes with respect to its application to operation of existing buildings and to emergency response.

**Cost Impact:** The code change proposal will decrease the cost of construction
This proposal does not apply to construction, except to the possible extent that it might influence construction of emergency shelters or similar uses, in which case costs would presumably be reduced by allowing what might otherwise constitute non-compliant uses. There is no way to quantitatively measure any such cost impact.

# ADM19-22

**IFC: SECTION 202 (New)**

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

## 2021 International Fire Code

**Add new definition as follows:**

**APPROVED AGENCY.** An established and recognized agency that is regularly engaged in conducting tests, furnishing inspection services or furnishing product certification where such agency has been approved by the fire code official.

**Reason Statement:** The term “approved agency” appears in the IFC and should, therefore, be defined in Chapter 2. This will provide consistency with the IBC and the IRC which already have this definition.

**Cost Impact:** The code change proposal will not increase or decrease the cost of construction
This is only defining a term used in the IFC.

# ADM20-22

**IEBC: SECTION 202 (New)**

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

## 2021 International Existing Building Code

**Add new definition as follows:**

**[A] APPROVED AGENCY.** An established and recognized agency that is regularly engaged in conducting tests, furnishing inspection services or furnishing product certification where such agency has been approved by the fire code official.

**Reason Statement:** The term “approved agency” appears in the IEBC and should, therefore, be defined in Chapter 2. This will provide consistency with the IBC and the IRC which already have this definition.

**Cost Impact:** The code change proposal will not increase or decrease the cost of construction
This is only defining a term in the IEBC to be consistent with the IBC and IRC.

# ADM21-22

**IBC: [A] 104.1**

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

## 2021 International Building Code

**Add new text as follows:**

**[A] 104.1.1 Listed compliance.** Listings required by this code shall be based on a test standard or approved listing evaluation that is germane to the provision requiring the listing. Anything required by this code, or a reference standard, to be listed shall be installed in accordance with the listing and the manufacturer's instructions. Copies of the listing standard and manufacturer's instructions shall be made available to the building official upon request.

**Reason Statement:** When the code requires something to be listed, the test standard used or the listing evaluation must be germane to the code provision that is requiring the listing. Additionally, the installation must be in accordance with the manufacturer's instructions and copies of the listing standard and manufacturer's instructions must be made available to the code official.

**Cost Impact:** The code change proposal will not increase or decrease the cost of construction
This only clarifies that when something is required to be listed, the test standard used or the listing evaluation must be germane to the code provision that is requiring the listing. As with any listing, the installation must be in accordance with the manufacturer's instructions and the building official must have access to the listing standard and manufacturer's instructions.

# ADM22-22

**IEBC: [A] 104.1**

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

## 2021 International Existing Building Code

**Add new text as follows:**

**[A] 104.1.1 Listed compliance.** Listings required by this code shall be based on a test standard or approved listing evaluation that is germane to the provision requiring the listing. Anything required by this code, or a reference standard, to be listed shall be installed in accordance with the listing and the manufacturer's instructions. Copies of the listing standard and manufacturer's instructions shall be made available to the code official upon request.

**Reason Statement:** When the code requires something to be listed, the test standard used or the listing evaluation must be germane to the code provision that is requiring the listing. Additionally, the installation must be in accordance with the manufacturer's instructions and copies of the listing standard and manufacturer's instructions must be made available to the code official.

**Cost Impact:** The code change proposal will not increase or decrease the cost of construction
This only clarifies that when something is required to be listed, the test standard used or the listing evaluation must be germane to the code provision that is requiring the listing. As with any listing, the installation must be in accordance with the manufacturer's instructions and the building official must have access to the listing standard and manufacturer's instructions.

# ADM23-22

**IFC: [A] 104.2**

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

## 2021 International Fire Code

**Add new text as follows:**

**[A] 104.2.1 Listed compliance.** Listings required by this code shall be based on a test standard or approved listing evaluation that is germane to the provision requiring the listing. Anything required by this code, or a reference standard, to be listed shall be installed in accordance with the listing and the manufacturer's instructions. Copies of the listing standard and manufacturer's instructions shall be made available to the fire code official upon request.

**Reason Statement:** When the code requires something to be listed, the test standard used or the listing evaluation must be germane to the code provision that is requiring the listing. Additionally, the installation must be in accordance with the manufacturer's instructions and copies of the listing standard and manufacturer's instructions must be made available to the fire code official.

**Cost Impact:** The code change proposal will not increase or decrease the cost of construction
This only clarifies that when something is required to be listed, the test standard used or the listing evaluation must be germane to the code provision that is requiring the listing. As with any listing, the installation must be in accordance with the manufacturer's instructions and the fire code official must have access to the listing standard and manufacturer's instructions.

# ADM24-22 Part I

**IBC: [A] 104.8 (New), [A] 104.11.2; IEBC: 104.8 (New), [A] 104.11.2; IFC: 104.8 (New), [A] 104.10.2**

**Proponents:** William Koffel, representing Spray Foam Coalition (wkoffel@koffel.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 THESE COMMITTEES.**

## 2021 International Building Code

**Add new text as follows:**

**[A] 104.8 Listed products.** Where *listed* products are required by this code or a reference standard, the testing of the product shall be germane to the application of the product requirement in this code. Products used to comply with listing requirements in this code or a reference standard shall be tested and found suitable by the listing agency for the purpose specified by this code or the reference standard. As a condition of approval, the *building official* is authorized to require submittal of a listing standard to validate the applicability of the listing standard.

**Revise as follows:**

**[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. Tests used to demonstrate equivalent fire safety performance properties shall be of a scale that is sufficient to predict fire safety performance of the end use configuration. 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.

## 2021 International Existing Building Code

**Add new text as follows:**

**104.8 Listed products.** Where *listed* products are required by this code or a reference standard, the testing of the product shall be germane to the application of the product requirement in this code. Products used to comply with listing requirements in this code or a reference standard shall be tested and found suitable by the listing agency for the purpose specified by this code or the reference standard. As a condition of approval, the *building official* is authorized to require submittal of a listing standard to validate the applicability of the listing standard.

**Revise as follows:**

**[A] 104.11.2 Tests.** Where 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 *code 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. Tests used to demonstrate equivalent fire safety performance properties shall be of a scale that is sufficient to predict fire safety performance of the end use configuration. In the absence of recognized and accepted test methods, the *code official* shall approve the testing procedures. Tests shall be performed by an *approved* agency. Reports of such tests shall be retained by the *code official* for the period required for retention.

## 2021 International Fire Code

**Add new text as follows:**

**104.8 Listed products.** Where *listed* products are required by this code or a reference standard, the testing of the product shall be germane to the application of the product requirement in this code. Products used to comply with listing requirements in this code or a reference standard shall be tested and found suitable by the listing agency for the purpose specified by this code or the reference standard. As a condition of approval, the *fire code official* is authorized to require submittal of a listing standard to validate the applicability of the listing standard.

**Revise as follows:**

**[A] 104.10.2 Tests.** Where 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 *fire code 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. Tests used to demonstrate equivalent fire safety performance properties shall be of a scale that is sufficient to predict fire safety performance of the end use configuration. In the absence of recognized and accepted test methods, the *fire code official* shall approve the testing procedures. Tests shall be performed by an *approved* agency. Reports of such tests shall be retained by the *fire code official* for the period required for retention of public records.

# ADM24-22 Part II

**IRC: R104.9 (New), R104.11.1**

**Proponents:** William Koffel, representing Spray Foam Coalition (wkoffel@koffel.com)

## 2021 International Residential Code

**Add new text as follows:**

**R104.9 Listed products.** Where *listed* products are required by this code or a reference standard, the testing of the product shall be germane to the application of the product requirement in this code. Products used to comply with listing requirements in this code or a reference standard shall be tested and found suitable by the listing agency for the purpose specified by this code or the reference standard. As a condition of approval, the *building official* is authorized to require submittal of a listing standard to validate the applicability of the listing standard.

**Revise as follows:**

**R104.11.1 Tests.** Where 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 at no expense to the *jurisdiction*. Test methods shall be as specified in this code or by other recognized test standards. Tests used to demonstrate equivalent fire safety performance properties shall be of a scale that is sufficient to predict fire safety performance of the end use configuration. 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 Statement:** During the hearings on F60-21 it was noted, by both proponents and opponents, that with respect to the use of the Alternative Methods section for evaluating foam plastics there were concerns regarding the scale of fire tests to be used and the fact that the test needed to be representative of end-use configuration. That discussion has resulted in a major review and revision of the Alternate Methods provisions by an FCAC Working Group. This proposal intends to include two provisions of the proposal that was developed by the FCAC Working Group, and subsequently supported by BCAC, in the event that the overall proposal is not approved. The overall proposal was being developed at the same time as this proposal and therefore this proposal has been limited to the codes intended to be addressed by the overall proposal and that were impacted by the F60-21 action. The Committee may wish to expand the codes for which this language is being revised.
The first section from the broader proposal is a new paragraph regarding listed products. The language of the broader proposal has been revised but the intent remains the same. Where the Code requires a product to be listed, the standard use to list the project shall be germane the code requirement that requires the product to be listed.

The second section is a revision to the paragraph that addresses the use of tests as a means to document that the Alternative Method is acceptable. The sentence proposed to be added is exactly the same as what is in the broader proposal.

**Cost Impact:** The code change proposal will not increase or decrease the cost of construction
With respect to the new paragraph addressing listed products, the proposed language is consistent with the existing intent of the Codes and how it is enforced in most jurisdictions.

With respect to the additional language regarding fire tests, it would only apply when an Alternate Method is used. The proposed language is consistent with current requirements for foam plastics. Presumably, with respect to other products the proposed language is consistent with how the codes are enforced in most jurisdictions.

# ADM25-22

**IFC: [A] 104.10**

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

## 2021 International Fire Code

**Revise as follows:**

**[A] 104.10 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 *fire code official* finds that the proposed alternate meets all of the following:

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

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

**Reason Statement:** 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 or fire code official must consider. During the last code cycle, this change was approved in the IBC and was well received by the committee and membership who agreed that it made it easier to read.

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

# ADM26-22

**IEBC: [A] 104.11**

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

## 2021 International Existing 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 *code official* finds that the proposed alternate meets all of the following:

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

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

**Reason Statement:** 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. During the last code cycle, this change was approved in the IBC and was well received by the committee and membership who agreed that it made it easier to read.

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

# ADM27-22

**IWUIC: [A] 105.3**

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

## 2021 International Wildland-Urban Interface Code

**Revise as follows:**

**[A] 105.3 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* in concurrence with the fire chief finds that the proposed alternate meets all of the following:

1. The alternate material, design or method of construction is satisfactory and complies with the intent of the provisions of this code~~, and that~~
2. The ~~the~~ material, method or work offered is, for the purpose intended, not less than the equivalent of that prescribed in this code ~~in~~ as it pertains to the following:
   2.1. Quality ~~quality~~ .~~,~~
   2.2. Strength ~~strength~~ .~~,~~
   2.3. Effectiveness ~~effectiveness~~ .~~,~~
   2.4. Fire ~~fire~~ resistance .,
   2.5. Durability ~~durability~~ . ~~and~~
   2.6. Safety ~~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 Statement:** 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. The word “construction” has been added after the word “method” and the word “equipment” has been added in the heading so it is consistent with the IBC, IEBC, IFC, and IRC. There are no changes to the various requirements that the building official or fire code official must consider. During the last code cycle, this change was approved in the IBC and was well received by the committee and membership who agreed that it made it easier to read.

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

# ADM28-22

**IWUIC: [A] 105.3**

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

## 2021 International Wildland-Urban Interface Code

**Revise as follows:**

**[A] 105.3 Alternative materials, design and methods.** The provisions of this code are not intended to prevent the installation of any material or to prohibit any design or method not specifically prescribed by this code, provided that any such alternative has been *approved*. An alternative material, design or method shall be submitted in writing and be *approved* where the *building official* in concurrence with the fire chief 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 is not *approved*, the *building official* shall respond in writing, stating the reasons why the alternative was not *approved*.

**Reason Statement:** A request to use an alternative material, design or method of construction must be explained and documented in writing so a proper evaluation can be made. Placing this requirement in this section makes it clear that a request for an alternate must be submitted in writing.

**Cost Impact:** The code change proposal will not increase or decrease the cost of construction
This will avoid needless delays and misunderstandings over a verbal request for an alternate.

# ADM29-22

**IEBC: [A] 104.11**

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

## 2021 International Existing 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 submitted in writing and be *approved* where the *code 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 *code official* shall respond in writing, stating the reasons why the alternative was not *approved*.

**Reason Statement:** A request to use an alternative material, design or method of construction must be explained and documented in writing so a proper evaluation can be made. Placing this requirement in this section makes it clear that a request for an alternate must be submitted in writing.

**Cost Impact:** The code change proposal will not increase or decrease the cost of construction
This will avoid needless delays and misunderstandings over a verbal request for an alternate

# ADM30-22

**IBC: [A] 104.11.1**

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

## 2021 International Building Code

**Revise as follows:**

**[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 an *approved* ~~sources~~ agency accredited to evaluate or certify products. The alternative material, design or method of construction and product evaluated shall be within the scope of accreditation and the criteria used for the evaluation shall be referenced within the report.

**Reason Statement:** It is sometimes difficult to determine the legitimacy of a research report. Agency accreditation is an excellent way to determine the legitimacy and reliability of research reports issued by such agencies. This will be valuable when the building official reviews a research report.

**Cost Impact:** The code change proposal will not increase or decrease the cost of construction
The new language only requires that the approved agency be accredited to evaluate or certify products.

# ADM31-22

**IEBC: [A] 104.11.1**

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

## 2021 International Existing Building Code

**Revise as follows:**

**[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 an *approved* ~~sources~~ agency accredited to evaluate or certify products. The alternative material, design or method of construction and product evaluated shall be within the scope of accreditation and the criteria used for the evaluation shall be referenced within the report.

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**Reason Statement:** It is sometimes difficult to determine the legitimacy of a research report. Agency accreditation is an excellent way to determine the legitimacy and reliability of research reports issued by such agencies. This will be valuable when the building official reviews a research report.

**Cost Impact:** The code change proposal will not increase or decrease the cost of construction
The new language only requires that the approved agency be accredited to evaluate or certify products.

# ADM32-22

**IFC: [A] 104.10.1**

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

## 2021 International Fire Code

**Revise as follows:**

**[A] 104.10.1 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 an *approved* ~~sources~~ agency accredited to evaluate or certify products. The alternative material, design or method of construction and product evaluated shall be within the scope of accreditation and the criteria used for the evaluation shall be referenced within the report.

.

**Reason Statement:** It is sometimes difficult to determine the legitimacy of a research report. Agency accreditation is an excellent way to determine the legitimacy and reliability of research reports issued by such agencies. This will be valuable when the building official reviews a research report.

**Cost Impact:** The code change proposal will not increase or decrease the cost of construction
The new language only requires that the approved agency be accredited to evaluate or certify products.

# ADM33-22

**IWUIC: [A] 105.3**

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

## 2021 International Wildland-Urban Interface Code

**Add new text as follows:**

**[A] 105.3.1 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 an approved agency accredited to evaluate or certify products. The alternative material, design or method of construction and product evaluated shall be within the scope of accreditation and the criteria used for the evaluation shall be referenced within the report.

**Reason Statement:** It is sometimes difficult to determine the legitimacy of a research report. Agency accreditation is an excellent way to determine the legitimacy and reliability of research reports issued by such agencies. The IBC, IEBC, IFC, IFGC, IMC, IPC, IPMC, IPSDC have provisions for the use of valid research reports as an aid to alternate approval.

**Cost Impact:** The code change proposal will not increase or decrease the cost of construction
This new section does not require that a research report be submitted when requesting an alternate, only that when one is submitted to support a request for an alternate, the issuing agency be accredited to evaluate or certify products and that the alternative material, design or method of construction and product evaluated be within the scope of accreditation and the criteria used for the evaluation be referenced within the report.

# ADM34-22 Part I

**IEBC: [A] 104.11, [A] 104.11.1; IFC: [A] 104.10, [A] 104.10.1; IFGC: [A] 105.2, [A] 105.2.1; IMC: [A] 105.2, [A] 105.2.1; IPC: [A] 105.2, [A] 105.2.1; IPMC: [A] 106.2, [A] 106.6; IPSDC: [A] 105.2, [A] 105.2.1; ISPSC: [A] 104.10, 104.10.1 (New); IWUIC: [A] 105.3, 105.3.1 (New); IGCC: 105.4, 105.4.1**

**Proponents:** Mike Nugent, representing Building Code Action Committee (bcac@iccsafe.org); Robert Marshall, 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 THESE COMMITTEES.**

## 2021 International Existing 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 *code 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~~, and that~~
2. The material, method or work offered is, for the purpose intended, not less than the equivalent of that prescribed in this code ~~in~~ as it pertains to the following:

   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 *code 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.

## 2021 International Fire Code

**Revise as follows:**

**[A] 104.10 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 *fire code 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~~, and that~~ .
2. The material, method or work offered is, for the purpose intended, not less than the equivalent of that prescribed in this code ~~in~~ as it pertains to the following:
   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 *fire code official* shall respond in writing, stating the reasons why the alternative was not *approved*.

**[A] 104.10.1 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.

## 2021 International Fuel Gas Code

**Revise as follows:**

**[A] 105.2 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 *code 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~~, and that~~
2. The material, method or work offered is, for the purpose intended, not less than the equivalent of that prescribed in this code ~~in~~ as it pertains to the following:
   2.1. Quality~~,~~
   2.2. Strength~~,~~
   2.3. Effectiveness~~,~~
   2.4. Fire effectiveness~~,~~
   2.5. Durability ~~and~~
   2.6 Safety.

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

**[A] 105.2.1 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.

## 2021 International Mechanical Code

**Revise as follows:**

**[A] 105.2 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 *code 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~~, and that~~
2. The material, method or work offered is, for the purpose intended, not less than the equivalent of that prescribed in this code ~~in~~ as it pertains to the following:
   2.1. Quality~~,~~
   2.2. Strength~~,~~
   2.3. Effectiveness~~,~~
   2.4. Fire effectiveness~~,~~
   2.5. Durability ~~and~~
   2.6 Safety.

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

**[A] 105.2.1 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.

## 2021 International Plumbing Code

**Revise as follows:**

**[A] 105.2 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 *code 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~~, and that~~
2. The material, method or work offered is, for the purpose intended, not less than the equivalent of that prescribed in this code ~~in~~ as it pertains to the following:
   2.1. Quality~~,~~
   2.2. Strength~~,~~
   2.3. Effectiveness~~,~~
   2.4. Fire effectiveness~~,~~
   2.5. Durability ~~and~~
   2.6 Safety.

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

**[A] 105.2.1 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.

## 2021 International Property Maintenance Code

**Revise as follows:**

**[A] 106.2 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 *code 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~~, and that~~
2. The material, method or work offered is, for the purpose intended, not less than the equivalent of that prescribed in this code ~~in~~ as it pertains to the following:
   2.1. Quality~~,~~
   2.2. Strength~~,~~
   2.3. Effectiveness~~,~~
   2.4. Fire effectiveness~~,~~
   2.5. Durability ~~and~~
   2.6 Safety.

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

**[A] ~~106.6~~ 106.2.1 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.

## 2021 International Private Sewage Disposal Code

**Revise as follows:**

**[A] 105.2 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 *code 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~~, and that~~

2. The material, method or work offered is, for the purpose intended, not less than the equivalent of that prescribed in this code ~~in~~ as it pertains to the following:
   2.1. Quality~~,~~
   2.2. Strength~~,~~
   2.3. Effectiveness~~,~~
   2.4. Fire effectiveness~~,~~
   2.5. Durability ~~and~~
   2.6 Safety.

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

**[A] 105.2.1 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.

## 2021 International Swimming Pool and Spa Code

**Revise as follows:**

**[A] 104.10 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 *code 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~~, and that~~
2. The material, method or work offered is, for the purpose intended, not less than the equivalent of that prescribed in this code ~~in~~ as it pertains to the following:
   2.1. Quality~~,~~
   2.2. Strength~~,~~
   2.3. Effectiveness~~,~~
   2.4. Fire effectiveness~~,~~
   2.5. Durability ~~and~~
   2.6 Safety.

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

**Add new text as follows:**

**104.10.1 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.

## 2021 International Wildland-Urban Interface Code

**Revise as follows:**

**[A] 105.3 Alternative materials, design and methods.** The provisions of this code are not intended to prevent the installation of any material or to prohibit any design or method not specifically prescribed by this code, provided that any such alternative has been *approved*. An alternative material, design or method shall be *approved* where the *building official* in concurrence with the fire chief 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.
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* in concurrence with the fire chief
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~~, and that~~
2. The material, method or work offered is, for the purpose intended, not less than the equivalent of that prescribed in this code ~~in~~ as it pertains to the following:
   2.1. Quality~~,~~
   2.2. Strength~~,~~
   2.3. Effectiveness~~,~~
   2.4. Fire effectiveness~~,~~
   2.5. Durability ~~and~~
   2.6 Safety.

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

**Add new text as follows:**

**105.3.1 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.

## 2021 International Green Construction Code

**Revise as follows:**

**105.4 ~~Innovative approaches and alternative~~ 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, ~~innovative approach,~~ or method of construction not specifically prescribed by this code, provided that any such alternative has been *approved*. An alternative material, design~~, innovative approach~~ or method of construction shall be reviewed and *approved* where the authority having jurisdiction 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~~, and that~~
2. The material, ~~design,~~ method or work offered is, for the purpose intended, not less than ~~at least~~ the equivalent of that prescribed in this code.

~~The details of granting the use of alternative materials, designs, innovative approach and methods of construction shall be recorded and entered in the files of the department.~~

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

**105.4.1 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.

# ADM34-22 Part II

**IRC: R104.11, R104.11.1 (New)**

**Proponents:** Mike Nugent, representing Building Code Action Committee (bcac@iccsafe.org); Robert Marshall, representing FCAC (fcac@iccsafe.org)

## 2021 International Residential Code

**Revise as follows:**

**R104.11 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. ~~The *building official* shall have the authority to approve an~~ An alternative material, design or method of construction ~~upon application of the *owner* or the owner's authorized agent. The~~ shall be approved where the *building official* ~~shall first find~~ 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~~, and that~~
2. The material, method or work offered is, for the purpose intended, not less than the equivalent of that prescribed in this code ~~in~~ as it pertains to the following:
   2.1. Quality~~,~~
   2.2. Strength~~,~~
   2.3. Effectiveness~~,~~
   2.4. Fire effectiveness~~,~~
   2.5. Durability ~~and~~
   2.6 Safety.

~~Compliance with the specific performance-based provisions of the International Codes shall be an alternative to the specific requirements of this code.~~ 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*.

**Add new text as follows:**

**R104.11.1 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.

**Reason Statement:** ADM19-19 modified IBC Section 104.11, but did not make the same suggestion across all the codes. The changes to this section were primarily formatting, with some slight reordering. This same change to be applicable to all the codes. It was also noted that not all of the codes included a subsection on research reports as an aid to alternative approval.
This proposal is submitted by the ICC Building Code Action Committee (BCAC), ICC Fire Code Action Committee (FCAC) and . ICC Plumbing/Mechanical/Gas Code Action Committee (PMGCAC).

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. In 2020 and 2021 the BCAC has held several virtual meetings open to any interested party. In addition, there were numerous virtual Working Group meetings for the current code development cycle, which included members of the committee as well as interested parties. Related documents and reports are posted on the BCAC website at https://www.iccsafe.org/products-and-services/i-codes/code-development/cs/building-code-action-committee-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 and life safety in new and existing buildings and facilities as well as the protection of life and property in wildland urban interface areas. In 2020 and 2021 the Fire-CAC held multiple virtual meetings that were open to any interested party. In addition, there were numerous virtual specific working group meetings that were also open to any interested parties, to develop, discuss and debate the proposed changes. Related documentation and reports are posted on the FCAC website at: https://www.iccsafe.org/products-and-services/i-codes/code-development/cs/fire-code-action-committee-fcac/

The PMG CAC was established by the ICC Board of Directors in July 2011 to pursue opportunities to improve and enhance assigned International Codes or portions thereof. In 2020 and 2021, the PMGCAC has held several virtual meetings open to any interested party. Numerous interested parties attended the committee meetings and offered their input.

**Cost Impact:** The code change proposal will not increase or decrease the cost of construction
This is primarily a format change.

# ADM35-22

**IBC: [A] 104.11; IEBC: [A] 104.11; IFC: [A] 104.10; IFGC: [A] 105.2; IMC: [A] 105.2; IPC: [A] 105.2; IPSDC: [A] 105.2**

**Proponents:** David Collins, representing Self (dcollins@preview-group.com); Ronald Geren, representing The American Institute of Architects (ron@specsandcodes.com); Paul Karrer, representing The American Institute of Architects (paulkarrer@aia.org)

## 2021 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 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.

**Exception:** Performance-based alternative materials, designs or methods of construction complying with the *ICC Performance Code*.

## 2021 International Existing 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 *code 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 *code official* shall respond in writing, stating the reasons why the alternative was not *approved*.

**Exception:** Performance-based alternative materials, designs or methods of construction complying with the *ICC Performance Code*

## 2021 International Fire Code

**Revise as follows:**

**[A] 104.10 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 *fire code 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 *fire code official* shall respond in writing, stating the reasons why the alternative was not *approved*.

**Exception:** Performance-based alternative materials, designs or methods of construction and equipment complying with the *ICC Performance Code*.

## 2021 International Fuel Gas Code

**Revise as follows:**

**[A] 105.2 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 *code 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 *code official* shall respond in writing, stating the reasons why the alternative was not *approved*.

**Exception:** Performance-based alternative materials, designs or methods of construction and equipment complying with the *ICC Performance Code*.

## 2021 International Mechanical Code

**Revise as follows:**

**[A] 105.2 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 code 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 *code official* shall respond in writing, stating the reasons why the alternative was not *approved*.

**Exception:** Performance-based alternative materials, designs or methods of construction and equipment complying with the *ICC Performance Code*.

## 2021 International Plumbing Code

**Revise as follows:**

**[A] 105.2 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 or method of construction shall be *approved* where the code 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 code official shall respond in writing, stating the reasons why the alternative was not *approved*.

**Exception:** Performance-based alternative materials, designs or methods of construction and equipment complying with the *ICC Performance Code*.

## 2021 International Private Sewage Disposal Code

**Revise as follows:**

**[A] 105.2 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 *code 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 *code official* shall respond in writing, stating the reasons why the alternative was not approved.

**Exception:** Performance-based alternative materials, designs or methods of construction and equipment complying with the *ICC Performance Code*.

**Reason Statement:** The ICC Performance Code (ICCPC) should not be considered solely for whole building designs, but also as another pathway for evaluating alternative materials, designs, and methods of construction. When projects are designed per the prescriptive requirements of any ICC code, there are situations where a single material, element, or system cannot conform to the prescriptive requirements. Also, new materials, elements, or systems are entering the construction market at a pace that the prescriptive codes cannot keep up. This provision will allow owners, designers and building officials to consider such advances in such materials, elements of designs using the Performance Code for guidance. Although the prescriptive provisions in each of the codes provides one pathway for approval of alternative materials, designs, and methods of construction, the ICCPC should not be overlooked as an alternative pathway. The ICCPC may be considered by the building official as an alternative method in and of itself per any of the sections listed, by including it within the text of each section will draw much greater attention to the ICCPC and thereby increase its use and adoption.

**Cost Impact:** The code change proposal will not increase or decrease the cost of construction
This change to the above mentioned codes do not add a requirement that individual projects must comply with. It provides an additional option for those projects that wish to pursue more performance-based solutions. ICC's Cost Impact Guide cites code change proposals that modify the design requirements (e.g. greater number of design options, design process efficiencies) as recognized instance of proposals that do not affect the construction or construction cost. Providing projects a route to use the ICC Performance Code to evaluate materials, designs and methods of construction does not impact the cost of construction.

ADM35-22

# ADM36-22 Part I

**IBC: [A] 104.11, [A] 104.11.1 (New), [A] 104.11.2 (New), [A] 104.11.1, [A] 104.11.2; IEBC: [A] 104.11, [A] 104.11.1 (New), [A] 104.11.2 (New), [A] 104.11.1, [A] 104.11.2; IFC: [A] 104.10, [A] 104.10.1 (New), [A] 104.10.2 (New), [A] 104.10.1, [A] 104.10.2; IFGC: [A] 105.2, [A] 105.2.1 (New), [A] 105.2.2 (New), [A] 105.2.1; IMC: [A] 105.2, [A] 105.2.1 (New), [A] 105.2.2 (New), [A] 105.2.1; IPC: [A] 105.2, [A] 105.2.1 (New), [A] 105.2.2 (New), [A] 105.2.1; IPMC: [A] 106.2, [A] 106.2.1 (New), [A] 106.2.2 (New); IWUIC: [A] 105.3, [A] 105.3.1 (New), [A] 105.3.2 (New)**

**Proponents:** Marcelo Hirschler, representing GBH International (mmh@gbhint.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 THESE COMMITTEES.**

## 2021 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 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~~ 2.4. Durability.

    ~~2.6~~ 2.5. 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.

**Add new text as follows:**

**[A] 104.11.1 Fire safety equivalency.** Determination of safety equivalency, with respect to fire, shall be based on an analysis that includes applicable fire safety performance properties, such as but not limited to ignitability, flame spread, heat release rate, heat of combustion, smoke development, and fire resistance. Determination of safety equivalency, with respect to structural fire safety, shall also include a structural system analysis.

**[A] 104.11.2 Fire Tests.** Tests conducted to demonstrate equivalent fire safety in support of an alternative material, design or method of construction application shall be of a scale that is sufficient to predict fire safety performance of the end use configuration. Tests shall be performed by a party acceptable to the code official.

**Revise as follows:**

**[A] ~~104.11.1~~ 104.11.3 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.

**[A] ~~104.11.2~~ 104.11.4 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.

## 2021 International Existing 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 *code 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 *code official* shall respond in writing, stating the reasons why the alternative was not *approved*.

**Add new text as follows:**

**[A] 104.11.1 Fire safety equivalency.**. Determination of safety equivalency, with respect to fire, shall be based on an analysis that includes applicable fire safety performance properties, such as but not limited to ignitability, flame spread, heat release rate, heat of combustion, smoke development, and fire resistance. Determination of safety equivalency, with respect to structural fire safety, shall also include a structural system analysis.

**[A] 104.11.2 Fire Tests.**. Tests conducted to demonstrate equivalent fire safety in support of an alternative material, design or method of construction application shall be of a scale that is sufficient to predict fire safety performance of the end use configuration. Tests shall be performed by a party acceptable to the code official.

**Revise as follows:**

**[A] ~~104.11.1~~ 104.11.3 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.

**[A] ~~104.11.2~~ 104.11.4 Tests.** Where 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 *code 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 *code official* shall approve the testing procedures. Tests shall be performed by an *approved* agency. Reports of such tests shall be retained by the *code official* for the period required for retention.

# 2021 International Fire Code

**Revise as follows:**

**[A] 104.10 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 *fire code 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 *fire code official* shall respond in writing, stating the reasons why the alternative was not *approved*.

**Add new text as follows:**

**[A] 104.10.1 Fire safety equivalency.**. Determination of safety equivalency, with respect to fire, shall be based on an analysis that includes applicable fire safety performance properties, such as but not limited to ignitability, flame spread, heat release rate, heat of combustion, smoke development, and fire resistance. Determination of safety equivalency, with respect to structural fire safety, shall also include a structural system analysis.

**[A] 104.10.2 Fire tests.**. Tests conducted to demonstrate equivalent fire safety in support of an alternative material, design or method of construction application shall be of a scale that is sufficient to predict fire safety performance of the end use configuration. Tests shall be performed by a party acceptable to the fire code official.

**Revise as follows:**

**[A] ~~104.10.1~~ 104.10.3 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.

**[A] ~~104.10.2~~ 104.10.4 Tests.** Where 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 *fire code 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 *fire code official* shall approve the testing procedures. Tests shall be performed by an *approved* agency. Reports of such tests shall be retained by the *fire code official* for the period required for retention of public records.

# 2021 International Fuel Gas Code

**Revise as follows:**

**[A] 105.2 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 *code 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 *code official* shall respond in writing, stating the reasons why the alternative was not *approved*.

**Add new text as follows:**

**[A] 105.2.1 Fire safety equivalency.**. Determination of safety equivalency, with respect to fire, shall be based on an analysis that includes applicable fire safety performance properties, such as but not limited to ignitability, flame spread, heat release rate, heat of combustion, smoke development, and fire resistance. Determination of safety equivalency, with respect to structural fire safety, shall also include a structural system analysis.

**[A] 105.2.2 Fire tests.**. Tests conducted to demonstrate equivalent fire safety in support of an alternative material, design or method of construction application shall be of a scale that is sufficient to predict fire safety performance of the end use configuration. Tests shall be performed by a party acceptable to the code official.

**Revise as follows:**

**[A] ~~105.2.1~~ 105.2.3 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.

# 2021 International Mechanical Code

**Revise as follows:**

**[A] 105.2 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 code 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 *code official* shall respond in writing, stating the reasons why the alternative was not *approved*.

**Add new text as follows:**

**[A] 105.2.1 Fire safety equivalency.**. Determination of safety equivalency, with respect to fire, shall be based on an analysis that includes applicable fire safety performance properties, such as but not limited to ignitability, flame spread, heat release rate, heat of combustion, smoke development, and fire resistance. Determination of safety equivalency, with respect to structural fire safety, shall also include a structural system analysis.

**[A] 105.2.2 Fire tests.**. Tests conducted to demonstrate equivalent fire safety in support of an alternative material, design or method of construction application shall be of a scale that is sufficient to predict fire safety performance of the end use configuration. Tests shall be performed by a party acceptable to the code official.

**Revise as follows:**

**[A] ~~105.2.1~~ 105.2.3 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.

# 2021 International Plumbing Code

**Revise as follows:**

**[A] 105.2 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 or method of construction shall be *approved* where the code 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 code official shall respond in writing, stating the reasons why the alternative was not *approved*.

**Add new text as follows:**

**[A] 105.2.1 Fire safety equivalency.**. Determination of safety equivalency, with respect to fire, shall be based on an analysis that includes applicable fire safety performance properties, such as but not limited to ignitability, flame spread, heat release rate, heat of combustion, smoke

development, and fire resistance. Determination of safety equivalency, with respect to structural fire safety, shall also include a structural system analysis.

**[A] 105.2.2 Fire tests.**. Tests conducted to demonstrate equivalent fire safety in support of an alternative material, design or method of construction application shall be of a scale that is sufficient to predict fire safety performance of the end use configuration. Tests shall be performed by a party acceptable to the code official.

**Revise as follows:**

**[A] ~~105.2.1~~ 105.2.3 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.

## 2021 International Property Maintenance Code

**Revise as follows:**

**[A] 106.2 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 *code 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 *code official* shall respond in writing, stating the reasons why the alternative was not *approved*.

**Add new text as follows:**

**[A] 106.2.1 Fire safety equivalency.**. Determination of safety equivalency, with respect to fire, shall be based on an analysis that includes applicable fire safety performance properties, such as but not limited to ignitability, flame spread, heat release rate, heat of combustion, smoke development, and fire resistance. Determination of safety equivalency, with respect to structural fire safety, shall also include a structural system analysis.

**[A] 106.2.2 Fire tests.**. Tests conducted to demonstrate equivalent fire safety in support of an alternative material, design or method of construction application shall be of a scale that is sufficient to predict fire safety performance of the end use configuration. Tests shall be performed by a party acceptable to the code official.

## 2021 International Wildland-Urban Interface Code

**Revise as follows:**

**[A] 105.3 Alternative materials, design and methods.** The provisions of this code are not intended to prevent the installation of any material or to prohibit any design or method not specifically prescribed by this code, provided that any such alternative has been *approved*. An alternative material, design or method shall be *approved* where the *building official* in concurrence with the fire chief 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 is not *approved*, the *building official* shall respond in writing, stating the reasons why the alternative was not *approved*.

**Add new text as follows:**

**[A] 105.3.1 Fire safety equivalency.**. Determination of safety equivalency, with respect to fire, shall be based on an analysis that includes applicable fire safety performance properties, such as but not limited to ignitability, flame spread, heat release rate, heat of combustion, smoke development, and fire resistance. Determination of safety equivalency, with respect to structural fire safety, shall also include a structural system analysis.

**[A] 105.3.2 Fire tests.**. Tests conducted to demonstrate equivalent fire safety in support of an alternative material, design or method of construction application shall be of a scale that is sufficient to predict fire safety performance of the end use configuration. Tests shall be performed by a party acceptable to the building official.

**Reason Statement:** The intent of this code proposal is to clarify equivalency in terms of fire safety, which is incorrect and misleading as described simply in terms of fire resistance at present. In fact, fire resistance is only a subset of all aspects of fire safety. Therefore, it is better to have a safety analysis look at the issue of fire safety more comprehensively.
As revised, fire resistance would be deleted from the list, and a separate section added that more fully addresses fire safety. A proper fire safety analysis performed under this section should always have taken these considerations into account, but having them specifically stated, and removing the incorrect term “fire resistance” item from the list will help code officials and code users by providing more thorough guidance for preparation of alternative method proposals. Additional guidance has also been provided to ensure that fire testing done in support of an alternative method proposal is of a sufficient scale to be relevant to the end use application.

This proposal is a portion of a more wide-ranging proposal that revises the entire section 104. The language relating to the fire safety aspects is identical to that agreed to for that proposal.

Equivalent changes are being proposed to all 9 ICC codes for which fire safety is a relevant issue in terms of alternate materials and methods.

**Cost Impact:** The code change proposal will not increase or decrease the cost of construction
There is no cost impact since this code proposal only clarifies the intent of the section and provides clearer guidance to the building, fire or code official.

# ADM36-22 Part II

**IRC: R104.11, R104.11.1 (New), R104.11.2 (New), R104.11.1**

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

## 2021 International Residential Code

**Revise as follows:**

**R104.11 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. The *building official* shall have the authority to approve an alternative material, design or method of construction upon application of the *owner* or the owner's authorized agent. The *building official* shall first find 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. Compliance with the specific performance-based provisions of the International Codes shall be an alternative to the specific requirements of this code. 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*.

**Add new text as follows:**

**R104.11.1 Fire safety equivalency.** Determination of safety equivalency, with respect to fire, shall be based on an analysis that includes applicable fire safety performance properties, such as but not limited to ignitability, flame spread, heat release rate, heat of combustion, smoke development, and fire resistance. Determination of safety equivalency, with respect to structural fire safety, shall also include a structural system analysis.

**R104.11.2 Fire tests.** Tests conducted to demonstrate equivalent fire safety in support of an alternative material, design or method of construction application shall be of a scale that is sufficient to predict fire safety performance of the end use configuration. Tests shall be performed by a party acceptable to the building official.

**Revise as follows:**

**~~R104.11.1~~ R104.11.3 Tests.** Where 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 at no 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.

**Reason Statement:** The intent of this code proposal is to clarify equivalency in terms of fire safety, which is incorrect and misleading as described simply in terms of fire resistance at present. In fact, fire resistance is only a subset of all aspects of fire safety. Therefore, it is better to have a safety analysis look at the issue of fire safety more comprehensively.
As revised, fire resistance would be deleted from the list, and a separate section added that more fully addresses fire safety. A proper fire safety analysis performed under this section should always have taken these considerations into account, but having them specifically stated, and removing the incorrect term "fire resistance" item from the list will help code officials and code users by providing more thorough guidance for preparation of alternative method proposals. Additional guidance has also been provided to ensure that fire testing done in support of an alternative method proposal is of a sufficient scale to be relevant to the end use application.

This proposal is a portion of a more wide-ranging proposal that revises the entire section 104. The language relating to the fire safety aspects is identical to that agreed to for that proposal.

Equivalent changes are being proposed to all 9 ICC codes for which fire safety is a relevant issue in terms of alternate materials and methods.

**Cost Impact:** The code change proposal will not increase or decrease the cost of construction
There is no cost impact since this code proposal only clarifies the intent of the section and provides clearer guidance to the building official.

# ADM37-22 Part I

PART 1 - IBC: [A] 105.2

PART 2 - IRC: R105.2

**Proponents:** Peter Zvingilas, ICC Region VI, representing Region VI (pzvingilas@groton-ct.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 IRC-BUILDING CODE COMMITTEE. SEE THE TENTATIVE HEARING ORDER FOR THESE COMMITTEES.**

## 2021 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 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 $m^2$).
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 to the finish grade 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.

# ADM37-22 Part II

PART 1 - IBC: [A] 105.2

PART 2 - IRC: R105.2

**Proponents:** Peter Zvingilas, ICC Region VI, representing Region VI (pzvingilas@voluntown.gov)

THIS IS A TWO PART CODE CHANGE. PART 1 WILL BE HEARD BY THE ADMINSTRATIVE COMMITTEE AND PART 2 WILL BE HEARD BY THE INTERNATIONAL RESIDENTIAL CODE BUILDING COMMITTEE. SEE THE TENTATIVE HEARING ORDER FOR THESE COMMITTEES.

## 2021 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:**

1. Other than *storm shelters*, one-*story* detached *accessory structures,* provided that the floor area does not exceed 200 square feet (18.58 $m^2$).
2. Fences not over 7 feet (2134 mm) high.
3. 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 to the finish grade, 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 $m^2$) 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:**

1. 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 Statement:** The current code defines the measurement by height measured from the bottom of the footing to the top of the wall. Footing depth varies due to frost protection requirements. By changing the language to measuring a difference in finished grade, this will be consistent on all applications.

**Cost Impact:** The code change proposal will not increase or decrease the cost of construction
This will have no cost impact on the cost of construction, it is showing a different way of measuring a retaining wall.

ADM37-22 Part II

# ADM38-22 Part I

**IBC: [A] 105.2**

**Proponents:** Joseph Summers, representing ICC Region VI (summersj@cityofgroton-ct.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 IRC-BUILDING CODE COMMITTEE. SEE THE TENTATIVE HEARING ORDER FOR THESE COMMITTEES.**

## 2021 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 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 $m^2$).
2. Fences, other than *swimming pool* barriers, 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.

# ADM38-22 Part II

**IRC: R105.2**

**Proponents:** Joseph Summers, representing ICC Region VI (summersj@cityofgroton-ct.gov)

## 2021 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:**

1. Other than *storm shelters*, one-*story* detached *accessory structures,* provided that the floor area does not exceed 200 square feet (18.58 $m^2$).
2. Fences, other than *swimming pool* barriers, not over 7 feet (2134 mm) high.
3. 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 $m^2$) 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:**

1. 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 Statement:** Fences are used as the barrier to a swimming pool and this proposal provides continuity with the ISPSC.

**Cost Impact:** The code change proposal will not increase or decrease the cost of construction
This only provides clarification

ADM38-22 Part II

# ADM39-22

**IFC: 105.6.25 (New)**

**Proponents:** Jeffrey Hugo, representing NFSA (hugo@nfsa.org)

## 2021 International Fire Code

**Add new text as follows:**

**105.6.25 Automatic sprinkler systems.** A construction permit is required for installation of or modification to an automatic sprinkler system. Maintenance performed in accordance with this code is not considered to be a modification and does not require a permit.

**Reason Statement:** The automatic fire-extinguishing system, as defined and applied throughout the code, does not apply to automatic sprinkler systems. This new section would specifically apply to automatic sprinkler systems. The text mimics other construction permit sections.

**Cost Impact:** The code change proposal will not increase or decrease the cost of construction
The automatic fire-extinguishing section may have been used for fire sprinkler construction permits in the past. This proposal correlates and provide consistent use of the defined terms.

# ADM40-22

**IPSDC: SECTION 107 (New), [A] 106.4, 107.2 (New), [A] 106.4.2, 107.3 (New), [A] 106.4.1, [A] 106.4.3, 107.5 (New), 107.6 (New)**

**Proponents:** Mike Nugent, representing Building Code Action Committee (bcac@iccsafe.org); Joseph J. Summers, representing Plumbing, Mechanical and Fuel Gas Code Action Committee (pmgcac@iccsafe.org)

## 2021 International Private Sewage Disposal Code

**Add new text as follows:**

**SECTION 107**
**FEES**

**Revise as follows:**

**[A] ~~106.4~~ 107.1 ~~Fees~~ Payment of fees.** A permit shall not be ~~issued~~ valid until the fees prescribed ~~in Section 106.4.2~~ by law have been paid ~~, and an~~ An amendment to a permit shall not be released until the additional fee, if any, ~~due to an increase of the *private sewage disposal system,*~~ has been paid.

**Add new text as follows:**

**107.2 Schedule of permit fees.** Where work requires a permit, a fee for each permit shall be paid as required, in accordance with the schedule as established by the applicable governing authority.

**Delete without substitution:**

**~~[A] 106.4.2 Fee schedule.~~** ~~The fees for all private sewage disposal work shall be as indicated in the following schedule:~~
~~[JURISDICTION TO INSERT APPROPRIATE SCHEDULE].~~

**Add new text as follows:**

**107.3 Permit valuations.** The applicant for a *permit* shall provide an estimated value of the work for which the permit is being issued at time of application. Such estimated valuations shall include the 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. Where, in the opinion of the *building official*, the valuation is underestimated, the *permit* shall be denied, unless the applicant can show detailed estimates acceptable to the *building official*. The building official shall have the authority to adjust the final valuation for permit fees.

**Revise as follows:**

**[A] ~~106.4.1~~ 107.4 Work commencing before permit issuance.** Any person who commences any work on a *private sewage disposal system* before obtaining the necessary permits shall be subject to ~~100 percent of the usual permit fee~~ a fee established by the code official that shall be in addition to the required permit fees.

**Delete without substitution:**

**~~[A] 106.4.3 Fee refunds.~~** ~~The *code official* shall authorize the refunding of fees as follows:~~

1. ~~The full amount of any fee paid hereunder that was erroneously paid or collected.~~
2. ~~Not more than [SPECIFY PERCENTAGE] percent of the permit fee paid where no work has been done under a permit issued in accordance with this code.~~
3. ~~Not more than [SPECIFY PERCENTAGE] percent of the plan review fee paid where an application for a permit for which a plan review fee has been paid is withdrawn or canceled before any plan review effort has been expended.~~

~~The *code official* shall not authorize the refunding of any fee paid except upon written application filed by the original permittee no later than 180 days after the date of fee payment.~~

**Add new text as follows:**

**107.5 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.

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

**Reason Statement:** The intent of this proposal is coordination for the section Fees in IPSDC with the other ICC codes. Since one city department will handle permit fees for construction, the requirements for administration should be the same across codes.
There were two different proposals to address consistency in the Fees section (ADM 27-19 and ADM 33-19) – the end result was coordination

between the 2021 codes. for – IBC, IFC, IEBC, IMC, IPC, IPMC, IFGC, ISPSC, IWUIC and IZC. ADM27-19 should have included IPSDC, however it was missed.

The IPSDC required the insertion of a table for fees and sets a policy for refunds. If the jurisdiction is on a code for 3 to 6 years, this would prohibit them from adjusting their fees. What the policy is for refunds should also be determined by the department. ADM27-19 removed similar text in the IMC, IPC, IPMC, IFGC, and ISPSC.

The current text does not address permit valuations or related fees. The more generic language for refunds allows for the department to establish a policy rather than have that set in the 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.

This proposal is submitted by the ICC Plumbing/Mechanical/Gas Code Action Committee (PMGCAC) in coordination with the ICC Building Code Action Committee (BCAC).

The PMG CAC was established by the ICC Board of Directors in July 2011 to pursue opportunities to improve and enhance assigned International Codes or portions thereof. In 2020 and 2021, the PMGCAC has held several virtual meetings open to any interested party. Numerous interested parties attended the committee meetings and offered their input.

**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.

ADM40-22

# ADM41-22 Part I

**IBC: SECTION 108, [A] 108.1, [A] 108.2, [A] 108.3, [A] 108.4, SECTION 112, [A] 112.1, [A] 112.2, [A] 112.3; IEBC: SECTION 107, [A] 107.1, [A] 107.2, [A] 107.3, [A] 107.4, SECTION 111, [A] 111.1, [A] 111.2, [A] 111.3; IFC: SECTION 106 (New), 106.1 (New), 106.2 (New), 106.3 (New), 106.4 (New), SECTION 110, [A] 110.1; IFGC: SECTION 110, [A] 110.1, [A] 110.2, 110.3, SECTION 111, [A] 111.1, [A] 111.2, [A] 111.3, [A] 111.4; IMC: SECTION 107, [A] 107.1, [A] 107.2, [A] 107.3, [A] 107.4, SECTION 112, [A] 112.1, [A] 112.2, [A] 112.3; IPC: SECTION 107, [A] 107.1, [A] 107.2, [A] 107.3, [A] 107.4, SECTION 112, [A] 112.1, [A] 112.2, [A] 112.3; IPSDC: SECTION 109, [A] 109.1, [A] 109.2, [A] 109.3, [A] 109.4, SECTION 110, [A] 110.1, [A] 110.2, [A] 110.3; ISPSC: SECTION 106 (New), 106.1 (New), 106.2 (New), 106.3 (New), 106.4 (New), SECTION 109, [A] 109.1, [A] 109.2, [A] 109.3; IWUIC: SECTION 108, [A] 108.1, [A] 108.2, 108.3 (New), [A] 108.3, SECTION 112, [A] 112.1, [A] 112.2, [A] 112.3**

**Proponents:** Mike Nugent, representing Building Code Action Committee (bcac@iccsafe.org); Joseph J. Summers, representing Chair of PMGCAC (pmgcac@iccsafe.org); Robert Marshall, 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 THESE COMMITTEES.**

## 2021 International Building Code

**Revise as follows:**

### SECTION 108
### TEMPORARY STRUCTURES ~~AND USES~~ , EQUIPMENT AND SYSTEMS

**[A] 108.1 General.** The *building official* is authorized to issue a *permit* for temporary structures ~~and 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 structures ~~and uses~~ shall comply with the requirements in Section 3103.

**[A] 108.3 Temporary ~~power~~ service utilities.** The *building official* is authorized to give permission to temporarily supply service utilities in accordance with Section 112. ~~and use power in part of an electric installation before such installation has been fully completed and the final certificate of completion has been issued. The part covered by the temporary certificate shall comply with the requirements specified for temporary lighting, heat or power in NFPA 70.~~

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

### SECTION 112
### SERVICE UTILITIES

**[A] 112.1 Connection of service utilities.** A person shall not make connections from a utility, a source of energy, fuel, or power, or a 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, the source of energy, fuel, or power, or the water system or sewer 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* or the owner's authorized agent or occupant of the building, structure or service system shall be notified in writing, as soon as practical thereafter.

## 2021 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 and 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 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~~ service utilities.** The *code official* is authorized to give permission to temporarily supply service utilities in accordance with Section 111. ~~and use power in part of an electric installation before such installation has been fully completed and the final certificate of completion has been issued. The part covered by the temporary certificate shall comply with the requirements specified for temporary lighting, heat or power in NFPA 70.~~

**[A] 107.4 Termination of approval.** The *code official* is authorized to terminate such permit for a temporary use and to order the ~~temporary use~~ same to be discontinued.

## SECTION 111
## SERVICE UTILITIES

**[A] 111.1 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 *code official*.

**[A] 111.2 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 sewer system for the purpose of testing systems or for use under a temporary approval.

**[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.

# 2021 International Fire Code

**Add new text as follows:**

## SECTION 106
## TEMPORARY STRUCTURES, USES, EQUIPMENT AND SYSTEMS

**106.1 General.** The fire code official is authorized to issue a permit for temporary structures, uses, equipment or systems as required in Sections 105.5 and 105.6. 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 requirements of this code as necessary to ensure health, safety and general welfare.

**106.3 Temporary service utilities.** The fire code official is authorized to give permission to temporarily supply service utilities in accordance with Section 110.

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

## SECTION 110
## SERVICE UTILITIES

**[A] 110.1 Authority to disconnect service utilities.** The *fire code official* shall have the authority to authorize disconnection of utility service to the building, structure or system in order to safely execute emergency operations or to eliminate an immediate hazard. The *fire 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, then 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.

# 2021 International Fuel Gas Code

## SECTION 110
## SERVICE UTILITIES

**[A] 110.1 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] 110.2 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 sewer system for the purpose of testing the installation or for use under a temporary approval.

**110.3 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 112.1 or 112.2. 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.

**Revise as follows:**

## SECTION 111
## TEMPORARY USES, EQUIPMENT, AND SYSTEMS ~~AND USES~~

**[A] 111.1 General.** The *code official* is authorized to issue a permit for temporary uses, *equipment*, and systems ~~and uses~~. 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] 111.2 Conformance.** Temporary uses, *equipment*, and 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] 111.3 Temporary utilities.** The *code official* is authorized to give permission to temporarily supply service utilities in accordance with Section 110. ~~before an installation has been fully completed and the final certificate of completion has been issued. The part covered by the temporary certificate shall comply with the requirements specified for temporary lighting, heat or power in the code.~~

**[A] 111.4 Termination of approval.** The *code official* is authorized to terminate such permit for ~~a~~ temporary ~~structure or use~~ uses, equipment or systems and to order the ~~temporary structure or use~~ same to be discontinued.

# 2021 International Mechanical Code

**Revise as follows:**

## SECTION 107
## TEMPORARY USES, EQUIPMENT, AND SYSTEMS ~~AND USES~~

**[A] 107.1 General.** The code official is authorized to issue a permit for temporary uses, *equipment*, and systems ~~and uses~~. 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 ~~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] 107.3 Temporary service utilities.** The code official is authorized to give permission to temporarily supply service utilities in accordance with Section 112. ~~before an installation has been fully completed and the final certificate of completion has been issued. The part covered by the temporary certificate shall comply with the requirements specified for temporary lighting, heat or power in the code.~~

**[A] 107.4 Termination of approval.** The code official is authorized to terminate such permit for temporary uses, *equipment*, or systems ~~or uses~~ and to order the ~~temporary *equipment*, systems or uses~~ same to be discontinued.

## 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 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] 112.2 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 sewer system for the purpose of testing systems or for use under a temporary approval.

**[A] 112.3 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 112.1 or 112.2. 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.

# 2021 International Plumbing Code

**Revise as follows:**

## SECTION 107
## TEMPORARY USES, EQUIPMENT, AND SYSTEMS ~~AND USES~~

**[A] 107.1 General.** The code official is authorized to issue a permit for temporary uses, equipment~~,~~ and systems ~~and uses~~. 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 ~~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] 107.3 Temporary service utilities.** The code official is authorized to give permission to temporarily supply service utilities in accordance with Section 112. ~~before an installation has been fully completed and the final certificate of completion has been issued. The part covered by the temporary certificate shall comply with the requirements specified for temporary lighting, heat or power in the code.~~

**[A] 107.4 Termination of approval.** The code official is authorized to terminate such permit for temporary uses, equipment~~,~~ or systems ~~or uses~~ and to order the ~~temporary equipment, systems or uses~~ same to be discontinued.

## 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 authorized by the code official.

**[A] 112.2 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 sewer system for the purpose of testing plumbing systems or for use under a temporary approval.

**[A] 112.3 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 112.1 or 112.2. 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.

# 2021 International Private Sewage Disposal Code

**Revise as follows:**

## SECTION 109
## TEMPORARY USES, EQUIPMENT~~,~~ AND SYSTEMS ~~AND USES~~

**[A] 109.1 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.

**Revise as follows:**

**[A] 109.2 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] 109.3 Temporary utilities.** The *code official* is authorized to give permission to temporarily supply service utilities in accordance with Section 110.~~, 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] 109.4 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.

## SECTION 110
## SERVICE UTILITIES

**[A] 110.1 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] 110.2 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, water system or sewer system for the purpose of testing systems or for use under a temporary approval.

**[A] 110.3 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 110.1 or 110.2. 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.

# 2021 International Swimming Pool and Spa Code

**Add new text as follows:**

## SECTION 106
## TEMPORARY STRUCTURES, EQUIPMENT AND SYSTEMS

**106.1 General.** The code official is authorized to issue a permit for temporary 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 code official is authorized to grant extensions for demonstrated cause.

**106.2 Conformance.** Temporary structures, equipment and systems shall conform to the requirements of this code as necessary to ensure health, safety and general welfare.

**106.3 Temporary service utilities.** The code official is authorized to give permission to temporarily supply service utilities in accordance with Section 109.

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

## SECTION 109
## SERVICE UTILITIES

**[A] 109.1 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] 109.2 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 sewer system for the purpose of testing systems or for use under a temporary approval.

**[A] 109.3 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 108.2 or 108.3. 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.

# 2021 International Wildland-Urban Interface Code

**Revise as follows:**

## SECTION 108
## TEMPORARY ~~STRUCTURES AND~~ USES , EQUIPMENT AND SYSTEMS

**[A] 108.1 General.** The *code official* is authorized to issue a permit for temporary ~~structures and temporary~~ uses , equipment and 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] 108.2 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.

**Add new text as follows:**

**108.3 Temporary service utilities.** The *code official* is authorized to give permission to temporarily supply service utilities in accordance with Section 112.

**Revise as follows:**

**[A] ~~108.3~~ 108.4 Termination of approval.** The *code official* is authorized to terminate such permit for a temporary ~~structure or~~ use , equipment or systems and to order the ~~temporary structure or use~~ same to be discontinued.

# 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 authorized by the *code official*.

**[A] 112.2 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 sewer system for the purpose of testing systems or for use under a temporary approval.

**[A] 112.3 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 Sections 112.1 and 112.2. 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.

# ADM41-22 Part II

**IRC: SECTION R107, R107.1, R107.2, R107.3, R107.4, SECTION R111, R111.1, R111.2, R111.3**

**Proponents:** Mike Nugent, representing Building Code Action Committee (bcac@iccsafe.org); Joseph J. Summers, representing Chair of PMGCAC (pmgcac@iccsafe.org); Robert Marshall, representing FCAC (fcac@iccsafe.org)

## 2021 International Residential Code

**Revise as follows:**

### SECTION R107
### TEMPORARY STRUCTURES, USES, EQUIPMENT AND ~~USES~~ SYSTEMS

**R107.1 General.** The *building official* is authorized to issue a *permit* for temporary structures , ~~and 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.

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

**R107.3 Temporary ~~power~~ service utilities.** The *building official* is authorized to give permission to temporarily supply service utilities in accordance with Section R111. ~~and use power in part of an electric installation before such installation has been fully completed and the final certificate of completion has been issued. The part covered by the temporary certificate shall comply with the requirements specified for temporary lighting, heat or power in NFPA 70.~~

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

### SECTION R111
### SERVICE UTILITIES

**R111.1 Connection of service utilities.** A *person* shall not make connections from a utility, a source of energy, fuel, or power 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 or power.

**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 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.

**Reason Statement:** The purpose of this proposal is coordination between codes for the section on temporary structures. A version was proposed last cycle, ADM32-19. As requested by the development committee, the BCAC worked with FCAC and PMGCAC to develop this proposal.
This proposal modified the section for temporary facilities where it was already in the code. The committee felt that it was very important to add these safety options to the IFC as well, so this proposal adds this section to IFC and ISPSC. 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 that is remaining in the proposed text.

Generally - The word use is moved to the front, and the lists are made the same throughout.

Temporary power - 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 section on Conformance includes a laundry list " structural strength, fire safety, means of egress, accessibility, light, ventilation and sanitary", that is not needed for the section and includes provisions that are not addressed in all of the codes (e.g. IPC does not address structural strength, means of egress, or light).

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.

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

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. In 2020 and 2021 the BCAC has held several virtual meetings open to any interested party. In addition, there were numerous virtual Working Group meetings for the current code development cycle, which included members of the committee as well as interested parties. Related documents and reports are posted on the BCAC website at https://www.iccsafe.org/products-and-services/i-codes/code-development/cs/building-code-action-committee-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 and life safety in new and existing buildings and facilities as well as the protection of life and property in wildland urban interface areas. In 2020 and 2021 the Fire-CAC held multiple virtual meetings that were open to any interested party. In addition, there were numerous virtual specific working group meetings that were also open to any interested parties, to develop, discuss and debate the proposed changes. Related documentation and reports are posted on the FCAC website at: https://www.iccsafe.org/products-and-services/i-codes/code-development/cs/fire-code-action-committee-fcac/

The PMG CAC was established by the ICC Board of Directors in July 2011 to pursue opportunities to improve and enhance assigned International Codes or portions thereof. In 2020 and 2021, the PMGCAC has held several virtual meetings open to any interested party. Numerous interested parties attended the committee meetings and offered their input.

**Cost Impact:** The code change proposal will not increase or decrease the cost of construction
This change is only removing repeating requirements, therefore this revision is strictly editorial and will not have any changes to the construction requirements.

ADM41-22 Part II

# ADM42-22

**IPC: 109.3 (New)**

**Proponents:** Mike Nugent, representing Building Code Action Committee (bcac@iccsafe.org); Joseph J. Summers, representing Plumbing, Mechanical and Fuel Gas Code Action Committee (pmgcac@iccsafe.org)

## 2021 International Plumbing Code

**Add new text as follows:**

**109.3 Permit valuations.** The applicant for a *permit* shall provide an estimated value of the work for which the permit is being issued at time of application. Such estimated valuations shall include the 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. Where, in the opinion of the *building official*, the valuation is underestimated, the *permit* shall be denied, unless the applicant can show detailed estimates acceptable to the *building official*. The building official shall have the authority to adjust the final valuation for permit fees.

**Reason Statement:** ADM27-19 was approved last cycle for the coordination of the Fees section in IMC, IPC, IPMC, IFGC, ISPSC. This section was left out of IPC by accident. There is another proposal from BCAC that has some adjustment to this section across codes. That revised language has been incorporated into this proposal.
This proposal is submitted by the ICC Plumbing/Mechanical/Gas Code Action Committee (PMGCAC) in coordination with the ICC Building Code Action Committee (BCAC).

The PMG CAC was established by the ICC Board of Directors in July 2011 to pursue opportunities to improve and enhance assigned International Codes or portions thereof. In 2020 and 2021, the PMGCAC has held several virtual meetings open to any interested party. Numerous interested parties attended the committee meetings and offered their input.

**Cost Impact:** The code change proposal will not increase or decrease the cost of construction
This is an administrative section and will not change the cost of construction.

# ADM43-22 Part I

**IBC: [A] 109.3; IEBC: [A] 108.3; IFC: 107.3; IFGC: 109.3; IMC: [A] 109.3; ISPSC: [A] 108.3; IWUIC: [A] 109.3; IGCC: 108.3**

**Proponents:** Mike Nugent, representing Building Code Action Committee (bcac@iccsafe.org); Joseph J. Summers, representing Plumbing, Mechanical and Fuel Gas Code Action Committee (pmgcac@iccsafe.org); Robert Marshall, 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 THESE COMMITTEES.**

## 2021 International Building Code

**Revise as follows:**

**[A] 109.3 Permit valuations.** The applicant for a *permit* shall provide an estimated ~~*permit*~~ value of the work for which the permit is being issued at time of application. ~~*Permit* valuations shall reflect~~ Such estimated valuations shall include the 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~~ Where, 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~~ acceptable to the *building official*. ~~Final building *permit* valuation shall be set by the *building official.*~~ The building official shall have the authority to adjust the final valuation for permit fees.

## 2021 International Existing Building Code

**Revise as follows:**

**[A] 108.3 Permit valuations.** The applicant for a *permit* shall provide an estimated ~~*permit*~~ value of the work for which the permit is being issued at time of application. ~~*Permit* valuations shall reflect~~ Such estimated valuations shall include the 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~~ Where, 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~~ acceptable to the *code official*. ~~Final building permit valuation shall be set by the *code official.*~~ The code official shall have the authority to adjust the final valuation for permit fees.

## 2021 International Fire Code

**Revise as follows:**

**107.3 Permit valuations.** The applicant for a *permit* shall provide an estimated ~~*permit*~~ value of the work for which the permit is being issued at time of application. ~~*Permit* valuations shall reflect~~ Such estimated valuations shall include the 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~~ Where, 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~~ acceptable to the *fire code official*. ~~Final permit valuation shall be set by the *fire code official.*~~ The fire code official shall have the authority to adjust the final valuation for permit fees.

## 2021 International Fuel Gas Code

**Revise as follows:**

**109.3 Permit valuations.** The applicant for a *permit* shall provide an estimated ~~*permit*~~ value of the work for which the permit is being issued at time of application. ~~*Permit* valuations shall reflect~~ Such estimated valuations shall include the 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~~ Where, 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~~ acceptable to the *code official*. ~~Final building permit valuation shall be set by the *code official.*~~ The code official shall have the authority to adjust the final valuation for permit fees.

## 2021 International Mechanical Code

**Revise as follows:**

**[A] 109.3 Permit valuations .** The applicant for a *permit* shall provide an estimated ~~*permit*~~ value of the work for which the permit is being issued at time of application. ~~*Permit* valuations shall reflect~~ Such estimated valuations shall include the 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~~ Where, 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~~ acceptable to the *code official*. ~~Final building permit valuation shall be set by the *code official.*~~ The code official shall have the authority to adjust the final valuation for permit fees.

## 2021 International Swimming Pool and Spa Code

**Revise as follows:**

**[A] 108.3 Permit valuations.** The applicant for a *permit* shall provide an estimated ~~*permit*~~value of the work for which the permit is being issued at time of application. ~~*Permit* valuations shall reflect~~ Such estimated valuations shall include the 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~~ Where, 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~~ acceptable to the *code official*. ~~Final building permit valuation shall be set by the *code official*.~~ The code official shall have the authority to adjust the final valuation for permit fees.

## 2021 International Wildland-Urban Interface Code

**Revise as follows:**

**[A] 109.3 Permit valuations.** The applicant for a permit shall provide an estimated ~~permit~~ value of the work for which the permit is being issued at time of application. ~~Permit valuations shall reflect~~ Such estimated valuations shall include the total value of work, including materials and labor, for which the permit is being issued. ~~If~~ Where, 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~~ acceptable to the applicable governing authority. ~~Final building permit valuation shall be set by the applicable governing authority.~~ The applicable governing authority shall have the authority to adjust the final valuation for permit fees.

## 2021 International Green Construction Code

**Revise as follows:**

**108.3 Permit valuations.** The applicant for a permit shall provide an estimated ~~permit~~ value of the work for which the permit is being issued at the time of application. ~~Permit valuations shall consist of~~ Such estimated valuations shall include the total value of work, including materials and labor, for which the permit is being issued, such as electrical, gas, mechanical, and plumbing equipment and permanent systems. ~~If~~ Where, 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~~ acceptable to the building official. ~~Final building permit valuation shall be set by the building official.~~ The building official shall have the authority to adjust the final valuation for permit fees.

# ADM43-22 Part II

**IRC: R108.3, R108.6, R108.4, R108.5**

**Proponents:** Mike Nugent, representing Building Code Action Committee (bcac@iccsafe.org); Joseph J. Summers, representing Plumbing, Mechanical and Fuel Gas Code Action Committee (pmgcac@iccsafe.org); Robert Marshall, representing FCAC (fcac@iccsafe.org)

## 2021 International Residential Code

**Revise as follows:**

**R108.3 ~~Building permit~~ Permit valuations.** The applicant for a *permit* shall provide an estimated value of the work for which the permit is being issued at time of application. Such estimated ~~Building permit~~ valuations shall include the 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, ~~including materials and labor~~. Where, in the opinion of the *building official*, the valuation is underestimated, the *permit* shall be denied, unless the applicant can show detailed estimates acceptable to the *building official*. The building official shall have the authority to adjust the final valuation for permit fees.

**~~R108.6~~ R108.4 Work commencing before permit issuance.** Any *person* who commences work requiring a *permit* on a building, structure, electrical, gas, mechanical or plumbing system before obtaining the necessary *permits* shall be subject to a fee established by the applicable governing authority that shall be in addition to the required *permit* fees.

**~~R108.4~~ R108.5 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.

**~~R108.5~~ R108.6 Refunds.** The *building official* is authorized to establish a refund policy.

**Reason Statement:** The intent of this proposal is to coordinate the provisions for fees in the I-codes. Last cycle there were two different proposals to address consistency in the Fees section (ADM 27-19 and ADM 33-19) – the end result was coordination between the 2021 codes. for – IBC, IFC, IEBC, IMC, IPC, IPMC, IFGC, ISPSC, IWUIC and IZC.
The revisions to Section 109.3 is based on some concerns raised during discussion. The change to the first and second sentence is a clarification of application. The cost of the permit is the value of the work being performed, not the value of the permit. The current last sentence could be read to say the code official can arbitrarily set the permit valuation, or it could be read to say the code official had to calculate the valuation. The proposed language allows for the code official to make adjustments if warranted.

There is another code change to add this section to IPC. ADM27-19 was approved last cycle for the coordination of the Fees section in IMC, IPC, IPMC, IFGC, IPSPC. This section was left out of IPC by accident. This revised text has been submitted to be added to the IPC Section 109.3.

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.

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

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. In 2020 and 2021 the BCAC has held several virtual meetings open to any interested party. In addition, there were numerous virtual Working Group meetings for the current code development cycle, which included members of the committee as well as interested parties. Related documents and reports are posted on the BCAC website at https://www.iccsafe.org/products-and-services/i-codes/code-development/cs/building-code-action-committee-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 and life safety in new and existing buildings and facilities as well as the protection of life and property in wildland urban interface areas. In 2020 and 2021 the Fire-CAC held multiple virtual meetings that were open to any interested party. In addition, there were numerous virtual specific working group meetings that were also open to any interested parties, to develop, discuss and debate the proposed changes. Related documentation and reports are posted on the FCAC website at: https://www.iccsafe.org/products-and-services/i-codes/code-development/cs/fire-code-action-committee-fcac/.

The PMG CAC was established by the ICC Board of Directors in July 2011 to pursue opportunities to improve and enhance assigned International Codes or portions thereof. In 2020 and 2021, the PMGCAC has held several virtual meetings open to any interested party. Numerous interested parties attended the committee meetings and offered their input.

**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.

# ADM44-22

**IFGC: SECTION 110, 110.3, SECTION 115, [A] 115.6.2; IMC: SECTION 112, [A] 112.3, SECTION 115, [A] 115.6.2; IPC: SECTION 112, [A] 112.3, SECTION 115, [A] 115.6.2; IPSDC: SECTION 110, [A] 110.3, SECTION 114, [A] 114.6.2; ISPSC: SECTION 109, [A] 109.3, SECTION 113, [A] 113.6.2**

**Proponents:** Mike Nugent, representing Building Code Action Committee (bcac@iccsafe.org)

## 2021 International Fuel Gas Code

### SECTION 110
### SERVICE UTILITIES

**Revise as follows:**

**[A] 110.3 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 112.1 or 112.2. 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.

### SECTION 115
### VIOLATIONS

**Revise as follows:**

**[A] 115.6.2 Authority to disconnect service utilities.** The *code official* shall have the authority to require disconnection of utility service in accordance with Section 110.3 ~~to the building, structure or system regulated by the technical codes in case of emergency where necessary to eliminate an immediate hazard to life or property. The *code 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 or occupant of the building, structure or service system shall be notified in writing, as soon as practicable thereafter~~.

## 2021 International Mechanical Code

### SECTION 112
### SERVICE UTILITIES

**[A] 112.3 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 112.1 or 112.2. 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.

### SECTION 115
### VIOLATIONS

**Revise as follows:**

**[A] 115.6.2 Authority to order ~~disconnection of energy sources~~ disconnect service utilities.** The code official shall have the authority to ~~order~~ authorize disconnection of utility services in accordance with Section 112.3 ~~energy sources supplied to a building, structure or mechanical system regulated by this code, where it is determined that the mechanical system or any portion thereof has become hazardous or unsafe. Written notice of such order to disconnect service and the causes therefor shall be given within 24 hours to the owner, the owner's authorized agent and occupant of such building, structure or premises, provided, however, that in cases of immediate danger to life or property, such disconnection shall be made immediately without such notice. Where energy sources are provided by a public utility, the code official shall immediately notify the serving utility in writing of the issuance of such order to disconnect~~.

## 2021 International Plumbing Code

### SECTION 112
### SERVICE UTILITIES

**[A] 112.3 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 112.1 or 112.2. 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.

### SECTION 115
### VIOLATIONS

**Revise as follows:**

**[A] 115.6.2 Authority to disconnect service utilities.** The code official shall have the authority to authorize disconnection of utility service in accordance with Section 112.3 ~~to the building, structure or system regulated by the technical codes in case of an emergency, where necessary, to eliminate an immediate danger to life or property. Where possible, the owner or the owner's authorized agent and occupant of the building, structure or service system shall be notified of the decision to disconnect utility service 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 systems shall be notified in writing, as soon as practical thereafter~~.

## 2021 International Private Sewage Disposal Code

### SECTION 110
### SERVICE UTILITIES

**[A] 110.3 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 110.1 or 110.2. 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.

### SECTION 114
### VIOLATIONS

**Revise as follows:**

**[A] 114.6.2 Authority to disconnect service utilities.** The *code official* shall have the authority to authorize disconnection of utility service in accordance with Section 110.3 ~~to the building, structure or system regulated by the technical codes in case of emergency, where necessary, to eliminate an immediate danger to life or property. Where possible, the owner, the owners's authorized agent and occupant of the building, structure or service system shall be notified of the decision to disconnect utility service prior to taking such action. If not notified prior to disconnecting, the owner or occupant of the building, structure or service systems shall be notified in writing as soon as is practical thereafter~~.

## 2021 International Swimming Pool and Spa Code

### SECTION 109
### SERVICE UTILITIES

**[A] 109.3 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 108.2 or 108.3. 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.

### SECTION 113
### VIOLATIONS

**Revise as follows:**

**[A] 113.6.2 Authority to disconnect service utilities.** The *code official* shall have the authority to authorize disconnection of utility service in accordance with Section 109.3 ~~to the pool or spa regulated by the technical codes in case of an emergency, where necessary, to eliminate an immediate danger to life or property. Where possible, the owner or the owner's authorized agent and occupant of the building where the pool or spa is located shall be notified of the decision to disconnect utility service prior to taking such action. If not notified prior to disconnecting, the owner, the~~

~~owner's authorized agent or the occupant of the building shall be notified in writing, as soon as practical thereafter~~.

**Reason Statement:** ADM 39-19 was a coordinating proposal for Service Utilities. There was an inadvertent duplication of language in the section on Violations. This proposal is intended to editorially remove the repeated sections. A reference to the same section in Service Utilities is provided instead.
This proposal is submitted by the Plumbing/Mechanical/Gas Code Action Committee (PMGCAC) working with the Building Code Action Committee (BCAC).

The PMG CAC was established by the ICC Board of Directors in July 2011 to pursue opportunities to improve and enhance assigned International Codes or portions thereof. In 2020 and 2021, the PMGCAC has held several virtual meetings open to any interested party. Numerous interested parties attended the committee meetings and offered their input.

**Cost Impact:** The code change proposal will not increase or decrease the cost of construction
These are administration requirements, so there will be no change in construction requirements.

ADM44-22

# ADM45-22 Part I

**IBC: SECTION 111, [A] 111.1, [A] 111.4; IEBC: SECTION 110, [A] 110.1, [A] 110.5 (New)**

**Proponents:** Joseph Summers, representing ICC Region VI (summersj@cityofgroton-ct.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 IRC-BUILDING CODE COMMITTEE. SEE THE TENTATIVE HEARING ORDER FOR THESE COMMITTEES.**

## 2021 International Building Code

### SECTION 111
### CERTIFICATE OF OCCUPANCY

**Revise as follows:**

**[A] 111.1 Change of occupancy.** A building or structure shall not be used or occupied in whole or in part, and a *change of occupancy* of a building or structure or portion thereof shall not be made, until the *building official* has issued a certificate of occupancy therefor as provided herein. Issuance of a certificate of occupancy shall not be construed as an approval of a violation of the provisions of this code or of other ordinances of the *jurisdiction*. Certificates presuming to give authority to violate or cancel the provisions of this code or other ordinances of the *jurisdiction* shall not be valid.

**~~Exception~~ Exceptions:**

1. Certificates of occupancy are not required for work exempt from *permits* in accordance with Section 105.2.
2. Work for which a certificate of approval is issued in accordance with Section 111.5.

**Add new text as follows:**

**[A] 111.5 Certificate of Approval.** The *building official* shall issue a certificate of approval indicating substantial compliance with the requirements of this code for all of the completed work that requires a *permit* but does not require a certificate of occupancy. Such work shall include, but not limited to: fences greater than 7 feet in height, retaining walls greater than 3 feet in height, roofing, siding, electrical, plumbing, and mechanical *repairs* and *alterations*.

## 2021 International Existing Building Code

### SECTION 110
### CERTIFICATE OF OCCUPANCY

**Revise as follows:**

**[A] 110.1 Change of occupancy.** A structure shall not be used or occupied in whole or in part, and a *change of occupancy* of a structure or portion thereof shall not be made until the *code official* has issued a certificate of occupancy therefor as provided herein. Issuance of a certificate of occupancy shall not be construed as an approval of a violation of the provisions of this code or of other ordinances of the jurisdiction. Certificates presuming to give authority to violate or cancel the provisions of this code or other ordinances of the jurisdiction shall not be valid.

**~~Exception~~ Exceptions:**

1. Certificates of occupancy are not required for work exempt from permits in accordance with Section 105.2.
2. Work for which a certificate of approval is issued in accordance with Section 110.5.

**Add new text as follows:**

**[A] 110.5 Certificate of Approval..** The *building official* shall issue a certificate of approval indicating substantial compliance with the requirements of this code for all of the completed work that requires a *permit* but does not require a certificate of occupancy. Such work shall include, but not limited to: fences greater than 7 feet in height, retaining walls greater than 3 feet in height, roofing, siding, electrical, plumbing, and mechanical *repairs* and *alterations*.

# ADM45-22 Part II

**IRC: SECTION R110, R110.1, R110.5**

**Proponents:** Joseph Summers, representing ICC Region VI (summersj@cityofgroton-ct.gov)

## 2021 International Residential Code

### SECTION R110
### CERTIFICATE OF OCCUPANCY

**Revise as follows:**

**R110.1 Use and change of occupancy.** A building or structure shall not be used or occupied in whole or in part, and a *change of occupancy* of a building or structure or portion thereof shall not be made, until the *building official* has issued a certificate of occupancy therefor as provided herein. Issuance of a certificate of occupancy shall not be construed as an approval of a violation of the provisions of this code or of other ordinances of the *jurisdiction*. Certificates presuming to give authority to violate or cancel the provisions of this code or other ordinances of the *jurisdiction* shall not be valid.

**Exceptions:**

1. Certificate of occupancy are not required for work exempt from *permits* under Section R105.2.
2. Accessory buildings or structures.
3. Work for which a certificate of approval is issued in accordance with Section R110.6

**Add new text as follows:**

**R110.6 Certificate of Approval.** The *building official* shall issue a certificate of approval indicating substantial compliance with the requirements of this code for all of the completed work that requires a *permit* but does not require a certificate of occupancy. Such work shall include, but not limited to: fences greater than 7 feet in height, retaining walls greater than 3 feet in height, decks, garages, *swimming pools*, *basements* and *attics* converted to *habitable space*, roofing, siding, electrical, plumbing, and mechanical *repairs* and *alterations*.

**Reason Statement:** Once a building has a valid certificate of occupancy, their is no reason to create a new certificate of occupancy when minor alterations and repairs are performed. This will expedite the closing of permits.

**Cost Impact:** The code change proposal will not increase or decrease the cost of construction
This will expedite the approval process. Currently the way the code reads you would need to issue a certificate of occupancy for permits such as window replacements, siding, roofing, service upgrade, boiler replacement, etc. The reasoning for expediting the approval process is the AHJ can then rely on the field inspection record to close out the permit or they could create their own certificate of approval form. Why do you need to specify the type of construction, design occupant load, if sprinklers are required for these types of permits. This requires research and considerable amount of time from the department staff to determine this.

CT adopted the language for certificate of approval and some jurisdictions have a check box on the inspection form stating the inspection is also the certificate of approval and many others have a separate form that has similar language as a C of O but only provides the permit number, address, description of work, code edition and an area for the BO to sign.

# ADM46-22

**ISPSC: SECTION 112, [A] 112.1; IPSDC: SECTION 113, 113.1; IFGC: SECTION 114 (IFGC), 114.1; IPMC: SECTION 108, [A] 108.1**

**Proponents:** Mike Nugent, representing Building Code Action Committee (bcac@iccsafe.org); Joseph J. Summers, representing Plumbing, Mechanical and Fuel Gas Code Action Committee (pmgcac@iccsafe.org)

## 2021 International Swimming Pool and Spa Code

**Delete without substitution:**

~~**SECTION 112**~~
~~**BOARD OF APPEALS**~~

~~**[A] 112.1 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.~~

## 2021 International Private Sewage Disposal Code

**Delete without substitution:**

~~**SECTION 113**~~
~~**BOARD OF APPEALS**~~

~~**113.1 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.~~

## 2021 International Fuel Gas Code

**Delete without substitution:**

~~**SECTION 114 (IFGC)**~~
~~**BOARD OF APPEALS**~~

~~**114.1 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.~~

## 2021 International Property Maintenance Code

**Delete without substitution:**

~~**SECTION 108**~~
~~**BOARD OF APPEALS**~~

~~**[A] 108.1 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-officio 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.~~

**Reason Statement:** ADM40-19 and ADM 43-19 were companion code changes. ADM 40-19 revised the sections for Means of Appeals. ADM 43-19 added an appendix for Board of Appeals that included the size and appointment of the Board of appeals to IBC, IEBC, IFC, IWUIC, IPC, IMC, IFGC, ISPSC, IPMC, IPSDC, IECC-C & R, IGCC and IRC. This text for the board size is only in these four codes. For consistency in the family of codes, and to not have a conflict with the appendix, this section should be deleted. Below is the relevant section from the appendix.
**[A] 101.3 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 **[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.

This proposal is submitted by the ICC Plumbing/Mechanical/Gas Code Action Committee (PMGCAC) in coordination with the ICC Building Code Action Committee (BCAC).

The PMG CAC was established by the ICC Board of Directors in July 2011 to pursue opportunities to improve and enhance assigned International Codes or portions thereof. In 2020 and 2021, the PMGCAC has held several virtual meetings open to any interested party. Numerous interested parties attended the committee meetings and offered their input.

**Cost Impact:** The code change proposal will not increase or decrease the cost of construction
This is removing redundant text.

ADM46-22

# ADM47-22

**IFC: [A] 112.3.2, 112.3.2.1 (New), 112.3.2.2 (New)**

**Proponents:** John Catlett, representing BOMA International (catlettcodeconsulting@gmail.com)

## 2021 International Fire Code

**[A] 112.3.2 Compliance with orders and notices.** A notice of violation issued or served as provided by this code shall be complied with by the *owner*, the *owner 's* authorized agent, operator, occupant or other person responsible for the condition or violation to which the notice of violation pertains.

**Add new text as follows:**

**112.3.2.1 Compliance with the provisions of Chapter 11.** With exception of buildings of use Groups I or H, a notice to comply with the provisions of Chapter 11 shall provide for thirty days from date of issuance for the building owner, owner's authorized agent, or the *fire code official to* request a meeting with the *fire code official* to discuss the compliance path and compliance date(s) for completion of work.

**112.3.2.2 Applicability to the *International Existing Building Code*.** In correlation with *International Existing Building Code* Section 101.2.1, the fire code official shall consider planned building alterations presented by the owner or owner's agent that will facilitate, minimize disruptions of occupants, and building operations when establishing the compliance path and compliance date(s) for completion of work.

**Reason Statement:** On behalf of building owners represented by BOMA International's 17,000 plus members, we propose the language above to fix short notices issued for Chapter 11 requirements that have occurred around the country. There are some jurisdictions that have previously adopted chapter 11, but never enforced the provisions. What typically happens is there is a new adoption or a change in code official due to fire department staff rotations that bring in new eyes that see that compliance has not been achieved. Many fire code officials have voiced that these buildings are unsafe and need to comply immediately.
BOMA contends that these buildings are not inherently unsafe with many complying with building codes when they were built. Chapter 11 is intended to make existing building safer, not to fix unsafe conditions. Several members of the Group A Fire Code Committee commented during the hearings on a change BOMA submitted to Chapter 11 that they are aware of the issues we raised during the group A hearings.

In a recent "casual" survey conducted by ICC Government Relations staff requested by the Industry Advisory Committee in preparation for the 2021 code cycle, it was found that the United States is almost completely split between jurisdictions that adopt or are allowed to adopt Chapter 11 and those who are not authorized or prohibited to enforce retrofitting provisions.

The survey can be viewed here:

https://www.cdpaccess.com/proposal/8779/25482/files/download/2983/

In fact, IFC Section 114 makes no mention of Chapter 11 nor does compliance fit any of the specific provisions of Section 114.1.1. Compliance with Chapter 11 is intended to bring existing buildings to a level of safety achieved by newer codes and technology. Section 114.1 clearly states that an unsafe condition is one that, "…in whole or in part, constitute a clear and inimical threat…". Failing to have a system that was not required a building was constructed in itself does not present an imminently hazardous condition. The two new sections above establish a slightly different path for compliance for chapter 11. The first utilizes similar language found in the IEBC for meeting requirements with the code official. The second provides a tie to IEBC Section 101.2.1 and recognition that compliance with many of the provisions chapter 11 can occur most proficiently and cost effectively when a building or portion thereof undergoes alterations. It should be a consideration for the fire code official when working with the building owner when establishing a path to compliance.

**Cost Impact:** The code change proposal will not increase or decrease the cost of construction
The code changes will not increase or decrease the cost of compliance. However. many provisions of chapter 11 contain high price tags and potential for disruption of existing building operations. Providing a minimum notice of 30 days and establishing a conversation between the fire code official and the building owner will allow the building owner to plan, secure designers and contractors, and possibly coordinate compliance with other building alterations the owner has planned.

# ADM48-22 Part I

**IBC: SECTION 113, [A] 113.1, [A] 113.2, [A] 113.3, [A] 113.4; IEBC: SECTION 112, [A] 112.1, [A] 112.2, [A] 112.3, [A] 112.4; IFC: SECTION 111, [A] 111.1, [A] 111.2, [A] 111.3, [A] 111.4; IFGC: SECTION 113, 113.1, [A] 113.2, 113.3, 113.4; IMC: SECTION 114, [A] 114.1, [A] 114.2, [A] 114.3, [A] 114.4; IPC: SECTION 114, [A] 114.1, [A] 114.2, [A] 114.3, [A] 114.4; IPMC: SECTION 107, 107.1, [A] 107.2, 107.3, 107.4; IPSDC: SECTION 112, [A] 112.1, 112.2, [A] 112.3, [A] 112.4; ISPSC: SECTION 111, [A] 111.1, [A] 111.2, [A] 111.3, [A] 111.4; IWUIC: SECTION 113, [A] 113.1, [A] 113.2, [A] 113.3, [A] 113.4; IGCC: SECTION 111, 111.1, 111.2, 111.3, 111.4**

**Proponents:** Mike Nugent, representing Building Code Action Committee (bcac@iccsafe.org); Joseph J. Summers, representing Plumbing, Mechanical and Fuel Gas Code Action Committee (pmgcac@iccsafe.org); Robert Marshall, 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 THESE COMMITTEES.**

## 2021 International Building Code

### SECTION 113
### 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 of ficial.*

**Revise as follows:**

**[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 ~~to pass~~ on matters pertaining to ~~building construction~~ provisions of this code and are not employees of the jurisdiction.

**[A] 113.4 Administration .** The *building official* shall take ~~immediate~~ action in accordance with the decision of the board.

## 2021 International Existing Building Code

### SECTION 112
### MEANS OF APPEALS

**[A] 112.1 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] 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 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~~ the provisions of this code and are not employees of the jurisdiction.

**[A] 112.4 Administration.** The *code official* shall take ~~immediate~~ action in accordance with the decision of the board.

## 2021 International Fire Code

### SECTION 111
### MEANS OF APPEALS

**Revise as follows:**

**[A] 111.1 ~~Board of appeals established~~ General.** 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 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 *fire code official*.

**[A] 111.2 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] 111.3 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*,~~ the provisions of this code and are not employees of the jurisdiction.

**[A] 111.4 Administration.** The *fire code official* shall take ~~immediate~~ action in accordance with the decision of the board.

## 2021 International Fuel Gas Code

**Revise as follows:**

### SECTION 113
### MEANS OF APPEALS

**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*.

**Revise as follows:**

**[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~~.

**113.3 Qualifications.** The board of appeals shall consist of members who are qualified by experience and training on matters pertaining to the provisions of this code and are not employees of the jurisdiction.

**113.4 Administration.** The *code official* shall take ~~immediate~~ action in accordance with the decision of the board.

## 2021 International Mechanical Code

### SECTION 114
### MEANS OF APPEALS

**[A] 114.1 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] 114.2 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 the authority to waive requirements of this code ~~or interpret the administration of this code~~.

**[A] 114.3 Qualifications.** The board of appeals shall consist of members who are qualified by experience and training on matters pertaining to the provisions of this code and are not employees of the jurisdiction.

**[A] 114.4 Administration.** The code official shall take ~~immediate~~ action in accordance with the decision of the board.

## 2021 International Plumbing Code

### SECTION 114
### MEANS OF APPEALS

**[A] 114.1 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] 114.2 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] 114.3 Qualifications.** The board of appeals shall consist of members who are qualified by experience and training on matters pertaining to the provisions of this code and are not employees of the jurisdiction.

**[A] 114.4 Administration.** The code official shall take ~~immediate~~ action in accordance with the decision of the board.

## 2021 International Property Maintenance Code

**Revise as follows:**

### SECTION 107
### MEANS OF APPEALS

**107.1 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] 107.2 Limitations of 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~~.

**107.3 Qualifications.** The board of appeals shall consist of members who are qualified by experience and training on matters pertaining to the provisions of this code and are not employees of the jurisdiction.

**107.4 Administration.** The *code official* shall take ~~immediate~~ action in accordance with the decision of the board.

## 2021 International Private Sewage Disposal Code

**Revise as follows:**

### SECTION 112
### MEANS OF APPEALS

**[A] 112.1 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:**

**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 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 on matters pertaining to the provisions of this code and are not employees of the jurisdiction.

**[A] 112.4 Administration.** The *code official* shall take ~~immediate~~ action in accordance with the decision of the board.

## 2021 International Swimming Pool and Spa Code

**Revise as follows:**

### SECTION 111
### MEANS OF APPEALS

**[A] 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*.

**Revise as follows:**

**[A] 111.2 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] 111.3 Qualifications.** The board of appeals shall consist of members who are qualified by experience and training on matters pertaining to the provisions of this code and are not employees of the jurisdiction.

**[A] 111.4 Administration.** The *code official* shall take ~~immediate~~ action in accordance with the decision of the board.

# 2021 International Wildland-Urban Interface Code

## 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.

**Revise as follows:**

**[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 on matters pertaining to the provisions of this code 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.

# 2021 International Green Construction Code

## SECTION 111
## MEANS OF APPEALS

**111.1 General.** 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, 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.

**Revise as follows:**

**111.2 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~~.

**111.3 Qualifications.** The board of appeals shall consist of members who are qualified by experience and training ~~to pass~~ on matters pertaining to the provisions of this code ~~building construction~~ and are not employees of the jurisdiction.

**111.4 Administration.** The authority having jurisdiction shall take ~~immediate~~ action in accordance with the decision of the board.

# ADM48-22 Part II

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

**Proponents:** Mike Nugent, representing Building Code Action Committee (bcac@iccsafe.org); Joseph J. Summers, representing Plumbing, Mechanical and Fuel Gas Code Action Committee (pmgcac@iccsafe.org); Robert Marshall, representing FCAC (fcac@iccsafe.org)

## 2021 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.

**R112.3 Qualifications.** The board of appeals shall consist of members who are qualified by experience and training ~~to pass judgment~~ on matters pertaining to ~~building construction~~ the provisions of this code 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 Statement:** ADM40-19 was approved for IBC, IEBC, IFC, IWUIC, IPC, IMC, IFGC, ISPSC, IPMC, IPSDC, IECC-R and IGCC for revisions to the section on Means of Appeals. This item was disapproved for IECC Commercial and IRC. The result is an inconsistency with IECC Commercial and IRC.
The intent of this proposal is coordination for the means of appeals within the family of codes. Most of this was accomplished through ADM40-19 during the last cycle. Comments during the testimony, from the code development committees and subsequent discussions have suggested some improvements.

General: In the IRC and IECC Residential, the sentence about the code official not being a voting member of the board of appeals is proposed to be deleted. The fact about city employees not being a voting member of the board is already included in the section on qualifications. The code official is an important advisor for the Board of Appeals. The deletion of this sentence will not change that.

Limitation on authority. The deletion of 'or interpret the administration of this code' is proposed to be deleted so that the board could consider appeals on any part of the codes.

Qualifications: The phrase for experience and training is slightly different in each code. Adding this idea to all codes would provide consistency.

Administration: The IRC code change committee felt that 'immediate' was unreasonable. With the word removed, the board, or jurisdiction can set a reasonable timeframe.

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

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. In 2020 and 2021 the BCAC has held several virtual meetings open to any interested party. In addition, there were numerous virtual Working Group meetings for the current code development cycle, which included members of the committee as well as interested parties. Related documents and reports are posted on the BCAC website at https://www.iccsafe.org/products-and-services/i-codes/code-development/cs/building-code-action-committee-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 and life safety in new and existing buildings and facilities as well as the protection of life and property in wildland urban interface areas. In 2020 and 2021 the Fire-CAC held multiple virtual meetings that were open to any interested party. In addition, there were numerous virtual specific working group meetings that were also open to any interested parties, to develop, discuss and debate the proposed changes. Related documentation and reports are posted on the FCAC website at: https://www.iccsafe.org/products-and-services/i-codes/code-development/cs/fire-code-action-committee-fcac/

The PMG CAC was established by the ICC Board of Directors in July 2011 to pursue opportunities to improve and enhance assigned International Codes or portions thereof. In 2020 and 2021, the PMGCAC has held several virtual meetings open to any interested party. Numerous interested parties attended the committee meetings and offered their input.

**Cost Impact:** The code change proposal will not increase or decrease the cost of construction
These are administration requirements, so there will be no change in construction requirements.

# ADM49-22

**IEBC: SECTION 117, [A] 117.1; IPMC: SECTION 113, 113.1**

**Proponents:** Mike Nugent, representing Building Code Action Committee (bcac@iccsafe.org)

## 2021 International Existing Building Code

### SECTION 117
### DEMOLITION

**Revise as follows:**

**[A] 117.1 General.** ~~The *code official* shall order the owner or owner's authorized agent of any premises on which is located any structure that in the *code official's* judgment is so old or dilapidated, or has become so out of *repair* as to be *dangerous*, *unsafe*, insanitary or otherwise unfit for human habitation of occupancy, and such that it is unreasonable to *repair* the structure, to demolish and remove such structure; or if such structure is capable of being made safe by *repairs*, to *repair* and make safe and sanitary or to demolish and remove to the owner's or the owner's authorized agent's option; or where there has been a cessation of normal construction of any structure for a period of more than two years, to demolish and remove such structure.~~

When the code official determines any structure is so old, dilapidated or has become so out of repair and is dangerous, unsafe, insanitary and otherwise unfit for human habitation or occupancy the code official can order either of the following:

1. The code official is permitted to authorize the owner or owner's authorized agent to make the structure safe by repairs in order to make the structure safe and sanitary. Where there has been a cessation of construction repairs of any structure for a period of more than two years the structure will be ordered demolished and removed.
2. The code official is permitted to order the owner or owner's authorized agent to demolish and remove any such structure.

## 2021 International Property Maintenance Code

### SECTION 113
### DEMOLITION

**Revise as follows:**

**113.1 General.** ~~The *code official* shall order the *owner* or *owner's* authorized agent of any *premises* upon which is located any *structure*, which in the *code official's* or *owner's* authorized agent judgment after review is so deteriorated or dilapidated or has become so out of repair as to be dangerous, unsafe, insanitary or otherwise unfit for human habitation or *occupancy*, and such that it is unreasonable to repair the *structure*, to demolish and remove such *structure*; or if such *structure* is capable of being made safe by repairs, to repair and make safe and sanitary, or to board up and hold for future repair or to demolish and remove at the *owner's* option; or where there has been a cessation of normal construction of any *structure* for a period of more than two years, the *code official* shall order the *owner* or owner's authorized agent to demolish and remove such *structure*, or board up until future repair. Boarding the building up for future repair shall not extend beyond one year, unless *approved* by the building official.~~

When the code official determines any structure is so old, dilapidated or has become so out of repair and is dangerous, unsafe, insanitary and otherwise unfit for human habitation or occupancy the code official can order either of the following:

1. The code official is permitted to authorize the owner or owner's authorized agent to make the structure safe by repairs in order to make the structure safe and sanitary. Where there has been a cessation of construction repairs of any structure for a period of more than two years the structure will be ordered demolished and removed.
2. The code official is permitted to order the owner or owner's authorized agent to demolish and remove any such structure.

**Reason Statement:** This is a run on sentence. The intent is only to clarify.

This proposal was submitted by the 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. In 2020 and 2021 the BCAC has held several virtual meetings open to any interested party. In addition, there were numerous virtual Working Group meetings for the current code development cycle, which included members of the committee as well as interested parties. Related documents and reports are posted on the BCAC website at https://www.iccsafe.org/products-and-services/i-codes/code-development/cs/building-code-action-committee-bcac/.

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

# ADM50-22

**ICCPC: [A] C101.2, [A] 102.3.4.2.1, [A] 102.3.4.2.2**

**Proponents:** David Collins, representing Self; Ronald Geren, representing The American Institute of Architects (ron@specsandcodes.com); Paul Karrer, representing The American Institute of Architects (paulkarrer@aia.org)

## 2021 International Code Council Performance Code

**Revise as follows:**

**[A] C101.2 Criteria.** Individually substantiated design methods shall comply with one or more of the following:

1. A process to evaluate design options against the performance objectives and functional statements shall be provided.
2. A comparison, signed and sealed by the *registered design professional in responsible charge*, between the prescriptive requirements and this design method shall be provided.
3. Peer review shall be provided.
4. ~~Reports prepared by the evaluation services shall be documented.~~
5. ~~5.~~ 4. This method shall not negatively impact the remainder of the building that complies with the prescriptive codes.
6. ~~The data substantiating the building performance as a whole shall accompany the design solution.~~
7. ~~7.~~ 5. This method shall address the actual use of the building, including but not limited to the number of people, fuel load, awareness and mobility of the people.
8. ~~8.~~ 6. The methodology for validation of this method for the project shall be acceptable to the *registered design professional in responsible charge* and the code official.
9. ~~9.~~ This method shall be substantiated by a system-based approach using not less than two acceptable scenarios to demonstrate compliance with design objectives and code provisions.

Where applicable to the proposed design, individually substantiated design methods shall comply with the following:

1. Reports prepared by the evaluation services shall be documented.
2. The data substantiating the building performance as a whole shall accompany the design solution.
3. Where multiple scenarios are applicable, the method shall be substantiated by an approach using not less than two scenarios acceptable to the code official to demonstrate compliance with the design objectives and code provisions.

**[A] 102.3.4.2.1 Concept report.** The concept report shall document the preliminary details of the project, identify the parties involved in the project, and define the goals and objectives to be utilized in the performance-based design analysis. The concept report shall be submitted to the code official as a means of communicating the programming and early schematic phase of a proposed project and to obtain concurrence between the code official and the project design team on the goals and objectives to be utilized in the analysis. The concept report shall address but not be limited to the following:

1. General project information, including schematic layout and site plan.
2. Definition of project scope.
3. Description of building and occupant characteristics.
4. Project goals and objectives.
5. Selected event scenarios.
6. Methods of evaluation.
7. Qualification statements for the *registered design professional in responsible charge*, *registered design professionals*, *peer reviewers* and special experts.
8. Proposed performance and prescriptive code usage.
9. Conceptual site and building plan.

**[A] 102.3.4.2.2 Design report.** 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 but not be limited to 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 and peer review.
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.

**Reason Statement:** Before providing a reason for the proposed changes, it is necessary to explain the use of Appendices in the ICCPC. Unlike other ICC codes which require individual adoption of each appendix to make them enforceable by the code officials, appendices to the ICCPC are additional requirements that are specifically referenced within various sections of the ICCPC. ICCPC appendices are not intended to be adopted individually, but are a part of the code like any other chapter or section.
The current language in the appendix is vague and suggests that some of the listed items may not be required, but does not provide a method to determine if any one line item is required for a given method. Given that the method is being substantiated by the person requesting approval, it seems appropriate to require most line items.

The change of language from the deleted Item 9 to the new Item 3 of the new second paragraph is due to the vague language. The original Item 9 implies that everything has multiple possible applicable "scenarios." Additionally, "system-based" is undefined and unclear. Finally, Item 9 did not identify the entity to whom the scenarios must be acceptable.

Peer reviews are retained as a required substantiation method. Requiring the use of peer reviews provides an additional level of risk mitigation that would make the approval of performance-based design solutions more acceptable to code officials. According to preliminary results from a 10/16/2021 survey conducted by Brian Meacham for ICC's project "Reimagining the ICCPC", 71% of respondents either agreed or strongly agreed with the concept of performance-based codes. However, 55% of the respondents either disagreed or strongly disagreed that performance-based codes *currently* available could be used with a high degree of confidence. When asked if they could be comfortable with performance-based codes, 79% agreed or strongly agreed. The survey also indicated that “[t]he importance of peer/independent review is higher” was overwhelmingly (approximately 75%) attributed to performance-based codes. Similarly, over 80% considered the qualifications of those reviewing and approving performance-based design is “very important.” One of the key summary points stated was “increasing confidence in verification,” and that peer review is “essential.” Select items in Sections 102.3.4.2.1 and 102.3.4.2.2 are revised to include the required peer review qualification statements and evaluations in the respective reports.

**Cost Impact:** The code change proposal will increase the cost of construction
This proposal would increase the design costs associated with the construction due to the need to hire a third-party consultant to perform the peer reviews. It is possible, however, that these increased design costs could be offset for larger projects (those more likely to elect performance-based design) due to the savings generated from not having to comply with the prescriptive requirements of the other I-Codes.

ADM50-22

# ADM51-22

**IGCC: INFORMATIVE APPENDIX M, SECTION M101, M101.1, M101.1.1, M101.1.2, M101.1.3, M101.1.4, M101.1.5, M101.1.6 (New), M101.1.7 (New), SECTION M201 (New), SECTION 202 (New)**

**Proponents:** Vladimir Kochkin, representing NAHB (vkochkin@nahb.org)

## 2021 International Green Construction Code

### INFORMATIVE APPENDIX M
### OPTION FOR RESIDENTIAL COMPLIANCE USING THE NATIONAL GREEN BUILDING STANDARD

### SECTION M101
### GENERAL

**M101.1 Residential requirements determined by the authority having jurisdiction.** The authority having jurisdiction shall determine if one or more of the following sections apply.

**Revise as follows:**

**M101.1.1 .** Detached one- and two-family dwellings and multiple single-family dwellings (townhouses) not more than three stories in height above grade plane with a separate means of egress, their accessory structures, and the site or lot upon which these buildings are located shall comply with ICC/~~ASHRAE~~ 700–~~2015~~ 2020 *National Green Building Standard*.

**M101.1.2 .** Group R-3 residential buildings, their accessory structures, and the site or lot upon which these buildings are located shall comply with ICC/~~ASHRAE~~ 700–~~2015~~ 2020 *National Green Building Standard*.

**M101.1.3 .** Group R-2 and R-4 residential buildings three stories or less in height above grade plane, their accessory structures, and the site or lot upon which these buildings are located shall comply with ICC/~~ASHRAE~~ 700–~~2015~~ 2020 *National Green Building Standard*.

**M101.1.4 .** Group R-2 and R-4 residential buildings four stories or more in height above grade plane, their accessory structures, and the site or lot upon which these buildings are located shall comply with the provisions of this code or ICC/~~ASHRAE~~ 700–~~2015~~ 2020 *National Green Building Standard*.

**M101.1.5 .** Where the non-residential portions of a mixed use building are 50 percent or more of the *gross floor area*, Group R-2 and R-4 portions ~~of mixed use buildings~~ shall comply with the provisions of this code or ICC/~~ASHRAE~~ 700–~~2015~~ 2020 *National Green Building Standard*. The remainder of the building and the site upon which the building is located shall comply with the provisions of this code.

**Add new text as follows:**

**M101.1.6 .** Where the residential portions of a mixed use building are greater than 50 percent of the gross floor area, the building and the site or lot upon which the building is located shall comply with the provisions of this code or ICC 700–2020 *National Green Building Standard*.

**M101.1.7 .** Assisted living facilities, residential board and care facilities, and group homes classified as I-1 occupancy by the International Building Code shall comply with the provisions of this code or ICC 700–2020 *National Green Building Standard*.

### SECTION M201
### DEFINITIONS

**Add new definition as follows:**

**FLOOR AREA, GROSS.** The floor area within the inside perimeter of the exterior walls of the building under consideration, exclusive of vent shafts and courts, without deduction for corridors, stairways, ramps, closets, the thickness of interior walls, columns or other features. The floor area of a building, or portion thereof, not provided with surrounding exterior walls shall be the usable area under the horizontal projection of the roof or floor above. The gross floor area shall not include shafts with no openings or interior courts.

**Reason Statement:** This change updates the reference to the latest edition of ICC-700 and provides complete alignment with the scope of ICC-700. The 2020 ICC-700 is an ANSI approved standard developed with a broad stakeholder involvement and input. The definition of *gross floor area* is added because it is not a defined term in IgCC. The definition is consistent with the IBC.

**Cost Impact:** The code change proposal will increase the cost of construction
The 2020 ICC-700 is a more stringent standard than its predecessor. Therefore, there will be an increase in the cost of design and construction to achieve compliance with the 2020 edition of ICC-700.

# ADM52-22

| ACCA | Air Conditioning Contractors of America | | |
|---|---|---|---|
| **Standard Reference Number** | **Title** | **Referenced in Code(s):** | |
| ANSI/ACCA 1 Manual D—~~2016~~ 2023 | Residential Duct Systems | IMC | IRC |
| ANSI/ACCA 10 Manual SPS —~~2010 RA~~ 2017 | ~~HVAC~~ Design for Swimming Pools and Spas | IMC | |
| ANSI/ACCA 3 Manual S—~~14~~ 2023 | Residential Equipment Selection | IECC® | |
| ANSI/ACCA 3 Manual S—~~2014~~ 2023 | Residential Equipment Selection | IRC | |
| ANSI/ASHRAE/ACCA 183—2007 (reaffirmed 2014) | Peak Cooling and Heating Load Calculations in Buildings Except Low-rise Residential Buildings | IMC | |

| AFSI | Architectural Fabric Structures Institute | |
|---|---|---|
| **Standard Reference Number** | **Title** | **Referenced in Code(s):** |
| ~~FSAAS—16~~ AFSI-77 | ~~Fabric Structures Associated Air Structures 2016~~ Air Structures Design and Standards Manual | IFC |

| AHAM | Association of Home Appliance Manufacturers | |
|---|---|---|
| **Standard Reference Number** | **Title** | **Referenced in Code(s):** |
| ANSI/AHAM RAC-1—~~2015~~ 2020 | Room Air Conditioners | IECC® |

| AHRI | Air-Conditioning, Heating, & Refrigeration Institute | |
|---|---|---|
| **Standard Reference Number** | **Title** | **Referenced in Code(s):** |
| 1160 (I-P) —~~2014~~ 2022 | Performance Rating of Heat Pump Pool Heaters ~~(with Addendum 1)~~ | IECC® |
| 1160 (I-P)—~~2014~~ 2022 | Performance Rating of Heat Pump Pool Heaters ~~(with Addendum 1)~~ | ISPSC |

| | | |
|---|---|---|
| 1200 (I-P)—~~2013~~ 2022 | Performance Rating of Commercial Refrigerated Display Merchandisers and Storage Cabinets | IECC® |
| 1230 (I-P)—~~2014~~ 2021 | Performance Rating of Variable Refrigerant Flow (VRF) Multi-split Air-Conditioning and Heat Pump Equipment ~~(with Addendum 1)~~ | IECC® |
| 1250 (I-P)—~~2014~~ (2020) | Standard for Performance Rating in Walk-in Coolers and Freezers | IECC® |
| 1360 (I-P)—2017 | Performance Rating of Computer and Data Processing Room Air Conditioners | IECC® |
| 210/240—~~2017 and~~ 2023 (2020) | Performance Rating of Unitary Air-conditioning and Air-source Heat Pump Equipment | IECC® |
| 340/360—~~2019~~ 2022 | Performance Rating of Commercial and Industrial Unitary Air-conditioning and Heat Pump Equipment | IECC® |
| 390 (I-P)—~~2003~~ 2021 | Performance Rating of Single Package Vertical Air-conditioners and Heat Pumps | IECC® |
| 440 (I-P)—~~2008~~ 2019 | Performance Rating of Room Fan Coils ~~— with Addendum 1~~ | IECC® |
| 550/590 (I-P)—~~2018~~ 2022 | Performance Rating of Water-chilling and Heat Pump Water-heating Packages Using the Vapor Compression Cycle | IECC® |
| 560—~~2018~~ 2000 | Absorption Water Chilling and Water Heating Packages | IECC® |
| 700—~~2017~~ 2019 | ~~with Addendum 1:~~ Specifications for Refrigerants | IMC |
| 910 (I-P)—2014 | Performance Rating of Indoor Pool Dehumidifiers | IECC® |
| 920 (I-P)—~~2015~~ 2020 | Performance Rating of DX-Dedicated Outdoor Air System Units | IECC® |

| AISC | American Institute of Steel | |
|---|---|---|
| **Standard Reference Number** | **Title** | **Referenced in Code(s):** |
| ANSI/AISC 341—~~16~~ 22 | Seismic Provisions for Structural Steel Buildings | IBC |
| ANSI/AISC 360—~~16~~ 22 | Specification for Structural Steel Buildings | IBC |
| ANSI/AISC 358—~~16/s1—18~~ 22 | Prequalified Connections for Special and Intermediate Steel Moment Frames for Seismic Applications, ~~IncludingSupplement No. 1~~ | IBC |

| AISI | American Iron and Steel Institute | |
|---|---|---|
| **Standard Reference Number** | **Title** | **Referenced in Code(s):** |
| AISI S100—16 (2020) w/S2—20: | ~~North American~~ Specification for the Design of Cold-Formed Steel Structural Members, 2016 Edition (Reaffirmed 2020), with Supplement 2, 2020 Edition | IBC |
| AISI S100—16 (2020) w/S2—20 | ~~North American~~ Specification for the Design of Cold-Formed Steel Structural Members, 2016 Edition (Reaffirmed 2020), with Supplement 2, 2020 Edition | IRC® |

| ALI | Automotive Lift Institute, Inc. | |
|---|---|---|
| **Standard Reference Number** | **Title** | **Referenced in Code(s):** |
| ALI ALCTV—~~2016~~ 2022 | Standard for Automotive Lifts—Safety Requirements for Construction, Testing and Validation (ANSI) | IBC |

| AMCA | Air Movement and Control Association International | |
|---|---|---|
| **Standard Reference Number** | **Title** | **Referenced in Code(s):** |
| ~~ANSI/~~AMCA 550—~~09 (Rev. 09/18)~~ 22 | Test Method for High Velocity Wind Driven Rain Resistant Louvers | IMC |

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|---|---|---|---|
| ANSI/AMCA 220—~~19~~ 21 | Laboratory Methods of Testing Air Curtain Units for Aerodynamic Performance Rating | IECC® | |
| ANSI/AMCA 230—~~15~~ 23 | Laboratory Methods of Testing Air Circulating Fans for Rating and Certification | IMC | IECC® |
| ANSI/AMCA 540—~~13~~ 23 | Test Method for Louvers Impacted by Wind Borne Debris | IBC | |
| ANSI/AMCA 210-ANSI/ASHRAE 51—~~16~~ 23 | Laboratory Methods of Testing Fans for Aerodynamic Performance Rating | IRC® | |
| ANSI/AMCA 210—16/ANSI/ASHRAE 51—16 | Laboratory Methods of Testing Fans for Aerodynamic Performance Rating | IMC | |

| **ANSI** | **American National Standards Institute** | | | |
|---|---|---|---|---|
| **Standard Reference Number** | **Title** | **Referenced in Code(s):** | | |
| ~~ANSI LC 4/CSA 6.32—2012~~ CSA/ANSI LC 4:23/CSA 6.32:23 | Press-connect Metallic Fittings and valves for Use in Fuel Gas Distribution Systems | IFGC | | IRC |
| ~~ANSI/CSA FC 1—2014~~ CSA/ANSI FC 1:21/CSA C22.2 NO. 62282-3-100:21 | Fuel Cell Technologies—Part 3-100: Stationary Fuel Cell Power Systems—Safety | IFGC | IMC | IRC® |
| ~~LC1/CSA 6.26—2016~~ CSA/ANSI LC 1:19/CSA 6.26:19 | Fuel Gas Piping Systems Using Corrugated Stainless Steel Tubing (CSST) | IFGC | | IRC® |
| ANSI Z21.41 (R2019)/CSA 6.9-~~2014~~ (R2019) | Quick Disconnect Devices for Use with Gas Fuel Appliances | IFGC | | IRC® |
| ANSI Z21.22—~~99 (R2003)~~ 2015 (R2020)/CSA 4.4-2015(R2020) | Relief Valves for Hot Water Supply Systems~~ with Addenda Z21.22a—2000 (R2003) and Z21.22b—2001 (R2003)~~ | IPC | | IRC® |
| ANSI Z21.24 -2015(R2020)/CSA 6.10— 2015(R2020) | Connectors for Gas Appliances | IFGC | | IRC® |
| ANSI Z21.40.1-1996 (R2017)/CGA 2.91—~~1996~~ M96(R2017) | Gas-fired Heat Activated Air Conditioning and Heat Pump ~~Appliances~~ | IFGC | | IRC |

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|---|---|---|---|---|
| ANSI Z21.50 :19/CSA 2.22—2016 :19 | Vented Decorative Gas Fireplaces | IFGC | | IRC® |
| ANSI Z21.69 -2015 (R2020)/CSA 6.16—2015 (R2020) | Connectors for Movable Gas Appliances | IFGC | | IRC® |
| ANSI Z21.75 -2016/CSA 6.27—2016 (R2020) | Connectors for Outdoor Gas Appliances and Manufactured Homes | IFGC | | IRC® |
| ANSI Z83.11 -2016 (R2021)/CSA 1.8—2016 (R2021) | Gas Food Service Equipment | IFGC | | |
| ANSI Z83.18—2017 (R2021) | Recirculating Direct Gas-fired Heating and Forced Ventilation Appliances for Commercial and Industrial Applications | IFGC | | |
| CSA/ANSI Z21.11.2—2016 :19 | Gas-fired Room Heaters—Volume II—Unvented Room Heaters | IFGC | | IRC® |
| CSA/ANSI Z21.56 :19/CSA 4.7—17 :19 | Gas-fired Pool Heaters | IFGC | ISPSC | IRC® |
| CSA/ANSI Z21.10.3 :19/CSA 4.3—2017 :19 | Gas Water Heaters—Volume III—Storage, Water Heaters with Input Ratings above 75,000 Btu per Hour, Circulating and Instantaneous | IFGC | IECC® | IRC® |
| CSA/ANSI Z21.15 :22/CSA 9.1—09(R2014) :22 | Manually Operated Gas Valves for Appliances, Appliance Connector Valves and Hose End Valves | IFGC | | IRC® |
| CSA/ANSI Z21.19 :19/CSA 1.4—2014 :19 | Refrigerators Using Gas Fuel | IFGC | | |
| CSA/ANSI Z21.42—2013 (R2018) | Gas-fired Illuminating Appliances | IFGC | | IRC® |
| CSA/ANSI Z21.47 :21/CSA 2.3—16 :21 | Gas-fired Central Furnaces | IECC® | | |
| CSA/ANSI Z21.58 :22/CSA 1.6—2015 :22 | Outdoor Cooking Gas Appliances | IFGC | | IRC® |
| CSA/ANSI Z21.80 :19CSA 6.22—11(R2016) :19 | Line Pressure Regulators | IFGC | | IRC® |

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|---|---|---|---|
| CSA/ANSI Z21.90 :19/CSA 6.24~~-2015~~ :19 | Gas Convenience Outlets and Optional Enclosures | IRC® | |
| CSA/ANSI Z21.91~~—2017~~ :20 | Ventless Firebox Enclosures for Gas-fired Unvented Decorative Room Heaters | IFGC | IRC® |
| CSA/ANSI Z21.10.1 :19/CSA 4.1 ~~—2017~~ :19 | Gas Water Heaters—Volume I—Storage, Water Heaters with Input Ratings of 75,000 Btu per Hour or Less | IFGC | IRC® |
| CSA/ANSI Z21.54 :19~~—2014~~ /CSA 8.4:19 | Gas Hose Connectors for Portable Outdoor Gas-fired Appliances | IFGC | IRC® |
| A108.11—~~10~~ 18 | Interior Installation of Cementitious Backer Units | IRC® | |
| A108.4—~~09~~ 19 | Installation of Ceramic Tile with Organic Adhesives or Water-cleanable Tile-setting Epoxy Adhesive | IBC | IRC® |
| A108.5—~~19~~ 21 | ~~Installation of Ceramic Tile with Dry-set Portland Cement Mortar or Latex-Portland Cement Mortar~~ Setting of Ceramic Tile with Dry-Set Cement Mortar, Modified Dry Set Cement Mortar, EGP (Exterior Glue Plywood) Modified Dry-Set Cement Mortar, or Improved Modified Dry-Set Cement Mortar | IBC | IRC® |
| A108.6—~~19~~ 99(R2019) | Installation of Ceramic Tile with Chemical-resistant, Water Cleanable Tile-setting and -grouting Epoxy | IBC | IRC® |
| A108.8—~~19~~ 99(R2019) | Installation of Ceramic Tile with Chemical-resistant Furan Resin Mortar and Grout | IBC | |
| A108.9—~~19~~ 99(2019) | Installation of Ceramic Tile with Modified Epoxy Emulsion Mortar/Grout | IBC | |
| A118.10— 14(R2019) | Standard Specifications for Load Bearing, Bonded, Waterproof Membranes for Thin - Set Ceramic Tile and Dimension Stone Installation | IPC | IRC® |

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|---|---|---|---|
| A118.1—~~18~~ 19 | American National Standard Specifications for Dry-set ~~Portland~~ Cement Mortar | IBC | IRC® |
| A118.3—~~20~~ 21 | American National Standard Specifications for Chemical~~r~~esistant, Water-cleanable Tile-setting and -grouting Epoxy and Water Cleanable Tile-setting Epoxy Adhesive | IBC | IRC® |
| A118.4—~~18~~ 19 | American National Standard Specifications for Modified Dry-set Cement Mortar | IBC | IRC® |
| A118.5—99(R2021) | American National Standard Specifications for Chemical Resistant Furan Mortar and Grouts for Tile Installation | IBC | |
| A118.6—19 | American National Standard Specifications for Standard Cement Grouts for Tile Installation | IBC | |
| A136.1—~~19~~ 20 | American National Standard Specifications for Organic Adhesives for ~~the~~ Installation of Ceramic Tile | IBC | IRC® |
| A137.1—~~19~~ 22 | American National Standard Specifications for Ceramic Tile | IBC | IRC® |
| A137.3—~~17~~ 22 | American National Standard Specifications for Gauged Porcelain Tiles and Gauged Porcelain Tile Panel/Slabs | IBC | |
| ANSI E1.21—~~2013~~ 2020 | Entertainment Technology: Temporary Structures Used for Technical Production of Outdoor Entertainment Events | IFC | |
| CSA/ANSI NGV 5.1—~~2016~~ :22 | Residential Fueling Appliances | IFGC | |
| CSA/ANSI NGV 5.2—~~2017~~ :22 | Vehicle Fueling Appliances (VFA) | IFGC | |
| CSA/ANSI Z21.88:19/CSA 2.33—~~16~~ : 19 | Vented Gas Fireplace Heaters | IFGC | IRC® |

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|---|---|---|---|---|
| LC 1/CSA 6.26~~—2016~~ :19 | Fuel Gas Piping Systems Using Corrugated Stainless Steel Tubing ~~(CSST)~~ | IFGC | | |
| LC4/CSA 6.32—12 | Press-connect Metallic Fittings for Use in Fuel Gas Distribution Systems | IRC® | | |
| Z21.1/CSA 1.1~~—2016~~ 2018 | Household Cooking Gas Appliances | IFGC | IMC | IRC |
| Z21.40.2/CGA 2.92—1996 (R2017) | Gas-fired Work Activated Air Conditioning and Heat Pump Appliances (Internal Combustion) | IFGC | | |
| Z21.40.2/CSA 2.92—96 (R2017) | Gas-fired Work Activated Air-conditioning and Heat Pump Appliances (Internal Combustion) | IRC® | | |
| Z21.41(R2019)/CSA 6.9—2014 (R2019) | Quick Disconnect Devices for use with Gas Fuel Appliances | IFGC | | |
| Z21.47/CSA 2.3—2016 | Gas-fired Central Furnaces | IFGC | IRC® | |
| Z21.56/CSA 4.7—2017 | Gas-fired Pool Heaters | IFGC | | |
| Z21.56a:19/CSA 4.7~~—2017~~ :19 | Gas Fired Pool Heaters | ISPSC | | |
| Z21.88/CSA 2.33~~—2016~~ :19 | Vented Gas Fireplace Heaters | IFGC | | |
| Z21.8~~—1994 (R2012)~~ 94(R2017) | Installation of Domestic Gas Conversion Burners | IFGC | IMC | IRC |
| Z83.20~~—08~~ 2016 | Gas-fired Tubular Low-intensity Infrared Heaters Outdoor Decorative Appliances | IFGC | IRC® | |
| Z97.1~~—2014~~ 2015(R2020) | Safety Glazing Materials Used in Buildings—Safety Performance Specifications and Methods of Test | IBC | IRC® | |

| APA | APA - Engineered Wood Association | |
|---|---|---|
| **Standard Reference Number** | **Title** | **Referenced in Code(s):** |
| ANSI/A190.1~~—2017~~ 2022 | Product Standard for Structural Glued-laminated Timber | IRC® |

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|---|---|---|
| ANSI/APA A190.1—~~2017~~ 2022 | Product Standard for Structural Glued Laminated Timber | IBC |
| ANSI/APA PRR 410—~~16~~ 2021 | Standard for Performance-Rated Engineered Wood Rim Boards | IBC |
| ANSI/APA PRR 410—~~2016~~ 2021 | Standard for Performance-rated Engineered Wood Rim Boards | IRC® |
| ANSI/APA PRS 610.1—~~2018~~ 2023 | Standard for Performance-Rated Structural Insulated Panels in Wall Applications | IRC® |
| APA PDS Supplement 1—~~12~~ 23 | Design and Fabrication of Plywood Curved Panels ~~(revised 2013)~~ | IBC |
| APA PDS Supplement 2—~~12~~ 23 | Design and Fabrication of Plywood-lumber Beams ~~(revised 2013)~~ | IBC |
| APA PDS Supplement 3—~~12~~ 23 | Design and Fabrication of Plywood Stressed-skin Panels ~~(revised 2013)~~ | IBC |
| APA PDS Supplement 4—~~12~~ 23 | Design and Fabrication of Plywood Sandwich Panels ~~(revised 2013)~~ | IBC |
| APA PDS Supplement 5—~~16~~ 23 | Design and Fabrication of All-plywood Beams ~~(revised 2013)~~ | IBC |
| APA T300—~~16~~ 23 | Glulam Connection Details | IBC |
| APA X440—~~17~~ 23 | Product Guide: Glulam | IBC |
| APA X450—~~18~~ 23 | Glulam in Residential Construction—Building—Construction Guide | IBC |
| **API** | **American Petroleum Institute** | |
| **Standard Reference Number** | **Title** | **Referenced in Code(s):** |
| ~~Publ~~ RP 2028 ~~3rd~~ 4th Edition—~~(2002, R2010)~~ (2024) | Flame Arrestors in Piping Systems | IFC |
| ~~Publ~~ RP 2009—~~7th~~ 8th Edition ~~(2002, R2012)~~ (2022) | Safe Welding and Cutting Practices in Refineries, Gas Plants and Petrochemical Plants | IFC |

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|---|---|---|
| Publ 2201 ~~5th~~ 6th Edition~~—(2003, R2010)~~ (2023) | Procedures for Welding or Hot Tapping on Equipment in Service | IFC |
| RP 1604—3rd Edition ~~(1996 R2010)~~ (1996) (4th edition 2021) | Closure of Underground Petroleum Storage Tanks | IFC |
| RP 1615—(1996) (6th Edition R2020) ~~(2011)~~ | Installation of Underground-petroleum Storage Systems | IFC |
| RP 2001—~~9th~~ 10th Edition ~~(2012)~~ (2022) | Fire Protection in Refineries~~, 8th Edition~~ | IFC |
| RP 2003—~~8th~~ 9th Edition ~~(2015)~~ (2023) | Protection Against Ignitions Arising out of Static, Lightning and Stray Currents | IFC |
| RP 2023—~~3rd~~ 4th Edition ~~(2001, R2006)~~ (2023) | Guide for Safe Storage and Handling of Heated Petroleum-derived Asphalt Products and Crude-oil Residue | IFC |
| RP 651—~~4th~~ 5th Edition ~~(2014)~~ (2022) | Cathodic Protection of Aboveground Petroleum Storage Tanks | IFC |
| RP 752— ~~3rd~~ 4th Edition ~~(2009)~~ (2022) | Management of Hazards Associated with Location of Process Plant Buildings, CMA Managers Guide | IFC |
| Std 2000~~—7th Edition (2014)~~ (7th edition R2020) 8th edition (2023) | Venting Atmosphere and Low-pressure Storage Tanks: Nonrefrigerated and Refrigerated | IFC |
| Std 2015—~~8th Edition 2001 (2018)~~ (2023) | Requirements for Safe Entry and Clearing of Petroleum Storage Tanks | IFC |
| Std 2350— ~~4th~~ 5th Edition ~~(2012)~~ (2021) | Overfill Protection for Storage Tanks in Petroleum Facilities | IFC |
| Std 653 Addendum 3,~~—~~5th Edition ~~(2018)~~ (2022) | Tank Inspection, Repair, Alteration and Reconstruction | IFC |

| **ASABE** | **American Society of Agricultural and Biological Engineers** | |
|---|---|---|
| **Standard Reference Number** | **Title** | **Referenced in Code(s):** |
| EP 484.3 DEC2017 (R2022) | Diaphragm Design of Metal-clad, Wood-frame Rectangular Buildings | IBC |

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| EP 486.3 SEP2017 (R2021) | Shallow-post and Pier Foundation Design | IBC |
| EP 559.1 ~~W/Corr.~~ AUG2010~~(R2014)~~ (R2019) | Design Requirements and Bending Properties for Mechanically Laminated Wood Assemblies | IBC |
| S640—JUL2017 (R2022) | Quantities and Units of Electromagnetic Radiation for Plants (Photosynthetic Organisms) | IECC® |

| **ASCE/SEI** | **American Society of Civil Engineers Structural Engineering Institute** | |
|---|---|---|
| **Standard Reference Number** | **Title** | **Referenced in Code(s):** |
| 19—~~16~~ 22 | Structural Applications of Steel Cables for Buildings | IBC |
| 29—~~19~~ 05 | Standard Calculation Methods for Structural Fire Protection | IBC |
| 49—~~12~~ 21 | Wind Tunnel Testing for Buildings and Other Structures | IBC |
| 55—~~16~~ 22 | Tensile Membrane Structures | IBC |
| 7—~~16~~ 22 | Minimum Design Loads and Associated Criteria for Buildings and Other Structures | IBC / IRC® |
| 8—~~20~~ 21 | Standard Specification for the Design of Cold-formed Stainless Steel Structural Members | IBC |
| ASCE/SEI 24—~~20~~ 14 | Flood Resistant Design and Construction | IFC / IRC / ISPSC / IBC |

| **ASHRAE** | **ASHRAE** | |
|---|---|---|
| **Standard Reference Number** | **Title** | **Referenced in Code(s):** |
| 140—~~2014~~ 2020 | ~~Standard Method of Test for the Evaluation of Building Energy Analysis Computer Programs~~ Method of Test for Evaluating Building Performance Simulation Software | IECC® |

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|---|---|---|---|---|
| 146—~~2011~~ 2020 | ~~Testing~~ Method of Test for Rating Pool Heaters | IECC® | | |
| 15—~~2019~~ 2022 | Safety Standard for Refrigeration Systems | IMC | IFC | |
| 170—~~2017~~ 2021 | Ventilation of Health Care Facilities | IMC | IBC | IFC |
| 34—~~2019~~ 2022 | Designation ~~and Safety~~ Classification of Refrigerants | IMC | IRC® | |
| 55—~~2017~~ 2020 | Thermal Environmental Conditions for Human Occupancy | IECC® | | |
| 62.1-~~2019~~ 2022 | Ventilation for Acceptable Air Quality | ISPSC | | |
| 62.1—~~2019~~ 2022 | Ventilation for Acceptable Indoor Air Quality | IMC | IEBC | IECC® |
| 90.1—~~2016~~ 2022 | Energy Standard for Buildings Except Low-rise Residential Buildings | IMC | IECC® | |
| 90.1—~~2019~~ 2022 | Energy Standard for Buildings Except Low-rise Residential Buildings | IECC® | | |
| 90.4—~~2016~~ 2022 | Energy Standard for Data Centers | IECC® | | |
| ANSI/ASHRAE/ACCA Standard 183—~~(RA2017)~~ 2007 (RA 2020) | Peak Cooling and Heating Load Calculations in Buildings~~,~~ Except Low-rise Residential Buildings | IECC® | | |

| **ASME** | **American Society of Mechanical Engineers** | |
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| **Standard Reference Number** | **Title** | **Referenced in Code(s):** |
| A112.1.3—2000 (~~Reaffirmed 2020~~ 2024) | Air Gap Fittings for Use with Plumbing Fixtures, Appliances and Appurtenances | IRC® |
| A112.1.3—~~2000 (R2020)~~ 2024 | Air Gap Fittings for Use with Plumbing Fixtures, Appliances and Appurtenances | IPC |

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|---|---|---|---|
| A112.14.1—2003 (R2022 ) | Backwater Valves | IPC | |
| A112.14.1—2003 ~~(R2017)~~ (2022) | Backwater Valves | IRC® | |
| A112.14.3—~~2021~~ 2023 | Grease Interceptors | IPC | |
| A112.14.4—2001~~-(R2017)~~ (R2022 ) | Grease Removal Devices | IPC | |
| A112.14.6—2010 ~~(R2020)~~ (R2024) | FOG (Fats, Oils and Greases) Disposal Systems | IPC | |
| A112.18.1—~~2020~~ /CSA B125.1 —~~2020~~ 2023 | Plumbing Supply Fittings | IPC | IRC® |
| A112.18.2—~~2019~~ 2023/CSA B125.2—~~19~~ 2023 | Plumbing Waste Fittings | IPC | |
| A112.18.2—~~2019~~ 2023 /CSA B125.2—~~2019~~ 2023 | Plumbing Waste Fittings | IRC® | |
| A112.18.3~~M~~—2002~~(R2020)~~ (R2022) | Performance Requirements for Backflow Protection Devices and Systems in Plumbing Fixture Fittings | IRC® | |
| A112.18.6—2021/CSA B125.6—21 | Flexible Water Connectors | IPC | IRC® |
| A112.19.12—~~2019~~ 2024 | Wall Mounted and Pedestal Mounted, Adjustable, Elevating, Tilting and Pivoting Lavatory, Sink, and Shampoo Bowl Carrier Systems and Drain Waste Systems | IPC | IRC® |
| A112.19.14—2013 (R~~2018~~ 2023) | Six-Liter Water Closets Equipped with Dual Flushing Device | IRC® | |
| A112.19.14—2013 ~~(R2018)~~ (R2023) | Six-liter Water Closets Equipped with a Dual Flushing Device | IPC | |
| A112.19.15—~~2012 () R201~~ 2012 (R2022) | Bathtub/Whirlpool Bathtubs with Pressure Sealed Doors | IPC | IRC |
| A112.19.19 ~~2016 (R2021)—~~ 2021 | Vitreous China Nonwater Urinals | IPC | |
| A112.19.1—~~2020~~ 2022/CSA B45.2—~~20~~ 2022 | Enameled Cast Iron and Enameled Steel Plumbing Fixtures | IPC | |

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| A112.19.1—~~2020~~ 2022/CSA B45.2—~~2020~~ 2022 | Enameled Cast-iron and Enameled Steel Plumbing Fixtures | IRC® | |
| A112.19.2—/CSA B45.1—~~20 2020 20~~ 2021 | Ceramic Plumbing Fixtures | IPC | |
| A112.19.2—~~2020~~ 2021/CSA B45.1—~~2020~~ 2021 | Ceramic Plumbing Fixtures | IPC | IRC® |
| A112.19.3—2021/CSA B45.4—~~08 (R~~2021~~)~~ | Stainless Steel Plumbing Fixtures | IPC | IRC® |
| A112.19.5—~~2021~~ 2022/CSA B45.15—~~2021~~ 2022 | Flush Valves and Spuds for Water Closets, Urinals, and Tanks | IPC | IRC® |
| A112.19.7-~~2012~~ 2023/CSA B45.10—~~2012 (R2021)~~ 2023 | Hydromassage Bathtub Systems | IRC® | |
| A112.19.7—CSA B45.10—~~R 2012/ 2012 ( 2021)~~ 2012(R2023) | Hydromassage Bathtub Systems | IPC | |
| A112.21.3—~~1985 (R2017)~~ 2022 | Hydrants for Utility and Maintenance Use | IPC | |
| A112.3.4—~~2020~~ 2022/CSA B45.9—~~20~~ 2022 | Macerating Toilet Systems and Related Components | IRC® | |
| A112.36.2M—1991 ~~(R2017)~~ (R2022) | Cleanouts | IPC | IRC® |
| A112.4.14—~~2004 (R2019)~~ 2022 | Manually Operated, Quarter-Turn Shutoff Valves for Use in Plumbing Systems | IPC | IRC® |
| A112.4.14—~~2019~~ 2022/CSA B125.14-~~19~~ 2022 | Manually Operated Valves for Use in Plumbing Systems | IPC | IRC® |
| A112.4.1—~~2019~~ 2024 | Water Heater Relief Valve Drain Tubes | IRC® | |
| A112.4.2—~~2020~~ 2021/CSA B45.16—~~20~~ 2021 | Water Closet Personal Hygiene Devices | IPC | |
| A112.4.3—~~1999 (R2020)~~ 2024 | Plastic Fittings for Connecting Water Closets to the Sanitary Drainage System | IPC | IRC® |

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| A112.4.4—~~2017~~ 2022 | Plastic Push-Fit Drain, Waste, and Vent (DWV) Fittings | IPC | | IRC® | |
| A112.6.1M — ~~1997(R2017)~~ 2022 | Floor-Affixed Supports for Off-the-Floor Plumbing Fixtures for Public Use | IPC | | | |
| A112.6.2—~~2017~~ 2022 | Framing-Affixed Supports for Off-the-Floor Water Closets with Concealed Tanks | IPC | | IRC® | |
| A112.6.3—~~2019~~ 2022 | Floor and Trench Drains | IPC | | IRC® | |
| A112.6.4—~~2003 (R2012)~~ (R2020 ) | Roof, Deck, and Balcony Drains | IPC | | | |
| A112.6.7—2010~~ (R2020 )~~ (R2024) | Sanitary Floor Sinks | IPC | | | |
| A112.6.9—2005 ~~(R2020 )~~ (R2024) | Siphonic Roof Drains | IPC | | | |
| A17.1—~~2019~~ 2022/CSA B44—~~19~~ 2022 | Safety Code for Elevators and Escalators | IBC | IEBC | IFC | IRC® |
| A17.3—~~2020~~ 2023 | Safety Code for Existing Elevators and Escalators | IEBC | | IFC | |
| A18.1—~~2020~~ 2023 | Safety Standard for Platform Lifts and Stairway Chairlifts | IBC | IEBC | IRC® | |
| ASME A17.1—~~2019~~ 2022/CSA B44—~~19~~ 2022 | Safety Code for Elevators and Escalators | IPMC | | IECC® | |
| ASME A17.1—~~2019~~ 2022/CSA B44—~~2019~~ 2022 | Safety Code for Elevators and Escalators | IRC® | | | |
| ASSE 1016—~~2020~~ 2021/ASME 112.1016—~~2020~~ 2021/CSA B125.16—~~2020~~ 2021 | Performance Requirements for Automatic Compensating Valves for Individual Showers and Tub/Shower Combinations | IPC | | IRC® | |
| B1.13M—~~2006~~ 2020 | Metric Screw Threads: M Profile | IMC | | | |
| B1.1—~~2003~~ 2024 | Unified Inch Screw Threads, UN and UNR Thread Form | IMC | | | |
| B1.20.1—~~2019~~ 2023 | Pipe Threads, General Purpose (inch) | IFGC | IMC | IPC | IRC® |

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|---|---|---|---|---|---|---|
| B1.20.3—~~1976~~ 2023 | Dryseal Pipe Threads, Inch | IMC | | | | |
| B16.12—~~2009 (R2019)~~ 2024 | Cast Iron Threaded Drainage Fittings | IPC | IRC® | | | |
| B16.15—~~2013~~ 2023 | Cast Alloy Threaded Fittings~~: Classes 125 and 250~~ | ISPSC | | | | |
| B16.15—~~2018~~ 2023 | Cast Alloy Threaded Fittings~~: Classes 125 and 250~~ | IMC | IPC | IRC® | | |
| B16.18—~~2018~~ 2023 | Cast Copper Alloy Solder Joint Pressure Fittings | IMC | IPC | IBC | IFC | IRC® |
| B16.22—~~2018~~ 2023 | Wrought-Copper and Copper-Alloy Solder Joint Pressure Fittings | IMC | IPC | IBC | IFC | IRC® |
| B16.26—~~2018~~ 2023 | Cast Copper Alloy Fittings for Flared Copper Tubes | IMC | IPC | IRC® | | |
| B16.29—~~2017~~ 2022 | Wrought Copper and Wrought Copper Alloy Solder Joint Drainage Fittings (DWV) | IPC | IRC® | | | |
| B16.33—~~2012 (R2017)~~ 2022 | Manually Operated Metallic Gas Valves for Use in Gas Piping Systems up to 125 psig (Sizes $^1/_2$ through 2) | IRC® | | | | |
| B16.33—~~2012(2017)~~ 2022 | Manually Operated Metallic Gas Valves for Use in Gas Piping Systems up to 125 psig (Sizes $^1/_2$ through 2) | IFGC | | | | |
| B16.34—~~2020~~ 2023 | Valves—Flanged, Threaded and Welding End | IPC | IRC® | | | |
| B16.44—~~2012 (R2017)~~ 2022 | Manually Operated Metallic Gas Valves for Use in Above-ground Piping Systems up to 5 psi | IFGC | IRC® | | | |
| B16.47—~~2020~~ 2023 | Large Diameter Steel Flanges: NPS 26 through NPS 60 Metric/Inch Standard | IFGC | | | | |
| B16.5—~~2019~~ 2024 | Pipe Flanges and Flanged Fittings: NPS $^1/_2$ through NFPS 24 Metric/Inch Standard | IFGC | IMC | | | |

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| B16.9—~~2018~~ 2023 | Factory-Made Wrought Steel Buttwelding Fittings | IMC | IPC | IRC® |
| B20.1—~~2021~~ 2024 | Safety Standard for Conveyors and Related Equipment | IBC | | |
| B251/B251M—2017 | Specification for General Requirements for Wrought Seamless Copper and Copper-alloy Tube | IPSDC | | |
| B31.12—~~2019~~ 2024 | Hydrogen Piping and Pipelines | IFGC | | |
| B31.1—~~2020~~ 2022 | Power Piping | IFC | | |
| B31.3—~~2020~~ 2022 | Process Piping | IFGC | IBC | IFC |
| B31.4—~~2019~~ 2022 | Pipeline Transportation Systems for Liquids and Slurries | IFC | | |
| B31.5—~~2019~~ 2022 | Refrigeration Piping and Heat Transfer Components | IMC | IPC | |
| B31.9—~~2020~~ 2023 | Building Services Piping | IMC | IFC | |
| B36.10M—~~2018~~ 2023 | Welded and Seamless Wrought-steel Pipe | IFGC | IRC® | |
| BPVC—~~2019~~ 2023 | ASME Boiler and Pressure Vessel Code (Sections I, II, IV, V & VI, VIII) | IFGC | IMC | IFC | IRC® |
| CSD-1—~~2021~~ 2024 | Controls and Safety Devices for Automatically Fired Boilers | IFGC | IMC | IRC® |

| **ASPE** | **American Society of Plumbing Engineers** | |
|---|---|---|
| **Standard Reference Number** | **Title** | **Referenced in Code(s):** |
| 45—~~2013~~ 2018 | Siphonic Roof Drainage ~~Systems~~ | IPC |
| ASPE/IAPMO Z1034—2015 (R2020) | Test Method for Evaluating Roof Drain Performance | IPC |

| **ASSE** | **ASSE International** | |
|---|---|---|
| **Standard Reference Number** | **Title** | **Referenced in Code(s):** |

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|---|---|---|---|
| 1003—~~09~~ 2020 | Performance Requirements for Water Pressure Reducing Valves for Domestic Water Distribution | IPC | |
| 1003—~~2011~~ 2020 | Performance Requirements for Water-pressure-reducing Valves for Domestic Water Distribution Systems | IRC® | |
| 1008—~~06~~ 2020 | Performance Requirements for Plumbing Aspects of Food Waste Disposer Units | IPC | |
| 1008—~~2006~~ 2020 | Performance Requirements for Plumbing Aspects of Residential Food Waste Disposer Units | IRC® | |
| 1013—~~2017~~ 2021 | Performance Requirements for Reduced Pressure Principle Backflow Prevention Assemblies ~~Preventers and Reduced Pressure Principle Fire Protection Backflow Preventers~~ | IRC® | |
| 1015—~~2017~~ 2021 | Performance Requirements for Double Check Backflow Prevention Assemblies ~~and Double Check Fire Protection Backflow Prevention Assemblies~~ | IPC | IRC® |
| 1018—~~2001~~ 2021 | Performance Requirements for Trap Seal Primer Valves; Potable Water Supplied | IPC | IRC® |
| 1019—~~2011 (R2016)~~ | ~~Performance Requirements for Vacuum Breaker Wall Hydrants, Freeze Resistant, Automatic Draining Type~~ Performance Requirements for Freeze-resistant, Wall Hydrants, Vacuum Breaker, Draining Types | IPC | IRC® |
| 1020—~~04~~ 2020 | Performance Requirements for Pressure Vacuum Breaker Assembly | IPC | |
| 1020—~~2004~~ 2020 | Performance Requirements for Pressure Vacuum Breaker Assembly | IRC® | |
| 1022—~~2017~~ 2021 | Performance Requirements for Backflow Preventer for Beverage Dispensing Equipment | IPC | |

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| 1023—~~1979~~ 2020 | Performance Requirements for Electrically Heated or Cooled ~~Hot~~ Water Dispensers~~, Household storage type—Electrical~~ | IRC® | |
| 1024—~~2017~~ 2021 | Performance Requirements for Dual Check Valve Type Backflow Preventers, Anti-siphon-type, Residential Applications | IPC | IRC® |
| 1035—~~08~~ 2020 | Performance Requirements for Laboratory Faucet Backflow Preventers | IPC | |
| 1035—~~2008~~ 2020 | Performance Requirements for Laboratory Faucet Backflow Preventers | IRC® | |
| 1044—~~2015~~ 2020 | Performance Requirements for Trap Seal Primer Devices—Drainage Types and Electronic Design Types | IPC | IRC® |
| 1047—~~2011~~ 2021 | Performance Requirements for Reduced Pressure Detector Fire Protection Backflow Prevention Assemblies | IPC | IRC® |
| 1048—~~2011~~ 2021 | Performance Requirements for Double Check Detector Fire Protection Backflow Prevention Assemblies | IPC | IRC® |
| 1049—~~2009~~ 2021 | Performance Requirements for Individual and Branch Type Air Admittance Valves for Chemical Waste Systems | IPC | |
| 1050—~~2009~~ 2021 | Performance Requirements for Stack Air Admittance Valves for Sanitary Drainage Systems | IPC | IRC® |
| 1051—~~2009~~ 2021 | Performance Requirements for Individual and Branch Type Air Admittance Valves for Sanitary Drainage Systems ~~fixture and Branch Devices~~ | IPC | IRC® |
| 1056—~~2013~~ 2021 | Performance Requirements for Spill-Resistant Vacuum Breaker | IPC | IRC® |

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| 1060—~~2016~~ 2020 | Performance Requirements for Outdoor Enclosures for Fluid-conveying Components | IRC® | | |
| 1060—~~2017~~ 2020 | Performance Requirements for Outdoor Enclosures for Fluid Conveying Components | IPC | | |
| 1061—~~2015~~ 2020 | Performance Requirements for Push Fit Fittings | IMC | IPC | IRC® |
| 1062—~~2017~~ 2021 | Performance Requirements for Temperature Actuated, Flow Reduction (TAFR) Valves to Individual Supply Fittings | IPC | IRC® | |
| 1064—~~2006 (R2011)~~ 2020 | Performance Requirements for Backflow Prevention Assembly Field Test Kits | IPC | | |
| 1069—~~05~~ 2020 | Performance Requirements for Automatic Temperature Control Mixing Valves | IPC | | |
| 1071—~~2012~~ 2021 | ~~Performance Requirements for~~ Temperature Actuated Mixing Valves for Plumbed Emergency Equipment | IPC | | |
| 1072—~~07~~ 2020 | Performance Requirements for Barrier Type Floor Drain Tap Seal Protection Devices | IPC | | |
| 1072—~~2007~~ 2020 | Performance Requirements for Barrier-type Trap Seal Protection for Floor Drain s ~~Trap Seal Protection Devices~~ | IRC® | | |
| 1079—~~2005~~ 2021 | Performance Requirements for Dielectric Pipe Unions | IMC | IPC | |
| 1081—~~2014~~ 2020 | Performance Requirements for Backflow Preventers with Integral Pressure Reducing Boiler Feed Valve and Intermediate Atmospheric Vent Style for Domestic and Light Commercial Water Distribution Systems | IPC | IRC® | |

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| 5013—2015 | ~~Performance Requirements for Testing~~ Reduced Pressure Principle Backflow ~~Prevention Assembly~~ Preventers (RPA) and Reduced Pressure Principle Fire Protection Backflow Preventers (RFP) | IPC |

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| ASSE/IAPMO 1055—~~2018~~ 2020 | Performance Requirements for Chemical Dispensing Systems with Integral Backflow Protection | IPC |

| **ASSP** | **American Society of Safety Professionals** | | |
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| **Standard Reference Number** | **Title** | **Referenced in Code(s):** | |
| ANSI/ASSP Z359.1 -2020 | The Fall Protection Code | IFGC | |
| ANSI/ASSE Z359.1—~~2019~~ 2020 | The Fall Protection Code | IBC | |
| ANSI/ASSP Z359.1—~~2019~~ 2020 | The Fall Protection Code | IMC | IFC |

| **ASTM** | **ASTM International** | | | |
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| **Standard Reference Number** | **Title** | **Referenced in Code(s):** | | |
| A105/A105M—~~18~~ 21 | Standard Specification for Carbon Steel Forgings for Piping Applications | IMC | | |
| A106/A106M—~~2018~~ 2019a | Specification for Seamless Carbon Steel Pipe for High-temperature Service | IFGC | IMC | IRC® |
| A126—04(~~2014~~ 2019) | Standard Specification for Gray Iron Castings for Valves, Flanges , and Pipe Fittings | IMC | IRC® | |
| A181/A181M—14(2020) | Standard Specification for Carbon Steel Forgings, for General-purpose Piping | IMC | | |
| A182/A182M—~~2018A~~ 21 | Standard Specification for Forged or Rolled Alloy and Stainless Steel Pipe Flanges, Forged Fittings, and Valves and Parts for High-temperature Service | ISPSC | | |

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| A193/A193M—~~19~~ 20 | Standard Specification for Alloy-steel and Stainless Steel Bolting for High Temperature or High Pressure Service and Other Special Purpose Applications | IMC | | | |
| A234/A234M—~~18A~~ 19 | Standard Specification for Piping Fittings of Wrought Carbon Steel and Alloy Steel for Moderate and High Temperature Service | IMC | | | |
| A240/A240M—~~17~~ 20a | Standard Specification for Chromium and Chromium-~~n~~ Nickel Stainless Steel Plate, Sheet , and Strip for Pressure Vessels and for General Applications | IMC | IBC | ISPSC | IRC® |
| A252—~~2010(2018)~~ /A252M-19 | Specification for Welded and Seamless Steel Pipe Piles | IBC | | | |
| A254—~~2010(2018)~~ /A254M-12(2019) | Specification for Copper Brazed Steel Tubing | IFGC | IMC | IRC® | |
| A268/A268M—~~2010(16)~~ 20 | Standard Specification for Seamless and Welded Ferritic and Martensitic Stainless Steel Tubing for General Service | IRC® | | | |
| A268/A268—~~2010(16)~~ 20 | Standard Specification for Seamless and Welded Ferritic and Martensitic Stainless Steel Tubing for General Service | IFGC | | | |
| A269/A269M-15a 2019 | Standard Specification for Seamless and Welded Austenitic Stainless Steel Tubing for General Service | IFGC | IMC | IPC | IRC® |
| A307—~~2014E1~~ 21 | Specification for Carbon Steel Bolts ~~and~~ Studs, and Threaded Rod 60,000 ~~psi~~ PSI Tensile Strength | IRC® | | | |
| A312/A312M— ~~2018~~ 21 | Specification for Seamless, Welded, and Heavily Cold Worked Austenitic Stainless Steel Pipes | IPC | | | |
| A312/A312M—~~2018~~ 21 | Standard Specification for Seamless, Welded and Heavily Cold Worked Austenitic Stainless Steel Pipes | IFGC | ISPSC | | |

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| A312/A312M ~~—17~~ 21 | Standard Specification for Seamless, Welded, and Heavily Cold Worked Austenitic Stainless Steel Pipes | IMC | | |
| A312/A312M ~~—2018~~ 21 | Specification for Seamless, Welded and Heavily Cold Worked Austenitic Stainless Steel Pipes | IRC® | | |
| A334/A334M—04a(~~2016~~ 2021) | Standard Specification for Seamless and Welded Carbon and Alloy-steel Tubes for Low-temperature Service | IMC | | |
| A36/A36M ~~—14~~ 19 | Specification for Carbon Structural Steel | IBC | IRC® | |
| A395/A395M—99(~~2014~~) 2018 | Standard Specification for Ferritic Ductile Iron Pressure-retaining Castings for Use at Elevated Temperatures | IMC | | |
| A403/A403M ~~—2018A~~ 20 | Standard Specification for Wrought Austenitic Stainless Steel Piping Fittings | ISPSC | | |
| A416/A416M ~~—2017A~~ 18 | Standard Specification for Low-Relaxation , ~~Uncoated~~ Seven-W~~w~~ire Steel Strand for Prestressed Concrete | IBC | | |
| A420/A420M ~~—2016~~ 20 | Specification for Piping Fittings of Wrought Carbon Steel and Alloy Steel for Low-temperature Service | IMC | | |
| A463/A463M—15 (2020)e1 | Standard Specification for Steel Sheet, Aluminum-coated, by the Hot-dip Process | IBC | IRC® | |
| A53/A53M— ~~2018~~ 2020 | Specification for Pipe, Steel, Black and Hot-dipped, Zinc-coated Welded and Seamless | IPC | | |
| A53/A53M ~~—2018~~ 2020 | Specification for Pipe, Steel, Black and Hot Dipped Zinc-coated Welded and Seamless | IFGC | IMC | IRC® |
| A536—84~~(2014)~~ ( 2019)e1 | Standard Specification for Ductile Iron Castings | IMC | | |
| A563/A563M ~~—15~~ 21a | Standard Specification for Carbon and Alloy Steel Nuts | IRC® | | |

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| A572/A572M—~~2018~~ 21e1 | Specification for High-strength Low-alloy Columbium-Vanadium Structural Steel | IBC | |
| A588/A588M—~~15~~ 19 | Standard Specification for High-~~s~~Strength Low-~~a~~ Alloy Structural Steel , ~~with~~ up to 50 ksi ~~(~~ [345 MPa~~)~~ ] Minimum Yield Point with Atmospheric Corrosion Resistance | IBC | |
| A6/A6M—~~2017A~~ 2019 | Standard Specification for General Requirements for Rolled Structural Steel Bars, Plates, Shapes and Sheet Piling | IBC | |
| A615/A615M—~~15ae1~~ 20 | StandardSpecification for Deformed and Plain Carbon-~~s~~ Steel Bars for Concrete Reinforcement | IBC | |
| A615/A615M—~~2015aE1~~ 20 | Standard Specification for Deformed and Plain Carbon- s Steel Bars for Concrete Reinforcement | IRC® | |
| A641/A641M—~~09a(2014)~~ 19 | Specification for Zinc-coated (Galvanized) Carbon Steel Wire | IRC® | |
| A653/A653M—~~2017~~ 2020 | Specification for Steel Sheet, Zinc-coated (Galvanized) or Zinc-iron Alloy-coated (Galvannealed) by the Hot-dip Process | IRC® | |
| A653/A653M—~~2017~~ 2020 | Specification for Steel Sheet, Zinc-coated Galvanized or Zinc-iron Alloy-coated Galvannealed by the Hot-dip Process | IBC | |
| A706/A706M—2016 | Standard Specification for Deformed and Plain Low-~~a~~ Alloy Steel Bars for Concrete Reinforcement | IBC | IRC® |
| A74— ~~17~~ 2021 | Specification for Cast-iron Soil Pipe and Fittings | IPC | |
| A74—2017 | Specification for Cast-iron Soil Pipe and Fittings | IRC® | |

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| A755/A755M—~~2016E1~~ 18 | Specification for Steel Sheet, Metallic-coated by the Hot-dip Process and Prepainted by the Coil-coating Process for Exterior Exposed Building Products | IBC | |
| A755M/A755M—~~2016E1~~ 18 | 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— 16(2021) | Specification for Welded Unannealed Austenitic Stainless Steel Tubular Products | IPC | |
| A778M/A778M—~~20~~16 (2021) | Specification for Welded Unannealed Austenitic Stainless Steel Tubular Products | IRC® | |
| A792/A792M—~~10(2015)~~ 21a | Specification for Steel Sheet, 55% Aluminum-zinc Alloy-coated by the Hot-dip Process | IBC | IRC® |
| A875/A875M—~~13~~ 21 | Standard Specification for Steel Sheet, Zinc-5%, Aluminum Alloy-coated by the Hot-dip Process | IBC | IRC® |
| A888— ~~2018~~ 21a | Specification for Hubless Cast-iron Soil Pipe and Fittings for Sanitary and Storm Drain, Waste, and Vent Piping Application | IPC | IRC® |
| A924/A924M—~~2017A~~ 20 | Standard Specification for General Requirements for Steel Sheet, Metallic-coated by the Hot-dip Process | IBC | |
| A924M—~~2017A~~ 20 | Standard Specification for General Requirements for Steel Sheet, Metallic-coated by the Hot-dip Process | IRC® | |
| B101—12(2019) | Specification for Lead-coated Copper Sheet and Strip for Building Construction | IBC | IRC® |
| B152/B152M—~~13~~ 19 | Standard Specification for Copper Sheet, Strip, Plate, and Rolled Bar | IPC | |
| B209—~~14~~ 21 | Specification for Aluminum and Aluminum Alloy Steel and Plate | IBC | IRC® |

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|---|---|---|---|---|---|---|---|---|
| B210/B210M—19a | Standard Specification for Aluminum and Aluminum-alloy Drawn Seamless Tubes | IFGC | | | | IMC | | |
| B280—~~18~~ 20 | Specification for Seamless Copper Tube for Air Conditioning and Refrigeration Field Service | IFGC | IMC | IFC | IRC | IBC | | |
| B306—~~13~~ 20 | Specification for Copper Drainage Tube (DWV) | IPC | | | | IRC® | | |
| B32—~~08(2014)~~ 20 | Specification for Solder Metal | IMC | | IPC | | IRC® | | |
| B370—12(2019) | Specification for Copper Sheet and Strip for Building Construction | IBC | | | | IRC® | | |
| B42—~~15a~~ 20 | Specification for Seamless Copper Pipe, Standard Sizes | IMC | IPC | IFC | IRC | IBC | | |
| B43—~~15~~ 20 | Specification for Seamless Red Brass Pipe, Standard Sizes | IMC | IPC | IBC | IFC | IRC® | | |
| B447—12a(2021) | Specification for Welded Copper Tube | IPC | | ISPSC | | IRC® | | |
| B68/B68M—~~11~~ 19 | Standard Specification for Seamless Copper Tube, Bright Annealed ~~(Metric)~~ | IMC | | IBC | | IFC | | |
| B75/B75M—~~11~~ 20 | Specification for Seamless Copper Tube | IMC | | IPC | | IRC® | | |
| B819—~~2018~~ 19 | Standard Specification for Seamless Copper Tube for Medical Gas Systems | IMC | | | | | | |
| B88—~~2016~~ 20 | Specification for Seamless Copper Water Tube | IFGC | IMC | IPC | IBC | IFC | ISPSC | IRC® |
| C1002—~~2018~~ 20 | 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 | | | | IRC® | | |
| C1007—~~11a(2015)~~ 20 | Specification for Installation of Load Bearing (Transverse and Axial) Steel Studs and Related Accessories | IBC | | | | | | |

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| C1029—~~15~~ 20 | Specification for Spray-applied Rigid Cellular Polyurethane Thermal Insulation | IBC | | IRC® |
| C1047—~~14a~~ 19 | Specification for Accessories for Gypsum Wallboard and Gypsum Veneer Base | IRC® | | |
| C1063—~~2018B~~ 21 | Specification for Installation of Lathing and Furring to Receive Interior and Exterior Portland Cement-based Plaster | IBC | | IRC® |
| C1088—~~2018~~ 20 | Specification for Thin Veneer Brick Units Made from Clay or Shale | IBC | | IRC® |
| C1107/C1107M—~~2017~~ 20 | Standard Specification for Packaged Dry, Hydraulic-cement Grout (Nonshrink) | IRC® | | |
| C1157/C1157M—~~2017~~ 20a | Standard Performance Specification for Hydraulic Cement | IBC | | |
| C126—~~2017~~ 19 | Standard Specification for Ceramic Glazed Structural Clay Facing Tile, Facing Brick, and Solid Masonry Units | IRC® | | |
| C1277—~~2018~~ 20 | Specification for Shielded Couplings Joining Hubless Cast Iron Soil Pipe and Fittings | IPC | IPSDC | IRC® |
| C1280—~~13a~~ 18 | Specification for Application of Exterior Gypsum Panel Products for Use as Sheathing | IBC | | |
| C1283—2015(2021) | Practice for Installing Clay Flue Lining | IBC | | IRC® |
| C1288—2017 | Standard Specification for ~~Discrete Nonasbestos~~ Fiber-~~c~~ Cement Interior Substrate Sheets | IBC | | IRC® |
| C1289—~~2018~~ 21 | Standard Specification for Faced Rigid Cellular Polyisocyanurate Thermal Insulation Board | IBC | | IRC® |
| C1313/C1313M—13(2019) | Standard Specification for Sheet Radiant Barriers for Building Construction Applications | IBC | | |

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| C1325—~~2018~~ 21 | Standard Specification for Nonasbestos Fiber-mat Reinforced Cement Backer Units | IBC | | IRC® |
| C1328/C1328M—~~12~~ 19 | Specification for Plastic (Stucco Cement) | IBC | | IRC® |
| C1363—~~11~~ 19 | Standard Test Method for Thermal Performance of Building Materials and Envelope Assemblies by Means of a Hot Box Apparatus | IECC® | | IRC® |
| C1364—~~2017~~ 19 | Standard Specification for Architectural Cast Stone | IBC | | IRC® |
| C140/C140M—~~2018~~ 21 | Test Method Sampling and Testing Concrete Masonry Units and Related Units | IBC | | |
| C1405—~~2016~~ 20a | Standard Specification for Glazed Brick (Single Fired, Brick Units) | IRC® | | |
| C143/C143M—~~15A~~ 20 | Test Method for Slump of Hydraulic Cement Concrete | IRC® | | |
| C1440— ~~2017~~ 21 | Specification for Thermoplastic Elastomeric (TPE) Gasket Materials for Drain, Waste, and Vent (DWV), Sewer, Sanitary and Storm Plumbing Systems | IPC | IPSDC | IRC |
| C1440—~~2017~~ 21 | Specification for Thermoplastic Elastomeric (TPE) Gasket Materials for Drain, Waste and Vent (DWV), Sewer, Sanitary and Storm Plumbing Systems | IRC® | | |
| C1460— ~~2017~~ 21 | Specification for Shielded Transition Couplings for Use with Dissimilar DWV Pipe and Fittings Above Ground | IPC | IPSDC | IRC® |
| C1460—~~2017~~ 21 | Specification for Shielded Transition Couplings for Use with Dissimilar DWV Pipe and Fittings Above Ground | IRC® | | |

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| C1461— ~~2008( 2017 )~~ 21 | 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 | |
| C14— ~~15a~~ 20 | Specification for Nonreinforced Concrete Sewer, Storm Drain and Culvert Pipe | IPC | IRC® |
| C150/C150M— ~~2018~~ 21 | Specification for Portland Cement | IBC | IRC® |
| C1540— ~~2018~~ 20 | Specification for Heavy Duty Shielded Couplings Joining Hubless Cast-iron Soil Pipe and Fittings | IPC | |
| C1563— 2008~~(201 7 )~~ (2021) | 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 | |
| C1568—08~~(2013)~~ (2020) | Standard Test Method for Wind Resistance of Concrete and Clay Roof Tiles (Mechanical Uplift Resistance Method) | IBC | |
| C1600/C1600M— ~~2017~~ 19 | Standard Specification for Rapid Hardening Hydraulic Cement | IBC | |
| C1629/C1629M— ~~2018A~~ 19 | Standard Classification for Abuse-resistant Nondecorated Interior Gypsum Panel Products and Fiber-reinforced Cement Panels | IBC | |
| C1634— ~~2017~~ 20 | Standard Specification for Concrete Facing Brick and Other Concrete Masonry Facing Units | IRC® | |
| C1658/C1658M— ~~2018~~ 19e1 | Standard Specification for Glass Mat Gypsum Panels | IBC | IRC® |
| C1668— ~~13a~~ 20 | Standard Specification for Externally Applied Reflective Insulation Systems on Rigid Duct in Heating, Ventilation, and Air Conditioning (HVAC) Systems | IRC® | |

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| C1670/1670M—~~2018~~ 2021a | Standard Specification for Adhered Manufactured Stone Masonry Veneer Units | IRC® | | | |
| C1670/C1670M—~~2018~~ 21a | Standard Specification for Adhered Manufactured Stone Masonry Veneer Units | IBC | | | |
| C1766—2015(2019) | Standard Specification for Factory-laminated Gypsum Panel Products | IBC | | IRC® | |
| C1788—~~14~~ 20 | Standard Specification for Non Metallic Plaster Bases (Lath) Used with Portland Cement Based Plaster in Vertical WallApplications | IBC | | | |
| C208—2012(2017)~~E1~~ e2 | Specification for Cellulosic Fiber Insulating Board | IBC | | IRC® | |
| C212—~~2017~~ 21 | Standard Specification for Structural Clay Facing Tile | IRC® | | | |
| C216—~~2017A~~ 21 | Specification for Facing Brick (Solid Masonry Units Made from Clay or Shale) | IBC | | IRC® | |
| C22/C22M—00(~~2015~~) (2021) | Specification for Gypsum | IBC | | IRC® | |
| C270—~~14A~~ 19ae1 | Specification for Mortar for Unit Masonry | IRC® | | | |
| C28/C28M—10(~~2015~~) 2020 | Specification for Gypsum Plasters | IBC | | IRC® | |
| C31/C31M—~~2018B~~ 21a | Practice for Making and Curing Concrete Test Specimens in the Field | IBC | | | |
| C315—2007(~~2016~~) (2021) | Specification for Clay Flue Liners and Chimney Pots | IFGC | IMC | IBC | IRC® |
| C317/C317M—2000 ~~(2015)~~ (2019) | Specification for Gypsum Concrete | IBC | | | |
| C34—2017 | Standard Specification for Structural Clay ~~Load-bearing~~ Loadbearing Wall Tile | IRC® | | | |

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| C35/C35M—~~(2014)~~ 01(2019) | Specification for Inorganic Aggregates for Use in Gypsum Plaster | IRC® | | |
| C35/C35—01~~(2014)~~ (2019) | Specification for Inorganic Aggregates for Use in Gypsum Plaster | IBC | | |
| C411—~~2017~~ 2019 | Test Method for Hot-surface Performance of High-temperature Thermal Insulation | IMC | IRC® | |
| C425— ~~2004( 2018 )~~ 21 | Specification for Compression Joints for Vitrified Clay Pipe and Fittings | IPC | IPSDC | IRC |
| C443— ~~2012(2017)~~ 20 | Specification for Joints for Concrete Pipe and Manholes, Using Rubber Gaskets | IPC | | |
| C443—~~2012(2017)~~ 20 | Specification for Joints for Concrete Pipe and Manholes, Using Rubber Gaskets | IRC® | | |
| C472—~~99(2014)~~ 20 | Standard Test Methods for Physical Testing of Gypsum, Gypsum Plasters and Gypsum Concrete | IBC | | |
| C473—~~2017~~ 2019 | Test Methods for Physical Testing of Gypsum Panel Products | IBC | | |
| C474—15(2020) | Test Methods for Joint Treatment Materials for Gypsum Board Construction | IBC | | |
| C475M—2017 | Specification for Joint Compound and Joint Tape for Finishing Gypsum Wallboard | IRC® | | |
| C476—~~2018~~ 2020 | Specification for Grout for Masonry | IRC® | | |
| C503M/C503M—2015 | Standard Specification for Marble Dimension Stone | IRC® | | |
| C514—04~~(2014)~~ (2020) | Specification for Nails for the Application of Gypsum Board | IBC | IRC® | |
| C516—~~2008(2014)E1~~ 19 | Specifications for Vermiculite Loose Fill Thermal Insulation | IBC | | |

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| C547—~~2017~~ 19 | Specification for Mineral Fiber Pipe Insulation | IBC | |
| C549—~~06(2012)~~ 18 | Specification for Perlite Loose Fill Insulation | IBC | |
| C552—~~2017E1~~ 21a | Standard Specification for Cellular Glass Thermal Insulation | IBC | IRC® |
| C564—~~14~~ 20a | Specification for Rubber Gaskets for Cast-iron Soil Pipe and Fittings | IPC | IRC® |
| C578—~~2018~~ 19 | Standard Specification for Rigid, Cellular Polystyrene Thermal Insulation | IBC | IRC® |
| C59/C59M—00~~(2015)~~ (2020) | Specification for Gypsum Casting Plaster and Molding Plaster | IBC | IRC® |
| C595/C595M—~~2018~~ 21 | Specification for Blended Hydraulic Cements | IBC | IRC® |
| C61/C61M—00~~(2015)~~ (2020) | Specification for Gypsum Keene's Cement | IBC | IRC® |
| C631—09~~(2014)~~ 2020 | Specification for Bonding Compounds for Interior Gypsum Plastering | IBC | IRC® |
| C636/C636M—~~13~~ 19 | Practice for Installation of Metal Ceiling Suspension Systems for Acoustical Tile and Lay-in Panels | IBC | |
| C652—~~2017A~~ 21 | Specification for Hollow Brick (Hollow Masonry Units Made from Clay or Shale) | IBC | IRC® |
| C67/C67M—~~2018~~ 21 | Test Methods of Sampling and Testing Brick and Structural Clay Tile | IBC | |
| C754—~~2018~~ 20 | Specification for Installation of Steel Framing Members to Receive Screw-attached Gypsum Panel Products | IBC | |
| C76— ~~2018A~~ 20 | Specification for Reinforced Concrete Culvert, Storm Drain and Sewer Pipe | IPC | |

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| C76—~~2018A~~ 20 | Specification for Reinforced Concrete Culvert, Storm Drain and Sewer Pipe | IPC | IPSDC | IRC® |
| C840—~~2018A~~ 20 | Specification for Application and Finishing of Gypsum Board | IBC | | |
| C842—05~~(2015)~~ (2021) | Specification for Application of Interior Gypsum Plaster | IBC | | IRC® |
| C844—2015 (2021) | Specification for Application of Gypsum Base to Receive Gypsum Veneer Plaster | IBC | | IRC® |
| C847—~~14a~~ 2018 | Specification for Metal Lath | IBC | | |
| C887—~~13~~ 20 | Specification for Packaged, Dry Combined Materials for Surface Bonding Mortar | IBC | | IRC® |
| C897—15 (2020) | Specification for Aggregate for Job-mixed Portland Cement-based Plaster | IBC | | IRC® |
| C926—~~2018B~~ 20b | Specification for Application of Portland Cement-based Plaster | IBC | | IRC® |
| C932—06~~(2013)~~ (2019) | Specification for Surface-applied Bonding Compounds for Exterior Plastering | IBC | | |
| C94/C94M—~~17A~~ 21b | Specification for Ready-mixed Concrete | IEBC | | |
| C94/C94M—~~2017A~~ 21b | Specification for Ready-mixed Concrete | IBC | | IRC® |
| C956—04~~(2015)~~ (2019) | Specification for Installation of Cast-in-place Reinforced Gypsum Concrete | IBC | | |
| D1003—~~13~~ 21 | Standard Test Method for Haze and Luminous Transmittance of Transparent Plastics | IECC® | | |
| D1143/D1143M—~~2007(2013)E1~~ 20 | Standard Test Methods for Deep Foundation~~s~~ Elements Under Static Axial Compressive Load | IBC | | |

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| D1227—13(2019)e1 | Specification for Emulsified Asphalt Used as a Protective Coating for Roofing | IBC | | IRC® |
| D1557—12~~e1~~ (2021) | Test Methods for Laboratory Compaction Characteristics of Soil Using Modified Effort [56,000 ft-lb/ft$^3$ (2,700 kN m/m$^3$)] | IBC | | |
| D1593—~~13~~ 19 | Standard Specification for Nonrigid Vinyl Chloride Plastic Film and Sheeting | ISPSC | | |
| D1693—15e1 | Test Method for Environmental Stress-cracking of Ethylene Plastics | IMC | | IRC® |
| D1784—~~11~~ 20 | Standard ~~Specification~~ Classification System and Basis for Specification for Rigid Poly (Vinyl Chloride) (PVC) Compounds and Chlorinated Poly (Vinyl Chloride) (CPVC) Compounds | IRC® | | |
| D1785— ~~2015E1~~ 21a | Specification for Poly (Vinyl Chloride) (PVC) Plastic Pipe, Schedules 40, 80 and 120 | IPC | | |
| D1785—15E1 | Specification for Poly (Vinyl Chloride) (PVC) Plastic Pipe, Schedules 40, 80 and 120 | IMC | ISPSC | IRC® |
| D1929—~~16~~ 20 | Standard Test Method for Determining Ignition Temperature of Plastics | IBC | | |
| D1970/D1970M—~~2017A~~ 21 | Specification for Self-adhering Polymer Modified Bituminous Sheet Materials Used as Steep Roof Underlayment for Ice Dam Protection | IBC | | IRC® |
| D2178/D2178M—15A(2021) | Specification for Asphalt Glass Felt Used in Roofing and Waterproofing | IBC | | IRC® |
| D2239—~~12A~~ 21 | Specification for Polyethylene (PE) Plastic Pipe (SIDR-PR) Based on Controlled Inside Diameter | IRC® | | |

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| D2241—~~15~~ 20 | Specification for Poly (Vinyl Chloride) (PVC) Pressure-rated Pipe (SDR-Series) | IMC | IPC | ISPSC | IRC® |
| D2412—~~11(2018)~~ 21 | Test Method for Determination of External Loading Characteristics of Plastic Pipe by Parallel-plate Loading | IMC | | | |
| D2466— ~~2017~~ 21 | Specification for Poly (Vinyl Chloride) (PVC) Plastic Pipe Fittings, Schedule 40 | IMC | IPC | ISPSC | IRC |
| D2466—~~2017~~ 21 | Specification for Poly (Vinyl Chloride) (PVC) Plastic Pipe Fittings, Schedule 40 | IMC | ISPSC | | IRC® |
| D2467—~~15~~ 20 | Specification for Poly (Vinyl Chloride) (PVC) Plastic Pipe Fittings, Schedule 80 | IMC | IPC | ISPSC | IRC® |
| D2487—~~2017~~ 17e1 | Practice for Classification of Soils for Engineering Purposes (Unified Soil Classification System) | IBC | | | |
| D2513—~~2018A~~ 20 | Specification for Polyethylene (PE) Gas Pressure Pipe, Tubing and Fittings | IFGC | | IRC® | |
| D2564— ~~2012(2018)~~ 20 | Specification for Solvent Cements for Poly (Vinyl Chloride) (PVC) Plastic Piping Systems | IMC | IPC | | IRC |
| D2609—~~15~~ 21 | Specification for Plastic Insert Fittings for Polyethylene (PE) Plastic Pipe | IPC | | IRC® | |
| D2626/D2626M—04 ~~(2012)e1~~ (2020) | Specification for Asphalt-saturated and Coated Organic Felt Base Sheet Used in Roofing | IBC | | IRC® | |
| D2665— ~~2014~~ 20 | Specification for Poly (Vinyl Chloride) (PVC) Plastic Drain, Waste, and Vent Pipe and Fittings | IPC | | | |
| D2672—~~14~~ 20e1 | Specification for Joints for IPS PVC Pipe Using Solvent Cement | IPC | ISPSC | | IRC® |
| D2680—~~01(2014)~~ 20 | Standard Specification for Acrylonitrile-Butadiene-Styrene (ABS) and Poly(Vinyl Chloride) (PVC) Composite Sewer Piping | IPC | | IRC® | |

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| D2683—~~14~~ 20 | Specification for Socket-type Polyethylene Fittings for Outside Diameter-controlled Polyethylene Pipe and Tubing | IMC | IPC | IRC® |
| D2737—~~12a~~ 21 | Standard Specification for Polyethylene (PE) Plastic Tubing | IMC | IPC | IBC |
| D2822/D2822M—2005(2011)e1 | Specification for Asphalt Roof Cement, Asbestos Containing | IBC | | IRC® |
| D2843—~~16~~ 19 | Standard Test Method for Density of Smoke from the Burning or Decomposition of Plastics | IBC | | |
| D2846/D2846M— ~~2017BE1~~ 19a | Specification for Chlorinated Poly (Vinyl Chloride) (CPVC) Plastic Hot- and Cold-Water Distribution Systems | IPC | | |
| D2846/D2846M—2017BE1 | Specification for Chlorinated Poly (Vinyl Chloride) (CPVC) Plastic Hot- and Cold-water Distribution Systems | IMC | ISPSC | IRC® |
| D2855— ~~2015~~ 2020 | ~~Standard Practice for Making Solvent-cemented Joints with Poly (Vinyl Chloride) (PVC) Pipe and Fittings~~ Standard Practice for the Two-Step (Primer and Solvent Cement) Method of Joining Poly (Vinyl Chloride) (PVC) or Chlorinated Poly (Vinyl Chloride) (CPVC) Pipe and Piping Components with Tapered Sockets | IPC | | |
| D2859—2016 | Standard Test Method for Ignition Characteristics of Finished Textile Floor Covering Materials | IBC | | |
| D2859—~~16~~ 2016(2021) | Standard Test Method for Ignition Characteristics of Finished Textile Floor Covering Materials | IFC | | |
| D2949—~~10~~ 18 | Specification for 3.25-in. Outside Diameter Poly (Vinyl Chloride) (PVC) Plastic Drain, Waste, and Vent Pipe and Fittings | IPC | | IRC® |
| D3035—~~15~~ 21 | Specification for Polyethylene (PE) Plastic Pipe (DR-PR) Based on Controlled Outside Diameter | IMC | IPC | IRC® |

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| D312/D312M—2016~~M~~ a | Specification for Asphalt Used in Roofing | IBC | | IRC® |
| D3138—04(2011) | Standard Specification for Solvent Cements for Transition Joints Between Acrylonitrile-Butadiene-Styrene (ABS) and Poly (Vinyl Chloride) (PVC) Non-Pressure Piping Components | IRC® | | |
| D3139~~—98(2011)~~ 19 | Specification for Joints for Plastic Pressure Pipes Using Flexible Elastomeric Seals | IPC | | |
| D3161/D3161M~~—2016A~~ 20 | Test Method for Wind Resistance of Steep Slope Roofing Products (Fan Induced Method) | IBC | | IRC® |
| D3201/D3201M~~—13~~ 20 | Test Method for Hygroscopic Properties of Fire-retardant-treated Wood and Wood-based Products | IBC | | IRC® |
| D3212~~—07(2013)~~ 20 | Specification for Joints for Drain and Sewer Plastic Pipes Using Flexible Elastomeric Seals | IPC | | IRC® |
| D323~~—15A~~ 20a | Test Method for Vapor Pressure of Petroleum Products (Reid Method) | IFC | | |
| D3278~~—96(2011)~~ 21 | Test Methods for Flash Point of Liquids by Small Scale Closed-cup Apparatus | IMC | IBC | IFC |
| D3350~~—14~~ 21 | Specification for Polyethylene Plastic Pipe and Fitting Materials | IRC® | | |
| D3462/D3462M—2016 | Specification for Asphalt Shingles Made from Glass Felt and Surfaced with Mineral Granules | IBC | | |
| D3462/D3462M~~—10A~~ 19 | Specification for Asphalt Shingles Made from Glass Felt and Surfaced with Mineral Granules | IRC® | | |
| D3468/D3468M—99~~(2013)E1~~ (2020) | Specification for Liquid-applied Neoprene and Chlorosulfanated Polyethylene Used in Roofing and Waterproofing | IBC | | IRC® |

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| D3498—~~03(2011)~~ 19a | ~~Standard Specification for Adhesives for Field-Gluing Plywood to Lumber Framing for Floor Systems~~ Standard Specification for Adhesives for Field-Gluing Wood Structural Panels (Plywood or Oriented Strand Board) to Wood Based Floor System Framing | IBC | |
| D3679—~~2017~~ 21 | Specification for Rigid Poly (Vinyl Chloride) (PVC) Siding | IBC | IRC® |
| D3957—2009~~(2015)~~ (2020) | Standard Practices for Establishing Stress Grades for Structural Members Used in Log Buildings | IBC | |
| D4434/D4434M—~~2015~~ 21 | Specification for Poly (Vinyl Chloride) Sheet Roofing | IBC | IRC® |
| D449/D449M—~~03(2014)E1~~ 2003(2021) | Specification for Asphalt Used in Dampproofing and Waterproofing | IRC® | |
| D4601/D4601M—04~~(2012)e1~~ (2020) | Specification for Asphalt-coated Glass Fiber Base Sheet Used in Roofing | IBC | IRC® |
| D4829—~~11~~ 21 | Test Method for Expansion Index of Soils | IBC | IRC® |
| D4869/D4869M—2016A(2021) | Specification for Asphalt-saturated (Organic Felt) Underlayment Used in Steep Slope Roofing | IBC | IRC® |
| D4990—1997a~~(2013)~~ (2020) | Specification for Coal Tar Glass Felt Used in Roofing and Waterproofing | IRC® | |
| D4990—97a(2013) | Specification for Coal Tar Glass Felt Used in Roofing and Waterproofing | IBC | |
| D5055—~~2016~~ 2019e1 | Specification for Establishing and Monitoring Structural Capacities of Prefabricated Wood I-joists | IBC | IRC® |
| D5456—~~2018~~ 21e1 | Specification for Evaluation of Structural Composite Lumber Products | IBC | IRC® |

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| D56—2016A | Test Method for Flash Point by Tag Closed Cup Tester | IMC | IBC |
| D56—~~16a~~ 21 | Test Method for Flash Point by Tag Closed Cup Tester | IFC | |
| D5726—98~~(2013)~~ (2020) | Specification for Thermoplastic Fabrics Used in Hot-applied Roofing and Waterproofing | IBC | IRC® |
| D6083/D6083M—~~2018~~ 21 | Specification for Liquid Applied Acrylic Coating Used in Roofing | IBC | IRC® |
| D6305—~~08(2015)E1~~ 21 | Practice for Calculating Bending Strength Design Adjustment Factors for Fire-retardant-treated Plywood Roof Sheathing | IRC® | |
| D635—~~14~~ 18 | Test Method for Rate of Burning and/or Extent and Time of Burning of Plastics in a Horizontal Position | IBC | |
| D6841—~~2016~~ 21 | Standard Practice for Calculating Design Value Treatment Adjustment Factors for Fire-retardant Treated Lumber | IBC | IRC® |
| D6878/D6878M—~~2017~~ 19 | Standard Specification for Thermoplastic Polyolefin Based Sheet Roofing | IBC | IRC® |
| D7147—~~2011(2018~~) 21 | Specification for Testing and Establishing Allowable Loads of Joist Hangers | IBC | |
| D7158/D7158M—~~2019~~ 20 | Standard Test Method for Wind Resistance of Asphalt Shingles (Uplift Force/Uplift Resistance Method) | IBC | IRC® |
| D7254—~~2017~~ 20 | Standard Specification for Polypropylene (PP) Siding | IBC | IRC® |
| D7425/D7425M—13(2019) | Standard Specification for Spray Polyurethane Foam Used for Roofing Applications | IBC | IRC® |
| D7672—~~14E1~~ 19 | Standard Specification for Evaluating Structural Capacities of Rim Board Products and Assemblies | IBC | IRC® |

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| D86—~~2017~~ 20b | Test Method for Distillation of Petroleum Products and Liquid Fuels at Atmospheric Pressure | IBC | | | | |
| D93—~~18~~ 20 | Test Method for Flash Point by Pensky-Martens Closed Up Tester | IMC | | IFC | | |
| D93—~~2018~~ 20 | Test Methods for Flash Point by Pensky-Martens Closed Cup Tester | IMC | IBC | IFC | | |
| E1007—~~16~~ 21 | Test Method f or Field Measurement of Tapping Machine Impact Sound Transmission Through Floor-Ceiling Assemblies and Associated Support Structures | IBC | | | | |
| E108—~~17~~ 20a | Standard Test Methods for Fire Tests of Roof Coverings | IWUIC | IEBC | IFC | IRC | |
| E108—~~2017~~ 20a | Standard Test Methods for Fire Tests of Roof Coverings | IWUIC | IBC | IRC® | | |
| E119—~~2018B~~ 20 | Standard Test Methods for Fire Tests of Building Construction and Materials | IMC | IWUIC | IBC | IRC® | |
| E119—~~2018b~~ 20 | Standard Test Methods for Fire Tests of Building Construction and Materials | IWUIC | | | | |
| E136—2019a | Standard Test Method for Behavior of Materials in a Vertical Tube Furnace at 750°C | IFGC | IMC | IWUIC | IBC | IRC® |
| E136—~~16A~~ 19a | Test Method for Behavior of Materials in a Vertical Tube Furnace at 750°C | IEBC | | | | |
| E1677—~~11~~ 19 | Specification for Air Barrier (AB) Material or Systems for Low-rise Framed Building Walls | IECC® | | | | |
| E1886—~~2013A~~ 19 | Standard Test Method for Performance of Exterior Windows, Curtain Walls, Doors and Impact Protective Systems Impacted by Missile(s) and Exposed to Cyclic Pressure Differentials | IBC | IRC® | | | |

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| E1918—~~06(2016)~~ 21 | Standard Test Method for Measuring Solar Reflectance of Horizontal or Low-sloped Surfaces in the Field | IECC® | | |
| E1966—15(2019) | Standard Test Method for Fire-resistant Joint Systems | IFC | IBC | |
| E1980—11(2019) | Standard Practice for Calculating Solar Reflectance Index of Horizontal and Low-sloped Opaque Surfaces | IECC® | | |
| E1996—~~2017~~ 20 | Specification for Performance of Exterior Windows, Curtain Walls, Doors and Impact Protective Systems Impacted by Windborne Debris in Hurricanes | IBC | IRC® | |
| E2174—~~2018~~ 20a | Standard Practice for On-site Inspection of Installed Fire Stops | IBC | | |
| E2178—~~13~~ 21a | Standard Test Method ~~for Air Permeance of Building Materials~~ for Determining Air Leakage Rate and Calculation of Air Permeance of Building Materials | IBC | IRC | IECC® |
| E2178—~~2013~~ 21a | Standard Test Method for Determining Air Leakage Rate and Calculation of Air Permanence of Building Materials | IECC® | IRC® | |
| E2231—~~2018~~ 19 | Standard Practice for Specimen Preparation and Mounting of Pipe and Duct Insulation Materials to Assess Surface Burning Characteristics | IMC | IRC® | |
| E2307—~~15BE1~~ 20 | Standard Test Method for Determining Fire Resistance of Perimeter Fire Barriers Using the Intermediate-scale, Multistory Test Apparatus | IBC | | |
| E2336—~~16~~ 20 | Standard Test Methods for Fire Resistive Grease Duct Enclosure Systems | IMC | | |
| E2353—~~2016~~ 21 | Standard Test Methods for Performance of Glazing in Permanent Railing Systems, Guards and Balustrades | IBC | | |

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| E2393—~~10a(2015)~~ 20a | Standard Practice for On-site Inspection of Installed Fire Resistive Joint Systems and Perimeter Fire Barriers | IBC | |
| E2570/E2570M—07~~(2014)E1~~ (2019) | Standard Test Methods for Evaluating Water-resistive Barrier (WRB) Coatings Used Under Exterior Insulation and Finish Systems (EIFS) or EIFS with Drainage | IRC® | |
| E2573—~~17~~ 19 | Standard Practice for Specimen Preparation and Mounting of Site-fabricated Stretch Systems to Assess Surface Burning Characteristics | IFC | |
| E2579—~~15~~ 21 | Standard Practice for Specimen Preparation and Mounting of Wood Products to Assess Surface Burning Characteristics | IFC | IBC |
| E2652—~~16~~ 18 | Standard Test Method for ~~Behavior~~ Assessing Combustibility of Materials Using ~~in~~ a Tube Furnace with a Cone-shaped Airflow Stabilizer at 750ºC | IBC | |
| E283/E283M—~~04(2012)~~ 19 | Standard Test Method for Determining Rate of Air Leakage through Exterior Windows, Curtain Walls and Doors Under Specified Pressure Differences across the Specimen | IBC | |
| E2925—~~17~~ 19a | Standard Specification for Manufactured Polymeric Drainage and Ventilation Materials Used to Provide a Rainscreen Function | IBC | IRC® |
| E3082—~~17~~ 20 | Standard Test Methods for Determining the Effectiveness of Fire-retardant Treatments for Natural Christmas Trees | IFC | |

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| E336—~~17a~~ 20 | Standard Test Method for Measurement of Airborne Sound Attenuation between Rooms in Buildings | IBC | |
| E408—13(2019) | Test Methods for Total Normal Emittance of Surfaces Using Inspection-meter Techniques | IECC® | |
| E605/E605M—~~93(2015)e1~~ 19 | Test Method for Thickness and Density of Sprayed Fire-resistive Material (SFRM) Applied to Structural Members | IBC | |
| E648—~~17a~~ 19ae1 | Standard Test Method for Critical Radiant Flux of Floor-covering Systems Using a Radiant Heat Energy Source | IFC | |
| E736/E736M—~~2017~~ 19 | Test Method for Cohesion/Adhesion of Sprayed Fire-resistive Materials Applied to Structural Members | IBC | |
| E779—2010(2018) | Standard Test Method for Determining Air Leakage Rate by Fan Pressurization | IECC® | IRC® |
| E779—~~10(2018)~~ 19 | Standard Test Method for Determining Air Leakage Rate by Fan Pressurization | IECC® | |
| E84—~~18b~~ 21a | Standard Test Method for Surface Burning Characteristics of Building Materials | IFC | |
| E903—~~2012~~ 20 | Standard Test Method Solar Absorptance, Reflectance and Transmittance of Materials Using Integrating Spheres ~~(Withdrawn 2005)~~ | IECC® | |
| E96/E96M—2016 | Standard Test Methods for Water Vapor Transmission of Materials | IBC | IRC® |
| F1085—~~14~~ 19 | Standard Specification for Mattress and Box Springs for Use in Berths in Marine Vessels | IFC | |
| F1361—~~2017~~ 21 | Standard Test Method for Performance of Open ~~Deep Fat~~ Vat Fryers | IECC® | |

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| F1476—07~~(2013)~~ (2019) | Specification for Performance of Gasketed Mechanical Couplings for Use in Piping Applications | IMC | IPC |
| F1488—~~14E1~~ 14(2019) | Specification for Coextruded Composite Pipe | IRC® | |
| F1495—~~2014a~~ 20 | Standard Specification for Combination Oven Electric or Gas Fired | IECC® | |
| F1496—~~2013~~ 13(2019) | Standard Test Method for Performance of Convection Ovens | IECC® | |
| F1504—~~2014~~ 21 | Standard Specification for Folded Poly (Vinyl Chloride) (PVC) for Existing Sewer and Conduit Rehabilitation | IRC® | |
| F1554—~~2018~~ 20 | Specification for Anchor Bolts, Steel, 36, 55 and 105-ksi Yield Strength | IRC® | |
| F1667—~~2018~~ 21 | Specification for Driven Fasteners: Nails, Spikes and Staples | IBC | IRC® |
| F1696—~~2018~~ 20 | Standard Test Method for Energy Performance of Stationary-Rack, Door-Type Commercial Dishwashing Machines | IECC® | |
| F1807— ~~2018~~ 19b | Specification for Metal Insert Fittings Utilizing a Copper Crimp Ring, or Alternate Stainless Steel Clamps, for SDR9 Cross-linked Polyethylene (PEX) Tubing and SDR9 Polyethylene of Raised Temperature (PE-RT) Tubing | IPC | |
| F1871—~~2011~~ 20 | Standard Specification for Folded/Formed Poly (Vinyl Chloride) Pipe Type A for Existing Sewer and Conduit Rehabilitation | IRC® | |
| F1920—~~2015~~ 20 | Standard Test Method for Performance of Rack Conveyor Commercial Dishwashing Machines | IECC® | |

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| F1924—~~12~~ 19 | Standard Specification for Plastic Mechanical Fittings for Use on Outside Diameter Controlled Polyethylene Gas Distribution Pipe and Tubing | IMC | IRC® |

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| F1960— ~~2018~~ 21 | Standard Specification for Cold Expansion Fittings with PEX Reinforcing Rings for Use with Cross-linked Polyethylene (PEX) and Polyethylene of Raised Temperature (PE-RT) Tubing | IPC |

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| F1970— ~~2018~~ 19 | Special Engineered Fittings, Appurtenances or Valves for Use in Poly (Vinyl Chloride) (PVC) OR Chlorinated Poly (Vinyl Chloride) (CPVC) Systems | IPC |

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| F1974—09~~(2015)~~ (2020) | Specification for Metal Insert Fittings for Polyethylene/Aluminum/Polyethylene and Cross-linked Polyethylene/ Aluminum/Cross-linked Polyethylene Composite Pressure Pipe | IPC | IRC® |

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| F2006—~~17~~ 21 | Standard/Safety Specification for Window Fall Prevention Devices for Nonemergency Escape (Egress) and Rescue (Ingress) Windows | IBC | IEBC | IFC |

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| F2080— ~~2016~~ 2019 | ~~Specifications for Cold-expansion Fittings with Metal Compression-sleeves for Cross-linked Polyethylene (PEX) Pipe~~ Standard Specification for Cold-Expansion Fittings with Metal Compression-Sleeves for Crosslinked Polyethylene (PEX) Pipe and SDR9 Polyethylene of Raised Temperature (PE-RT) Pipe | IMC | IPC | IRC |

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| F2090—~~17~~ 21 | Specification for Window Fall Prevention Devices with Emergency Escape (Egress) Release Mechanisms | IBC | IEBC | IFC | IRC® |

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| F2098— ~~2015~~ 2018 | Standard Specification for Stainless Steel Clamps for Securing SDR9 Cross-linked Polyethylene (PEX) Tubing and SDR9 Polyethylene of Raised Temperature (PE-RT) to Metal Insert and Plastic Fittings | IPC |

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| F2098—~~2015~~ 2018 | Standard Specification for Stainless Steel Clamps for Securing SDR9 Cross-linked Polyethylene (PEX) Tubing and SDR9 Polyethylene of Raised Temperature (PE-RT) to Metal Insert and Plastic Insert Fittings | IMC | | IRC® |
| F2144—~~2017~~ 21 | Standard Test Method for Performance of Large Open Vat Fryers | IECC® | | |
| F2159— ~~2018~~ 21 | Standard Specification for Plastic Insert Fittings Utilizing a Copper Crimp Ring, or Alternate Stainless Steel Clamps for SDR9 Cross-linked Polyethylene (PEX) Tubing and SDR9 Polyethylene of Raised Temperature (PE-RT) Tubing | IPC | | |
| F2159—~~2018~~ 21 | Standard Specification for Plastic Insert Fittings Utilizing a Copper Crimp Ring or Alternate Stainless Steel Clamps for SDR9 Cross-linked Polyethylene (PEX) Tubing and SDR9 Polyethylene of Raised Temperature (PE-RT) Tubing | IMC | | IRC® |
| F2200—~~17~~ 20 | Standard Specification for Automated Vehicular Gate Construction | IFC | | |
| F2306/F2306M— ~~2018~~ 20 | 12″ to 60″ Annular Corrugated Profile-wall Polyethylene (PE) Pipe and Fittings for Gravity Flow Storm Sewer and Subsurface Drainage Applications | IPC | | |
| F2389— ~~2017A~~ 21 | Standard Specification for Pressure-rated Polypropylene (PP) Piping Systems | IPC | | |
| F2389—2017A | Specification for Pressure-rated Polypropylene Piping Systems | IMC | | IRC® |
| F2434—~~14~~ 19 | Standard Specification for ~~Metal~~ Plastic Insert Fittings Utilizing a Copper Crimp Ring for SDR9 Cross-linked Polyethylene (PEX) Tubing and SDR9 Cross-linked Polyethylene/Aluminum/Cross-linked Polyethylene (PEX-AL-PEX) Tubing | IMC | IPC | IRC® |

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| F2561—~~17~~ 20 | Standard Practice for Rehabilitation of a Sewer Service Lateral and its Connection to the Main Using a One Piece Main and Lateral Cured-in-Place Liner | IPC | | |
| F2599—~~16~~ 20 | Standard Practice for The Sectional Repair of Damaged Pipe by Means of an Inverted Cured-in-Place Liner | IPC | | |
| F2623—~~14~~ 19 | Standard Specification for Polyethylene of Raised Temperature (PE-RT) Systems for Non-Potable Water Applications ~~SDR9 Tubing~~ | IMC | IRC® | |
| F2648/F2648M— ~~2017~~ 20 | 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— ~~2009 (2016)~~ 21 | Standard Specification for Plastic Insert Fittings for SDR9 Cross-linked Polyethylene (PEX) and Polyethylene of Raised Temperature (PE-RT) Tubing | IPC | | |
| F2764/F2764M— ~~2018~~ 19 | ~~Standard Specification for 30 to 60 in. [750 to 1500 mm] Polypropylene (PP) Triple Wall Pipe and Fittings for Non-pressure Sanitary Sewer Applications~~ Standard Specification for 6 to 60 in. [150 to 1500 mm] Polypropylene (PP) Corrugated Double and Triple Wall Pipe and Fittings for Non-Pressure Sanitary Sewer Applications | IPC | | |
| F2769— 2018 | Standard Specification for Polyethylene or Raised Temperature (PE-RT) Plastic Hot- and Cold-water Tubing and Distribution Systems | IMC | IPC | IRC |
| F2806—~~10(2015)~~ 20 | Standard Specification for Acrylonitrile-Butadiene-Styrene (ABS) Plastic Pipe (Metric SDR-PR) | IMC | IRC® | |

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| F2831— ~~2012(2017)~~ 19 | Standard Practice for Internal Non Structural Epoxy Barrier Coating Material Used in Rehabilitation of Metallic Pressurized Piping Systems | IPC | | | |
| F2855—~~12~~ 19 | Standard Specification for Chlorinated Poly(Vinyl Chloride)/Aluminum/Chlorinated Poly(Vinyl Chloride) (CPVC-AL-CPVC) Composite Pressure Tubing | IMC | IPC | IRC® | |
| F2861—~~2017~~ 20 | Standard Test Method for Enhanced Performance of Combination Oven in Various Modes | IECC® | | | |
| F2881 /F2881M— ~~2018~~ 21 | 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 | | | |
| F2969—12(2020) | Standard Specification for Acrylonitrile-butadiene-styrene (ABS) IPS Dimensioned Pressure Pipe | IRC® | | | |
| F3226/F3226M—~~16~~ 19 | Standard Specification for Metallic Press-Connect Fittings for Piping and Tubing Systems | IPC | IRC® | | |
| F3240—~~17~~ 19e1 | Standard Practice for Installation of Seamless Molded Hydrophilic Gaskets (SMHG) for Long Term Watertightness of Cured-in-Place Rehabilitation of Main and Lateral Pipelines | IPC | | | |
| F3253—~~2017~~ 19 | Standard Specification for Crosslinked Polyethylene (PEX) Tubing with Oxygen Barrier for Hot- and Cold-water Hydronic Distribution Systems | IMC | IRC® | | |
| F437—~~15~~ 21 | Specification for Threaded Chlorinated Poly (Vinyl Chloride) (CPVC) Plastic Pipe Fittings, Schedule 80 | IMC | IPC | ISPSC | IRC® |

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| F439—~~13~~ 19 | Specification for Socket Type Chlorinated Poly (Vinyl Chloride) (CPVC) Plastic Pipe Fittings, Schedule 80 | IMC | IPC | ISPSC | IRC® |
| F441/F441M—~~15~~ 20 | Specification for Chlorinated Poly (Vinyl Chloride) (CPVC) Plastic Pipe, Schedules 40 and 80 | IMC | IPC | | IRC® |
| F442/F442M—~~13E1~~ 20 | Specification for Chlorinated Poly (Vinyl Chloride) (CPVC) Plastic Pipe (SDR-PR) | IRC® | | | |
| F477—14(2021) | Specification for Elastomeric Seals (Gaskets) for Joining Plastic Pipe | IPC | | IRC® | |
| F493—~~14~~ 20 | Specification for Solvent Cements for Chlorinated Poly (Vinyl Chloride) (CPVC) Plastic Pipe and Fittings | IMC | IPC | IRC® | |
| F656— ~~2015~~ 21 | Specification for Primers for Use in Solvent Cement Joints of Poly (Vinyl Chloride) (PVC) Plastic Pipe and Fittings | IPC | | | |
| F667 /F667M — ~~20~~16 (2021) | Standard Specification for 3 through 24 in. Corrugated Polyethylene Pipe and Fittings | IPC | | | |
| F714—~~13~~ 21a | Standard Specification for Polyethylene (PE) Plastic Pipe (SDR-PR) Based on Outside Diameter | IMC | | IRC® | |
| F844—~~07a(2013)~~ 19 | Standard Specification for Washers, Steel, Plain (Flat), Unhardened for General Use | IRC® | | | |
| F876— ~~2017~~ 20b | Specification for Cross-linked Polyethylene (PEX) Tubing | IPC | | | |
| F876—2018A | Specification for Cross-linked Polyethylene (PEX) Tubing | IMC | | | |
| F877— ~~2018A~~ 20 | Specification for Cross-linked Polyethylene (PEX) Hot- and Cold-water Distribution Systems | IPC | | | |

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| G152—13(2021) | Practice for Operating Open Flame Carbon Arc Light Apparatus for Exposure of Nonmetallic Materials | IBC |
| G154—2016~~A~~ | Standard Practice for Operating Fluorescent Ultraviolet (UV) ~~Light~~ Lamp Apparatus for ~~UV~~ Exposure of Nonmetallic Materials | IBC |
| G155—~~13~~ 21 | Standard Practice for Operating Xenon Arc ~~Light~~ Lamp Apparatus for Exposure of ~~Nonmetallic~~ Materials | IBC |

| **AWC** | **American Wood Council** | | |
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| **Standard Reference Number** | **Title** | **Referenced in Code(s):** | |
| ANSI/AWC NDS—~~2018~~ 2024 | National Design Specification (NDS) for Wood Construction—with 2018 NDS Supplement | IBC | IRC® |
| ANSI/AWC WFCM—~~2018~~ 2024 | Wood Frame Construction Manual for One- and Two-Family Dwellings | IBC | IRC® |
| AWC STJR—~~2021~~ 2024 | Span Tables for Joists and Rafters | IBC | IRC® |

| **AWPA** | **American Wood Protection Association** | | |
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| **Standard Reference Number** | **Title** | **Referenced in Code(s):** | |
| M4—~~15~~ 21 | Standard for the Handling, Storage, Field Fabrication, and Field Treatment of ~~Care~~ of Preservative-treated Wood Products | IBC | IRC® |
| U1—~~20~~ 23 | USE CATEGORY SYSTEM: User Specification for Treated Wood Except Commodity Specification H | IBC | IRC® |

| **AWS** | **American Welding Society** | |
|---|---|---|
| **Standard Reference Number** | **Title** | **Referenced in Code(s):** |
| A5.8/A5.8—~~2011-AMD1~~ :2019 | Specifications for Filler Metals for Brazing and Braze Welding | IMC |

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| A5.8M/A5.8~~—2011-AMD1~~ :2019 | Specifications for Filler Metals for Brazing and Braze Welding | IPC |
| A5.8M/A5.8~~—2011—AMD1~~ :2019 | Specifications for Filler Metals for Brazing and Braze Welding | IRC® |
| D1.4/D1.4M—2018-AMD1 | Structural Welding Code—Steel Reinforcing Bars | IBC |

| AWWA | American Water Work Association | | | |
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| **Standard Reference Number** | **Title** | **Referenced in Code(s):** | | |
| C110/A21.10~~—12~~ 21 | ~~Standard for~~ Ductile Iron & Gray Iron Fittings | IMC | IPC | IRC® |
| C115/A21.15~~—11~~ 20 | ~~Standard for~~ Flanged Ductile-iron Pipe with Ductile Iron or Grey-iron Threaded Flanges | IMC | IPC | IRC® |
| C153/A21.53~~—11~~ 19 | Ductile-iron Compact Fittings for Water Service | IMC | | IRC® |
| C500~~—09~~ 19 | Standard for Metal-seated Gate Valves for Water Supply Service | IPC | | IRC® |
| C507~~—15~~ 18 | Standard for Ball Valves, 6 In. Through 60 in. (150 mm through 1,500 mm). | IPC | | IRC® |
| C510~~—07~~ 17 | Double Check Valve Backflow Prevention Assembly | IRC® | | |
| C652~~—11~~ 19 | Disinfection of Water-storage Facilities | IPC | | |
| C901~~—16~~ 20 | Polyethylene (PE) Pressure Pipe and Tubing, 3/4 in. (19 mm) through 3 in. (76 mm) for Water Service | IMC | IPC | IRC® |
| C903~~—16~~ 21 | Polyethylene-aluminum-polyethylene (PE-AL-PE) Composite Pressure Pipe, 12 mm ($^1/_2$ in.) through 50 mm (2 in.), for Water Service | IRC® | | |

| CGA | Compressed Gas Association | |
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| **Standard Reference Number** | **Title** | **Referenced in Code(s):** |

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| ANSI/CGA P-18—~~(2013)~~ (2018) | Standard for Bulk Inert Gas Systems | IFC | |
| C-7—~~(2014)~~ (2020) | Guide to Classification and Labeling of Compressed Gases | IFC | |
| S-1.1—~~(2011)~~ (2019) | Pressure Relief Device Standards—Part 1—Cylinders for Compressed Gases | IFGC | IFC |
| S-1.2—~~(2009)~~ 2019 | Pressure Relief Device Standards—Part 2—Cargo and Portable Tanks for Compressed Gases | IFGC | IFC |
| S-1.3—~~(2008)~~ (2020) | Pressure Relief Device Standards—Part 3—Stationary Storage Containers for Compressed Gases | IFGC | IFC |
| V-1—~~(2013)~~ (2021) | Standard for Gas Cylinder Valve Outlet and Inlet Connections | IFC | |

| CISPI | Cast Iron Soil Pipe Institute | | | |
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| **Standard Reference Number** | **Title** | **Referenced in Code(s):** | | |
| 301—~~18~~ 21 | Standard Specification for Hubless Cast-iron Soil Pipe and Fittings for Sanitary and Storm Drain, Waste and Vent Piping Applications | IPC | IPSDC | IRC® |
| 310—~~18~~ 20 | 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 | IPC | IPSDC | IRC® |

| CPA | Composite Panel Association | | |
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| **Standard Reference Number** | **Title** | **Referenced in Code(s):** | |
| ANSI A135.4—2012 (R2020) | Basic Hardboard | IBC | IRC® |
| ANSI A135.5—2012 (R2020) | Prefinished Hardboard Paneling | IBC | IRC® |
| ANSI A135.6—~~2012~~ (R2020) | Engineered Wood Siding | IBC | IRC® |

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| ANSI A135.7—2012 (R2020) | Engineered Wood Trim | IRC® | | |

| CRRC | Cool Roof Rating Council | | | |
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| **Standard Reference Number** | **Title** | **Referenced in Code(s):** | | |
| ANSI/CRRC-S100—~~2020~~ 2021 | Standard Test Methods for Determining Radiative Properties of Materials | IECC® | | |

| CSA | Canadian Standards Association | | | |
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| **Standard Reference Number** | **Title** | **Referenced in Code(s):** | | |
| ~~ANSI/CSA FC I—2014~~ CSA/ANSI FC 1:21/CSA C22.2 NO. 62282-2-100:21 | Fuel Cell Technologies—Part 3-100; Stationary fuel cell power systems—Safety | IFGC | IMC | IRC® |
| ~~ANSI/CSA FC1—2014~~ CSA/ANSI FC 1:21/CSA C22.2 NO. 62282-3-100:21 | Fuel Cell Technologies—Part 3-100; Stationary fuel cell power systems-Safety | IFGC | IMC | |
| ~~ANSI/CSA~~ CSA/ANSI NGV 5.1—~~2016~~ :22 | Residential Fueling Appliances | IFGC | | |
| ~~CAN/~~CSA~~/~~C22.2 No. 60335-2-40—~~2012~~ :19 | ~~Safety of~~ Household and Similar Electrical Appliances, Part 2-40: Particular Requirements for Electrical Heat Pumps, Air-Conditioners and Dehumidifiers | IMC | ISPSC | IRC® |
| A257.1—~~14~~ :19 | Non-reinforced Circular Concrete Culvert, Storm Drain, Sewer Pipe and Fittings | IPC | | |
| A257.2—~~14~~ :19 | Reinforced Circular Concrete Culvert, Storm Drain, Sewer Pipe and Fittings | IPC | IPSDC | IRC® |
| A257.3—~~14~~ : 19 | Joints for Circular Concrete Sewer and Culvert Pipe, Manhole Sections and Fittings Using Rubber Gaskets | IPC | IPSDC | IRC® |
| AAMA/WDMA/CSA 101/I.S.2/A440—~~17~~ 22 | North American Fenestration Standard/Specifications for Windows, Doors and Unit Skylights | IBC | IECC® | IRC® |
| ANSI Z21.69-2015 (R2020)/CSA 6.16—~~2015~~ (R2020) | Connectors for Movable Gas Appliances | IFC | IRC | |

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| ANSI Z83.26/CSA 2.37—2014 | Gas-fired Outdoor Infrared Patio Heaters | IFC | |
| ANSI/CSA/IGSHPA C448 Series —16 (R2021) | Design and Installation of Ground Source Heat Pump Systems for Commercial and Residential Buildings | IMC | IRC® |
| ASME A112.18.1—~~2018~~ 2022/CSA B125.1—~~18~~ :22 | Plumbing Supply Fittings | IPC | |
| ASME A112.18.1—~~2018~~ 2023/CSA B125.1—~~2018~~ :23 | Plumbing Supply Fittings | IRC® | |
| ASME A112.18.2—2019/CSA B125.2—~~2019~~ 2023 | Plumbing Waste Fittings | IRC® | |
| ASME A112.18.2—~~2015~~ 2023/CSA B125.2—~~2015~~ 2023 | Plumbing Waste Fittings | IPC | |
| ASME A112.18.6—~~2017~~/CSA B125.6— 17(R2022) | Flexible Water Connectors | IPC | |
| ASME A112.19.1—~~2018~~ 2023/CSA B45.2—~~18~~ :23 | Enameled Cast-iron and Enameled Steel Plumbing Fixtures | IRC® | |
| ASME A112.19.1—~~2020~~ 2023/CSA B45.2—~~20~~ :23 | Enameled Cast-iron and Enameled Steel Plumbing Fixtures | IPC | |
| ASME A112.19.2—~~2018~~ 2023/CSA B45.1—~~18~~ :23 | Ceramic Plumbing Fixtures | IRC® | |
| ASME A112.19.2—~~2020~~ :23/B45.1—~~2020~~ :23 | Ceramic Plumbing Fixtures | IPC | |
| ASME A112.19.3—~~2017~~ 2022/CSA B45.4—~~2017~~ 22 | Stainless Steel Plumbing Fixtures | IRC® | |
| ASME A112.19.3—~~2021~~ 2022/CSA B45.4— ~~2021~~ :22 | Stainless Steel Plumbing Fixtures | IPC | |
| ASME A112.19.5—~~2021~~ 22/CSA B45.15—~~21~~ 22 | Flush Valves and Spuds for Water Closets, Urinals and Tanks | IPC | |
| ASME A112.19.7—2020/CSA B45.10 :20~~1221 2012 (R20 )~~ | Hydromassage Bathtub Systems | IPC | |

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| ASME A112.3.4—~~2013~~ 2018/CSA B45.9—18 (R2023) | Macerating Toilet Systems and Related Components | IRC® | | |
| ASME A112.3.4—2018/CSA B45.9— 2018 ~~18~~ (R2023) | Macerating Toilet Systems and Waste Pumping Systems for Plumbing Fixtures | IPC | | |
| ASME A112.4.2—~~2020~~ 2021/CSA B45.16—~~20~~ 21 | Personal Hygiene Devices for Water Closet s | IPC | | |
| ASME A112.4.2—~~2015~~ 2021/CSA B45.16—~~15~~ 21 | Personal Hygiene Devices for Water-closet s | IRC® | | |
| ASME A17.1/CSA B44—~~2019~~ 2022 | Safety Code for Elevators and Escalators | IRC® | | |
| ASME A17.1—~~2019~~ 2023/CSA B44-— 23 | Safety Code for Elevators and Escalators | IBC | | |
| ASME A17.7—2007/CSA B44.7 —~~07(R2017)~~ 07(R2021) | Performance-based Safety Code for Elevators and Escalators | IBC | | |
| ASSE 1002—2020/ASME A112.1002—2020/CSA B125.12 —2020 | Anti-Siphon Fill Valves for Water Closet Tanks | IPC | | |
| ASSE 1016—2017/ASME 112.1016—2017/CSA B125.16 —~~2017~~ (R2022) | Performance Requirements for Automatic Compensating Valves for Individual Showers and Tub/Shower Combinations | IPC | IRC® | |
| ASSE 1037—~~2015~~ 2020/ASME A112.1037—~~2015~~ 2020/CSA B125.37—~~15~~ :20 | Performance requirements for Pressurized Flushing Devices for Plumbing Fixtures | IPC | | |
| ASSE 1070—2020/ASME A112.1070—2020/CSA B125.~~10~~70— :20 | Performance requirements for Water Temperature Limiting Devices | IPC | | |
| ASSE 1070—~~2015~~ 2020/ASME A112.1070—~~2015~~ 2020/CSA B125.70—~~15~~ :20 | Performance Requirements for Water-temperature-limiting Devices | IRC® | | |
| B125.3—~~18~~ :23 | Plumbing Fittings | IPC | IRC® | |
| B137.10—~~17~~ :23 | Cross-linked Polyethylene/Aluminum/Cross-linked Polyethylene (PEX-AL-PEX) Composite Pressure-pipe Systems | IMC | IPC | IRC® |

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| B137.11—~~17~~ :23 | Polypropylene (PP-R) Pipe and Fittings for Pressure Applications | IMC | | IPC | | IRC® |
| B137.18—~~17~~ :23 | Polyethylene of Raised Temperature Resistance (PE-RT) Tubing Systems for Pressure Applications | IMC | | IPC | | IRC® |
| B137.1—~~17~~ : 23 | Polyethylene (PE) Pipe, Tubing and Fittings for Cold-water Pressure Services | IMC | | IPC | | IRC® |
| B137.2—~~17~~ :23 | Polyvinylchloride (PVC) Injection-moulded Gasketed Fittings for Pressure Applications | IMC | IPC | | ISPSC | IRC® |
| B137.3—~~17~~ :23 | Rigid ~~Poly (Vinyl Chloride)~~ polvinylchloride (PVC) Pipe and Fittings for Pressure Applications | IMC | IPC | IPSDC | ISPSC | IRC® |
| B137.5—~~17~~ :23 | Cross-linked Polyethylene (PEX) Tubing Systems for Pressure Applications | IMC | | IPC | | IRC® |
| B137.6—~~17~~ :23 | Chlorinated Polyvinylchloride (CPVC) Pipe, Tubing and Fittings for Hot- and Cold-water Distribution Systems | IMC | IPC | | ISPSC | IRC® |
| B137.9—~~17~~ :23 | Polyethylene/Aluminum/Polyethylene (PE-AL-PE) Composite Pressure-pipe Systems | IMC | | IPC | | IRC® |
| B181.1—~~18~~ :21 | Acrylonitrile-Butadiene-Styrene ABS Drain, Waste and Vent Pipe and Pipe Fittings | IPC | | IPSDC | | IRC® |
| B181.2—~~18~~ :21 | Polyvinylchloride PVC and Chlorinated Polyvinylchloride (CPVC) Drain, Waste, and Vent Pipe and Pipe Fittings | IPC | | IPSDC | | IRC® |
| B181.3—~~18~~ :21 | Polyolefin and Polyvinylidene Fluoride (PVDF) Laboratory Drainage Systems | IPC | | | IRC® | |
| B182.13—~~18~~ :21 | Profile Polypropylene (PP) Sewer Pipe and Fittings for Leak-proof Sewer Applications | IPC | | | | |
| B182.1—~~18~~ :21 | Plastic Drain and Sewer Pipe and Pipe Fittings | IPC | | IPSDC | | IRC® |

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| B182.2—18 :21 | PSM Type Polyvinylchloride PVC Sewer Pipe and Fittings | IPC | IPSDC | IRC® |
| B182.4—18 :21 | Profile Polyvinylchloride PVC Sewer Pipe and Fittings | IPC | IPSDC | IRC® |
| B182.6—18 :21 | Profile Polyethylene (PE) Sewer Pipe and Fittings for Leak-proof Sewer Applications | IPC | | IRC® |
| B182.8—18 :21 | Profile Polyethylene (PE) Storm Sewer and Drainage Pipe and Fittings | IPC | | IRC® |
| 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(R2017) :22 | Drinking Water Treatment Systems | IPC | | IRC® |
| B55.1—2015 20 | Test Method for Measuring Efficiency and Pressure Loss of Drain Water Heat Recovery Units | IECC® | | IRC® |
| B55.2—2015 :20 | Drain Water Heat Recovery Units | IRC® | | |
| B602—16 :20 | Mechanical Couplings for Drain, Waste and Vent Pipe and Sewer Pipe | IPC | IPSDC | IRC® |
| B64.1.1—11(R2016) :21 | Atmospheric Type Vacuum Breakers, (AVB) | IPC | | IRC® |
| B64.1.2—11(R2016) :21 | Pressure Vacuum Breakers, (PVB) | IPC | | IRC® |
| B64.1.3—11(R2016) :21 | Spill-rResistant pPressure vVacuum bBreakers (SRPVB) | IPC | | IRC® |
| B64.10—17 | Manual for the Selection and Installation of Backflow Prevention Devices Preventers | IPC | | |
| B64.2.1.1—11(2016) :21 | Hose Connection Dual Check Vacuum Breakers (HCDVB) | IPC | | IRC® |

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| B64.2.1—11(2016) :21 | Hose Connection Vacuum Breakers, (HCVB) with Manual Draining Feature | IPC | |
| B64.2.1—11(R2016) :21 | Hose Connection Vacuum Breakers (HCVB) with Manual Draining Feature | IRC® | |
| B64.2.2—11(2016) :21 | Hose Connection Vacuum Breakers, Type (HCVB) with Automatic Draining Feature | IPC | IRC® |
| B64.2—11(R2016) :21 | Hose Connection Vacuum Breakers, Type (HCVB) | IPC | IRC® |
| B64.3—11(2016) :21 | Dual Check Valve Backflow Preventers with Atmospheric Port (DCAP) | IRC® | |
| B64.3—11(R2016) :21 | Backflow Preventers, Dual Check Valve Type with Atmospheric Port (DCAP) | IPC | |
| B64.4.1—11(2016) :21 | Reduced Pressure Principle backflow preventers for Fire Sprinklers (RPF) protection systems (RPF) | IPC | IRC® |
| B64.4.1—11(R2016) :21 | Reduced Pressure Principle for Fire Sprinklers (RPF) | IPC | |
| B64.4—11(2016) :21 | Reduced Pressure Principle Type (RP) Backflow Preventers, | IRC® | |
| B64.4—11(R2016) :21 | Backflow Preventers, Reduced Pressure Principle Type (RP) | IPC | |
| B64.5.1—11(R2016) :21 | Double Check Valve Backflow Preventers for Fire Protection Systems (DCVAF) | IPC | |
| B64.5.1—11(2016) :21 | Double Check Valve Backflow Preventers, Type for Fire Systems (DCVAF) | IRC® | |
| B64.5—11(R2016) :21 | Double Check Valve Backflow Preventers (DCVA) | IPC | |
| B64.5—11(2016) :21 | Double Check Valve Backflow Preventers (DCVA) | IRC® | |

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| B64.6—~~11(2016)~~ :21 | Dual Check Valve Backflow Preventers (DuC) | IRC® | | |
| B64.6—~~11(R2016)~~ :21 | Dual Check Valve (DuC) Backflow Preventers | IPC | | |
| B64.7—~~11(2016)~~ :21 | Laboratory Faucet Vacuum Breakers (LFVB) | IRC® | | |
| B64.7—~~11(R2016)~~ :21 | Laboratory Faucet Vacuum Breakers (LFVB) | IPC | | |
| B79—08(R2018) | Commercial and Residential Drains and Cleanouts | IPC | | |
| C22.2 No. 108—14(R2019) | Liquid Pumps | ISPSC | | |
| C22.2 No. 236—15 | Heating and Cooling Equipment | IMC | ISPSC | IRC® |
| CSA B45.5—~~17~~ :22/IAPMO Z124—~~2017 with errata dated August 2017~~ 2022 | Plastic Plumbing Fixtures | IPC | | |
| CSA B45.5—~~2017~~ :22/IAPMO Z124—~~2017 with Errata dated August 2017~~ 2022 | Plastic Plumbing Fixtures | IRC® | | |
| CSA B55.1—~~2015~~ :20 | Test Method for Measuring Efficiency and Pressure Loss of Drain Water Heat Recovery Units | IECC® | | |
| CSA B55.2—~~2015~~ :20 | Drain Water Heat Recovery Units | IECC® | IRC® | |
| CSA B805-~~18~~ 17/ICC 805-2018 (R2023) | Rainwater Harvesting Systems | IPC | | |
| CSA O325—~~16~~ :21 | Construction Sheathing | IRC® | | |
| CSA/ANSI NGV 2—~~2016~~ :19 | Compressed Natural Gas Vehicle Fuel Containers | IFC | | |
| CSA/ANSI NGV 5.1—~~2016~~ :22 | Residential Fueling Appliances | IFC | | |
| CSA/ANSI NGV 5.2—~~2017~~ :22 | Vehicle Fueling Appliances (VFA) | IFGC | IFC | |
| Z21.56a/CSA 4.7—2017 | Gas Fired Pool Heaters | ISPSC | | |

| CTI | Cooling Technology Institute | | |
|---|---|---|---|
| **Standard Reference Number** | **Title** | **Referenced in Code(s):** | |
| ATC 105DS—~~2018~~ 2019 | Acceptance Test Code for Dry Fluid Coolers | IECC® | |
| ATC 105S—~~11~~ 2021 | Acceptance Test Code for Closed Circuit Cooling Towers | IECC® | |
| CTI STD 201 RS~~(17)~~ 2021 | Performance Rating of Evaporative Heat Rejection Equipment | IECC® | |

| DASMA | Door & Access Systems Manufacturers Association International | | |
|---|---|---|---|
| **Standard Reference Number** | **Title** | **Referenced in Code(s):** | |
| ANSI/DASMA 105—~~2017~~ 2020 | Test Method for Thermal Transmittance and Air Infiltration of Garage Doors and Rolling Doors | IECC® | IRC® |
| ANSI/DASMA 107—~~2017~~ 2020 | Room Fire Test Standard for Garage Doors Using Foam Plastic Insulation | IBC | |

| DHA | Decorative Hardwoods Association | | |
|---|---|---|---|
| **Standard Reference Number** | **Title** | **Referenced in Code(s):** | |
| ANSI/HPVA HP-1—~~2016~~ 2022 | American National Standard for Hardwood and Decorative Plywood | IBC | IRC® |

| DOC | U.S. Department of Commerce | | |
|---|---|---|---|
| **Standard Reference Number** | **Title** | **Referenced in Code(s):** | |
| PS 1—~~19~~ 22 | Structural Plywood | IBC | IRC® |
| PS 20—~~05~~ 20 | American Softwood Lumber Standard | IBC | IRC® |
| PS 2—18 | Performance Standard for Wood-~~based~~ Structural ~~use~~ Panels | IBC | IRC® |

| FEMA | Federal Emergency Management Agency |
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| Standard Reference Number | Title | Referenced in Code(s): |
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| FEMA TB-11—~~01~~ 23 | Crawlspace Construction for Buildings Located in Special Flood Hazard Area | IRC® |
| FEMA TB-2—~~08~~ 23 | Flood Damage-resistant Materials Requirements | IRC® |
| FEMA-TB-11—~~01~~ 23 | Crawlspace Construction for Buildings Located in Special Flood Hazard Areas | IBC |

| FGIA | Fenestration & Glazing Alliance (formerly AAMA) | | |
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| **Standard Reference Number** | **Title** | **Referenced in Code(s):** | |
| 711—~~20~~ 23 | Voluntary Specification for Self Adhering Flashing Used for Installation of Exterior Wall Fenestration Products | IBC | IRC® |
| 712—~~14~~ 23 | Voluntary Specification for Mechanically Attached Flexible Flashing | IRC® | |
| 714—~~20~~ 23 | Voluntary Specification for Liquid Applied Flashing Used to Create a Water-resistive Seal around Exterior Wall Openings in Buildings | IBC | IRC® |
| AAMA/NSA 2100—~~20~~ 22 | Specifications for Sunrooms | IRC® | |
| AAMA/WDMA/CSA 101/I.S.2/A ~~C~~440—~~17~~ 22 | North American Fenestration Standard/Specifications for Windows, Doors and Unit Skylights | IECC® | |

| FM | FM Approvals | | |
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| **Standard Reference Number** | **Title** | **Referenced in Code(s):** | |
| 4474—~~2011~~ 2020 | American National Standard for Evaluating the Simulated Wind Uplift Resistance of Roof Assemblies Using Static Positive and/or Negative Differential Pressures | IBC | IRC® |

| GA | Gypsum Association |
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| Standard Reference Number | Title | Referenced in Code(s): |
|---|---|---|
| GA 216—~~2018~~ 2021 | Application and Finishing of Gypsum Panel Products | IBC |
| GA 600—~~2018~~ 2021 | Fire-resistance and Sound Control Design Manual, ~~22nd~~ 23rd Edition | IBC |
| GA-253—~~2018~~ 2021 | Application of Gypsum Sheathing | IRC® |

| IAPMO | IAPMO Group | |
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| **Standard Reference Number** | **Title** | **Referenced in Code(s):** |
| ANSI/CAN/IAPMO Z1001—~~2016~~ 2021 | Prefabricated Gravity Grease Interceptors | IPC |
| ASPE/IAPMO Z1034-2015(R2020) | Test Method for Evaluating Roof Drain Performance | IPC |
| CSA B45.5—~~17~~ :22 /IAPMO Z124—~~2017~~ 2022 ~~with errata dated August 2017~~ | Plastic Plumbing Fixtures | IPC |
| IAPMO Z124.7—2013(R2018) | Prefabricated Plastic Spa Shells | ISPSC |
| IAPMO/ANSI Z1157—2014e1(R2019) | Ball Valves | IPC |

| IES | Illuminating Engineering Society | |
|---|---|---|
| **Standard Reference Number** | **Title** | **Referenced in Code(s):** |
| ANSI/ASHRAE/IES~~NA~~ 90.1—~~2019~~ 2022 | Energy Standard for Buildings, Except Low-rise Residential Buildings | IECC® |

| IIAR | International Institute of Ammonia Refrigeration | |
|---|---|---|
| **Standard Reference Number** | **Title** | **Referenced in Code(s):** |
| ANSI/IIAR 2—~~2014, including Addendum A~~ 2021 | Design of Safe Closed-circuit Ammonia Refrigeration Systems | IFC |

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|---|---|---|
| ANSI/IIAR 9—~~2018~~ 2020 | ~~Standard for Recognized and Generally Accepted Good Engineering Practices (RAGAGEP) for Existing Closed-circuit Ammonia Refrigeration Systems~~ Minimum System Safety Requirements for Existing Closed-Circuit Ammonia Refrigeration Systems | IFC |

| IKECA | International Kitchen Exhaust Cleaning Association | |
|---|---|---|
| **Standard Reference Number** | **Title** | **Referenced in Code(s):** |
| ANSI/IKECA C10—~~2016~~ 2021 | Standard for the Methodology for Cleaning of Commercial Kitchen Exhaust Systems | IFC |

| MHI | Material Handling Institute | |
|---|---|---|
| **Standard Reference Number** | **Title** | **Referenced in Code(s):** |
| ANSI MH29.1—~~08~~ 2020 | Safety Requirements for Industrial Scissors Lifts | IBC |
| ANSI/MH16.1—~~12~~ 2021 | Design, Testing and Utilization of Industrial Steel Storage Racks | IBC |

| MSS | Manufacturers Standardization Society of the Valve and Fittings Industry | | | |
|---|---|---|---|---|
| **Standard Reference Number** | **Title** | **Referenced in Code(s):** | | |
| ANSI SP 58—~~2018~~ 2023 | Pipe Hangers and Supports—Materials, Design and Manufacture, Selection, Application and Installation | IFGC | IMC | IRC® |
| SP-110—~~2010~~ 2023 | Ball Valves, Threaded, Socket Welding, Solder Joint, Grooved and Flared Ends (incl. a 2010 Errata Sheet) | IPC | | IRC® |
| SP-122—~~2017~~ 2023 | Plastic Industrial Ball Valves | IPC | | IRC® |
| SP-139—~~2014~~ 2022 | Copper Alloy Gate, Globe, Angle and Check Valves for Low Pressure/Low Temperature Plumbing Applications | IPC | | IRC® |

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| SP-42—~~2013~~ 2022 | Corrosion Resistant Gate, Globe, Angle and Check Valves with Flanged and Butt Weld Ends (Glasses 150, 300 & 600) | IRC® | |
| SP-67—~~2011~~ 2022 | Butterfly Valves | IPC | IRC |
| SP-70—~~2011~~ 2023 | Gray Iron Gate Valves, Flanged and Threaded Ends | IPC | IRC® |
| SP-70—~~2013~~ 2023 | Gray Iron Gate Valves, Flanged and Threaded Ends | IPC | |
| SP-72—~~2010a~~ 2023 | Ball Valves with Flanged or Butt-welding Ends for General Service | IPC | IRC® |
| SP-78—~~2011~~ 2023 | Cast Iron Plug Valves, Flanged and Threaded Ends | IPC | |
| SP-78—~~2011~~ 2023 | Cast Iron Plug Valves, Flanged and Threaded Ends | IRC® | |
| SP-80—~~2013~~ 2019 | Bronze Gate, Globe, Angle and Check Valves | IPC | IRC® |

| NBBI | National Board of Boiler and Pressure Vessel Inspectors | |
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| **Standard Reference Number** | **Title** | **Referenced in Code(s):** |
| NBIC—~~2017~~ 2023 | National Board Inspection Code, Part 3 (ANSI/NB23) | IMC |

| NCMA | National Concrete Masonry Association | |
|---|---|---|
| **Standard Reference Number** | **Title** | **Referenced in Code(s):** |
| TEK 5—~~84~~ B(2005) | ~~Details~~ Detailing ~~for~~ Concrete Masonry Fire Walls | IBC |

| NEMA | National Electrical Manufacturers Association | |
|---|---|---|
| **Standard Reference Number** | **Title** | **Referenced in Code(s):** |
| 250—~~2018~~ 2020 | Enclosures for Electrical Equipment (1,000 Volt Maximum) | IFC |
| ~~NEMA~~ ANSI Z535.1—2017 | ~~ANSI/NEMA Color Chart~~ American National Standard for Safety Colors | ISPSC |

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| NEMA MG1—2016 | Motors and Generators | IECC® | | | |

| NFPA | National Fire Protection Association | | | | |
|---|---|---|---|---|---|
| **Standard Reference Number** | **Title** | **Referenced in Code(s):** | | | |
| 02—~~19~~ 23 | Hydrogen Technologies Code | IFC | | | |
| 04—~~21~~ 24 | Standard for Integrated Fire Protection and Life Safety System Testing | IBC | | IFC | |
| 105—~~19~~ 22 | Standard for Smoke Door Assemblies and Other Opening Protectives | IMC | IPMC | IBC | IFC |
| 10—~~21~~ 22 | Standard for Portable Fire Extinguishers | IPMC | IBC | IFC | |
| 110—~~19~~ 22 | Standard for Emergency and Standby Power Systems | IBC | | IFC | |
| 111—~~19~~ 22 | Standard on Stored Electrical Energy Emergency and Standby Power Systems | IBC | | IFC | |
| 1123—~~18~~ 22 | Code for Fireworks Display | IFC | | | |
| 1124—~~06~~ 22 | Code for the Manufacture, Transportation, Storage and Retail Sales of Fireworks and Pyrotechnic Articles | IFC | | | |
| 1124—~~17~~ 22 | Code for the Manufacture, Transportation and Storage of Fireworks and Pyrotechnic Articles | IBC | | IFC | |
| 1125—~~17~~ 22 | Code for the Manufacture of Model Rocket and High-power Rocket Motors | IFC | | | |
| 1142—~~17~~ 22 | Standard on Water Supplies for Suburban and Rural Fire Fighting | IFC | | | |
| 11—~~16~~ 21 | Standard for Low-, Medium, and High Expansion Foam | IBC | | IFC | |
| 12A—~~18~~ 22 | Standard on Halon 1301 Fire Extinguishing Systems | IPMC | IBC | IFC | |

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| 12—~~15~~ 22 | Standard on Carbon Dioxide Extinguishing Systems | IBC | | | |
| 12—~~18~~ 22 | Standard on Carbon Dioxide Extinguishing Systems | IPMC | IFC | | |
| 13D—~~19~~ 22 | Standard for the Installation of Sprinkler Systems in One- and Two-family Dwellings and Manufactured Homes | IBC | IFC | IRC® | |
| 13R—~~19~~ 22 | Standard for the Installation of Sprinkler Systems in Low-rise Residential Occupancies | IBC | IFC | IRC® | |
| 13—~~19~~ 22 | Standard for Installation of Sprinkler Systems, 2022 and 2019 editions | IBC | IFC | | |
| 14—~~19~~ 22 | Standard for the Installation of Standpipe and Hose System | IBC | IFC | | |
| 15—~~17~~ 22 | Standard for Water Spray Fixed Systems for Fire Protection | IFC | | | |
| 170—~~18~~ 21 | Standard for Fire Safety and Emergency Symbols | IBC | IFC | | |
| 2001—~~18~~ 22 | Standard on Clean Agent Fire Extinguishing Systems | IPMC | IBC | IFC | |
| 204—~~18~~ 21 | Standard for Smoke and Heat Venting | IPMC | IFC | | |
| 20—~~19~~ 22 | Standard for the Installation of Stationary Pumps for Fire Protection | IBC | IFC | | |
| 211—~~19~~ 22 | Standard for Chimneys, Fireplaces, Vents and Solid Fuel-burning Appliances | IFGC | IMC | IBC | IRC® |
| 221—~~21~~ 24 | Standard for High Challenge Fire Walls, Fire Walls and Fire Barrier Walls | IBC | | | |
| 22—~~18~~ 23 | Standard for Water Tanks for Private Fire Protection | IFC | | | |
| 232—~~17~~ 22 | Standard for the Protection of Records | IFC | | | |

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| 241—~~19~~ 22 | Standard for Safeguarding Construction, Alteration and Demolition Operations | IFC | |
| 24—~~19~~ 22 | Standard for Installation of Private Fire Service Mains and Their Appurtenances | IFC | |
| 252—~~17~~ 22 | Standard Methods of Fire Tests of Door Assemblies | IBC | |
| 253—~~19~~ 23 | Standard Method of Test for Critical Radiant Flux of Floor Covering Systems Using a Radiant Heat Energy Source | IBC | IFC |
| 257—~~17~~ 22 | Standard for Fire Test for Window and Glass Block Assemblies | IBC | |
| 259—~~18~~ 23 | Standard Test Method for Potential Heat of Building Materials | IBC | IRC® |
| 25—~~20~~ 23 | Standard for the Inspection, Testing and Maintenance of Water-based Fire Protection Systems | IPMC | IFC |
| 260—~~19~~ 23 | Methods of Tests and Classification System for Cigarette Ignition Resistance of Components of Upholstered Furniture | IFC | |
| 261—~~18~~ 23 | Standard Method of Test for Determining Resistance of Mock-up Upholstered Furniture Material Assemblies to Ignition by Smoldering Cigarettes | IFC | |
| 262—~~19~~ 23 | Standard Method of Test for Flame Travel and Smoke of Wires and Cables for Use in Air-handling Spaces | IMC | |
| 265—~~19~~ 23 | 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 | IFC |

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| 268—~~19~~ 22 | Standard Test Method for Determining Ignitability of Exterior Wall Assemblies Using a Radiant Heat Energy Source | IBC | | | |
| 275—~~17~~ 22 | Standard Method of Fire Tests for the Evaluation of Thermal Barriers | IBC | | IRC® | |
| 276—19 | Standard Method of Fire Tests for Determining the Heat Release Rate of Roofing Assemblies with Combustible Above-deck Roofing Components | IBC | | | |
| 276—~~15~~ 23 | Standard Method of Fire Tests for Determining the Heat Release Rate of Roofing Assemblies with Combustible Above-Deck Roofing Components | IRC® | | | |
| 285—~~19~~ 22 | Standard Fire Test Method for the Evaluation of Fire Propagation Characteristics of Exterior ~~Nonload-bearing Wall Assemblies Containing Combustible Components~~ | IBC | | | |
| 286—~~15~~ 23 | Standard Methods of Fire Test for Evaluating Contribution of Wall and Ceiling Interior Finish to Room Fire Growth | IBC | | | |
| 288—~~17~~ 22 | Standard Methods of Fire Tests of Horizontal Fire Door Assemblies Installed in Horizontal in Fire-resistance-~~related floor Systems~~ Rated Assemblies | IBC | | | |
| 289—~~19~~ 23 | Standard Method of Fire Test for Individual Fuel Packages | IBC | | IFC | |
| 2—19 | Hydrogen Technologies Code | IFGC | | IMC | |
| 30A—~~21~~ 24 | Code for Motor Fuel Dispensing Facilities and Repair Garages | IFGC | IMC | IBC | IFC |
| 30B—~~19~~ 23 | Code for the Manufacture and Storage of Aerosol Products | IFC | | | |
| 30—~~21~~ 24 | Flammable and Combustible Liquids Code | IBC | | IFC | |

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| 318—~~18~~ 22 | Standard for the Protection of Semiconductor Fabrication Facilities | IFC | | |
| 32—~~16~~ 21 | Standard for Dry Cleaning Facilities | IBC | IFC | |
| 33—~~18~~ 21 | Standard for Spray Application Using Flammable or Combustible Materials | IFC | | |
| 34—~~18~~ 21 | Standard for Dipping, Coating and Printing Processes Using Flammable or Combustible Liquids | IFC | | |
| 35—~~16~~ 21 | Standard for the Manufacture of Organic Coatings | IFC | | |
| 37—~~18~~ 21 | Standard for the Installation and Use of Stationary Combustion Engines and Gas Turbines | IFGC | IMC | |
| 385—~~17~~ 22 | Standard for Tank Vehicles for Flammable and Combustible Liquids | IFC | | |
| 400—~~19~~ 22 | Hazardous Materials Code | IFC | | |
| 407—~~17~~ 22 | Standard for Aircraft Fuel Servicing | IFC | | |
| 409—~~16~~ 22 | Standard ~~for~~ on Aircraft Hangars | IFGC | IBC | IFC |
| 40—~~19~~ 22 | Standard for the Storage and Handling of Cellulose Nitrate Film | IBC | IFC | |
| 418—~~16~~ 21 | Standard for Heliports | IBC | | |
| 45—~~19~~ 23 | Standard on Fire Protection Laboratories Using Chemicals (2015 Edition) | IBC | IFC | |
| 484—~~19~~ 22 | Standard for Combustible Metals | IBC | IFC | |
| 495—~~18~~ 23 | Explosive Materials Code | IFC | | |
| 498—~~18~~ 23 | Standard for Safe Havens and Interchange Lots for Vehicles Transporting Explosives | IFC | | |

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| 501—~~17~~ 22 | Standard on Manufactured Housing | IRC® | | | |
| 505—~~18~~ 23 | Fire Safety Standard for Powered Industrial Trucks, Including Type Designations, Areas of Use, Maintenance and Operation | IFC | | | |
| 51—~~18~~ 23 | Design and Installation of Oxygen-fuel Gas Systems for Welding, Cutting and Allied Processes | IFGC | IPC | IFC | |
| 52—~~19~~ 22 | Vehicular Gaseous Fuel System Code | IFC | | | |
| 55—~~19~~ 23 | Compressed Gases and Cryogenic Fluids Code | IPC | IFC | | |
| 56—~~20~~ 23 | Standard for Fire and Explosion Prevention during Cleaning and Purging of Flammable Gas Piping Systems | IFC | | | |
| 58—~~17~~ 23 | Liquefied Petroleum Gas Code | IFGC | | | |
| 58—~~20~~ 23 | Liquefied Petroleum Gas Code | IMC | IBC | IFC | IRC® |
| 59A—~~19~~ 22 | Standard for the Production, Storage and Handling of Liquefied Natural Gas (LNG) | IFC | | | |
| 655—~~17~~ 19 | Standard for the Prevention of Sulfur Fires and Explosions | IBC | IFC | | |
| 68—~~13~~ 23 | Standard on Explosion Protection by Deflagration Venting | IFC | | | |
| 701—~~19~~ 23 | Standard Methods of Fire Tests for Flame Propagation of Textiles and Films | IBC | IFC | | |
| 703—~~21~~ 24 | Standard for Fire Retardant-treated Wood and Fire-retardant Coatings for Building Materials | IFC | | | |
| 704—~~17~~ 22 | Standard System for the Identification of the Hazards of Materials for Emergency Response | IMC | IBC | IFC | |

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| 72—~~19~~ 22 | National Fire Alarm and Signaling Code | IMC | | | | |
| 750—~~19~~ 23 | Standard on Water Mist Fire Protection Systems | IPMC | IBC | IFC | | |
| 76—~~16~~ 20 | Standard for the Fire Protection of Telecommunications Facilities | IFC | | | | |
| 77—~~14~~ 24 | Recommended Practice on Static Electricity | IFC | | | | |
| 780—~~17~~ 23 | Standard for the Installation of Lightning Protection Systems | IFC | | | | |
| 80—~~19~~ 22 | Standard for Fire Doors and Other Opening Protectives | IMC | IPMC | IBC | IFC | |
| 85—~~19~~ 23 | Boiler and Combustion System Hazards Code | IFGC | IMC | IBC | IFC | IRC® |
| 86—~~19~~ 23 | Standard for Ovens and Furnaces | IFC | | | | |
| 88A—~~19~~ 23 | Standard for Parking Structures | IFGC | | | | |
| 914—~~19~~ 23 | Code for Fire Protection of Historic Structures | IFC | | | | |
| 92—~~18~~ 21 | Standard for Smoke Control Systems | IMC | IBC | IFC | | |
| 96—~~20~~ 24 | Standard for Ventilation Control and Fire Protection of Commercial Cooking Operations | IMC | IFC | | | |
| 99—~~21~~ 24 | Health Care Facilities Code | IMC | IPC | IBC | IFC | |
| ~~1221~~ 1225—~~19~~ 2022 | Standard for the ~~Installation, Maintenance and Use of~~ Emergency Services Communications ~~Systems~~ | IFC | | | | |
| NFPA 101—~~21~~ 24 | Life Safety Code | IEBC | | | | |
| NFPA 13R—19 | Standard for the Installation of Sprinkler Systems in Residential Occupancies up to and Including Four Stories in Height | IEBC | | | | |

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| NFPA 99—21 | Health Care Facilities Code | IEBC | |

| NFRC | National Fenestration Rating Council, Inc. | | |
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| **Standard Reference Number** | **Title** | **Referenced in Code(s):** | |
| 100—~~2020~~ 2023 | Procedure for Determining Fenestration Products *U*-factors | IECC® | IRC® |
| 200—~~2020~~ 2023 | Procedure for Determining Fenestration Product Solar Heat Gain Coefficients and Visible Transmittance at Normal Incidence | IECC® | IRC® |
| 203—~~2017~~ 2023 | ~~Procedure for Determining Translucent Fenestration Product Visible Transmittance at Normal Incidence~~ Procedure for Determining Visible Transmittance of Tubular Daylighting Devices | IECC® | |
| 400—~~2020~~ 2023 | Procedure for Determining Fenestration Product Air Leakage | IECC® | IRC® |

| NSF | NSF International | | |
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| **Standard Reference Number** | **Title** | **Referenced in Code(s):** | |
| 14—~~2017~~ 2020 | Plastic Piping System Components and Related Materials | IMC | IRC® |
| 14—~~2018~~ 2020 | Plastic Piping System Components and Related Materials | IPC | |
| 184—~~2014~~ 2019 | Residential Dishwashers | IPC | |
| 18—~~2016~~ 2020 | Manual Food and Beverage Dispensing Equipment | IPC | |
| 350—~~2017a~~ 2020 | Onsite Residential and Commercial Water Reuse Treatment Systems | IPC | IRC® |
| 358-1—~~2017~~ 2021 | Polyethylene Pipe and Fittings for Water-based Ground-source “Geothermal” Heat Pump Systems | IMC | IRC® |

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| 358-3—~~2016~~ 2021 | Cross-linked Polyethylene (PEX) Pipe and Fittings for Water-based Ground-source (Geothermal) Heat Pump Systems | IMC | IRC® |
| 358-4—~~2017~~ 2018 | Polyethylene of Raised Temperature (PE-RT) Pipe and Fittings for Water-based Ground-source (Geothermal) Heat Pump Systems | IMC | IRC® |
| 359—~~2011(R2016)~~ 2018 | Valves for Crosslinked Polyethylene (PEX) Water Distribution Tubing Systems | IPC | IRC® |
| 372—~~2016~~ 2020 | Drinking Water Systems Components—Lead Content | IPC | IRC® |
| 3—~~2017~~ 2019 | Commercial Warewashing Equipment | IPC | |
| 40—~~2018~~ 2020 | Residential Wastewater Treatment Systems | IPSDC | |
| 41—~~2016~~ 2018 | Nonliquid Saturated Treatment Systems (Composing Toilets) | IPSDC | IRC® |
| 42—~~2017~~ 2021 | Drinking Water Treatment Units—Aesthetic Effects | IRC® | |
| 50—~~2017~~ 2020 | Equipment for Swimming Pools, Spas, Hot Tubs and Other Recreational Water Facilities | IPC | IRC® |
| 53—~~2017~~ 2020 | Drinking Water Treatment Units—Health Effects | IPC | IRC® |
| 58—~~2017~~ 2020 | Reverse Osmosis Drinking Water Treatment Systems | IPC | IRC® |
| 61—~~2018~~ 2020 | Drinking Water System Components—Health Effects | IPC | IRC® |
| 62—~~2017~~ 2021 | Drinking Water Distillation Systems | IPC | IRC® |

| **PDI** | **Plumbing and Drainage Institute** | |
|---|---|---|
| **Standard Reference Number** | **Title** | **Referenced in Code(s):** |

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|---|---|---|
| PDI G101 ~~(2012)~~ (2017) | Testing and Rating Procedure for Hydro Mechanical Grease Interceptors with Appendix of ~~Sizing and~~ Installation ~~Data~~ and Maintenance | IPC |

| PHTA | Pool & Hot Tub Alliance (formerly APSP) | |
|---|---|---|
| **Standard Reference Number** | **Title** | **Referenced in Code(s):** |
| ANSI/APSP/ICC 15—~~2011~~ 2021 | American National Standard for Residential Swimming Pool and Spa Energy Efficiency ~~Includes Addenda A Approved January 9, 2013~~ | ISPSC |
| ANSI/APSP/ICC 16—~~2017~~ 2022 | American National Standard for Suction Outlet Fittings (SOFA) for Use in Pools, Spas, and Hot Tubs | ISPSC |
| ANSI/APSP/ICC 4—~~2012~~ 2022 | American National Standard for Aboveground/Onground Residential Swimming Pools—~~Includes Addenda A Approved April 4, 2013~~ | ISPSC |
| ANSI/APSP/ICC/NPC 12 - ~~2016~~ 2023 | American National Standard for the Plastering of Swimming Pools | ISPSC |

| PLIB | Pacific Lumber Inspection Bureau (formerly WCLIB) | |
|---|---|---|
| **Standard Reference Number** | **Title** | **Referenced in Code(s):** |
| AITC 200—~~09~~ 20 | Manufacturing Quality Control Systems Manual for Structural Glued Laminated Timber | IBC |

| PSAI | Portable Sanitation Association International | |
|---|---|---|
| **Standard Reference Number** | **Title** | **Referenced in Code(s):** |
| ~~PSAI/ANSI~~ ANSI/PSAI Z4.3—20~~1~~6 | American National Standard: for Sanitation: ~~for~~ Non-sewered Waste-disposal Systems: Minimum Requirements | IPC |

| RESNET | Residential Energy Services Network, Inc. | |
|---|---|---|
| **Standard Reference Number** | **Title** | **Referenced in Code(s):** |

| | | |
|---|---|---|
| ANSI/RESNET/ICC 301—~~2019~~ 2022 | Standard for the Calculation and Labeling of the Energy Performance of Dwelling and Sleeping Units using an Energy Rating Index | IECC® |
| ANSI/RESNET/ICC 380—~~2019~~ 2022 | Standard for Testing Airtightness of Building, Dwelling Unit and Sleeping Unit Enclosures; Airtightness of Heating and Cooling Air Distribution Systems, and Airflow of Mechanical Ventilation Systems | IECC® |

| **RMI** | **Rack Manufacturers Institute** | |
|---|---|---|
| **Standard Reference Number** | **Title** | **Referenced in Code(s):** |
| ANSI/MH16.1—~~12~~ 21 | ~~Specification for~~ Design, Testing and Utilization of Industrial Steel Storage Racks | IBC |

| **SDI** | **Steel Deck Institute** | |
|---|---|---|
| **Standard Reference Number** | **Title** | **Referenced in Code(s):** |
| SDI ~~QA/QC~~ SD—~~2017~~ 2022 | ~~Standard for Quality Control and Quality Assurance for Installation of Steel Deck~~ Standard for Steel Deck | IBC |

| **SJI** | **Steel Joist Institute** | |
|---|---|---|
| **Standard Reference Number** | **Title** | **Referenced in Code(s):** |
| SJI 100—2020 | 45th Edition Standard Specifications, Load Tables and Weight Tables for K-Series, LH-Series, DLH-Series and Joist Girders | IBC |

| **SMACNA** | **Sheet Metal and Air Conditioning Contractors' National Association, Inc.** | | | |
|---|---|---|---|---|
| **Standard Reference Number** | **Title** | **Referenced in Code(s):** | | |
| ~~SMACNA/ANSI~~ ANSI/SMACNA 4th Edition~~—2016~~ 2020 | HVAC Duct Construction Standards—Metal and Flexible, ~~4th Edition (ANSI)~~ (ANSI/SMACNA 006-2020) | IFGC | IMC | IRC® |

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|---|---|---|
| ~~SMACNA/ANSI~~ ANSI/SMACNA ~~—~~ 2nd edition 2013 | Round Industrial Duct Construction Standards~~, 3rd Edition~~ (ANSI/SMACNA 005-2013) | IMC |
| ~~SMACNA/ANSI~~ ANSI/SMACNA ~~—2011~~ 2nd Edition 2004 | Rectangular Industrial Duct Construction Standards, ~~2nd Edition~~ (ANSI/SMACNA 002-2004) | IMC |
| SMACNA~~—~~ 1st edition 2015 | ~~SMACNA~~ Phenolic Duct Construction Standards~~, 1st Edition (ANSI)~~ (ANSI/SMACNA 022-2015) | IMC |
| SMACNA~~—10~~ 2021 | Fibrous Glass Duct Construction Standards ~~7th~~ 8th edition | IRC® |
| SMACNA~~—2010~~ 2021 | Fibrous Glass Duct Construction Standards~~, 7th Edition~~ 8th edition | IMC |
| SMACNA—2nd edition 2012 | HVAC Air Duct Leakage Test Manual ~~Second Edition~~ (ANSI/SMACNA 016-2012) | IECC® |

| **SPRI** | **Single-Ply Roofing Institute** | |
|---|---|---|
| **Standard Reference Number** | **Title** | **Referenced in Code(s):** |
| ANSI/SPRI GT-1~~—2016~~ 21 | Test Standard for Gutter Systems | IBC |
| ANSI/SPRI VF-1~~—17~~ 21 | External Fire Design Standard for Vegetative Roofs | IBC |
| ANSI/SPRI/FM 4435-ES-1~~—17~~ 21 | Wind Test Design Standard for Edge Systems Used with Low Slope Roofing Systems | IBC |

| **TIA** | **Telecommunications Industry Association** | |
|---|---|---|
| **Standard Reference Number** | **Title** | **Referenced in Code(s):** |
| ANSI/TIA 222-~~H—2017~~ I-2023 | Structural Standard for Antenna Supporting Structures, Antennas and Small Wind Turbine Support Structures | IBC |

| **TMS** | **The Masonry Society** |
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| Standard Reference Number | Title | Referenced in Code(s): | |
|---|---|---|---|
| 216—~~2013~~ 14 (19) | ~~Standard Method~~ Code Requirements for Determining Fire Resistance of Concrete and Masonry Construction Assemblies | IBC | |
| 302—2018 | Standard Method for Determining the Sound Transmission ~~Class~~ Rating s for Masonry ~~Walls~~ Assemblies | IBC | |
| 402—~~2016~~ 2022 | Building Code Requirements for Masonry Structures | IBC | IRC® |
| 404—~~2016~~ 2023 | Standard for the Design of Architectural Cast Stone | IBC | IRC® |
| 504—~~2016~~ 2023 | Standard for the Fabrication of Architectural Cast Stone | IBC | |
| 602—~~2016~~ 2022 | Specification for Masonry Structures | IBC | IRC® |
| 604—~~2016~~ 2023 | Standard for the Installation of Architectural Cast Stone | IBC | |

| TPI | Truss Plate Institute | | |
|---|---|---|---|
| **Standard Reference Number** | **Title** | **Referenced in Code(s):** | |
| ANSI/TPI 1—~~2014~~ 2022 | National Design Standard for Metal-plate-connected Wood Truss Construction | IBC | IRC® |

| UL | UL LLC | |
|---|---|---|
| **Standard Reference Number** | **Title** | **Referenced in Code(s):** |
| 1004-1—12 | Rotating Electrical Machines General Requirements—with revisions through ~~August 2018~~ November 2020 | ISPSC |
| 1026—2012 | Electric Household Cooking and Food Serving Appliances—with revisions through ~~July 2018~~ March 2021 | IRC® |

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|---|---|---|---|---|---|---|
| 103—2010 | Factory-built Chimneys, for Residential Type and Building Heating Appliances—with Revisions through ~~March 2017~~ September 2021 | IFGC | IMC | IBC | IRC® | |
| 1042—2009 | Electric Baseboard Heating Equipment—with revisions through ~~December 2016~~ February 2021 | IRC® | | | | |
| 1081—2016 | Swimming Pool Pumps, Filters and Chlorinators—with revisions through ~~October 2017~~ July 2020 | ISPSC | | | | |
| 109—97 | Tube Fittings for Flammable and Combustible Fluids, Refrigeration Service and Marine Use with revisions through May 2020 | IMC | | | | |
| 10A—2009 | Tin Clad Fire Doors—with Revisions through July 20, 2018 | IBC | | | | |
| 10B—2008 | Fire Tests of Door Assemblies—with Revisions through ~~February 2015~~ May 2020 | IBC | | | | |
| 10C—2016 | Positive Pressure Fire Tests of Door Assemblies - with revisions through May 2021 | IBC | IFC | | | |
| 10D—2017 | ~~Standard for~~ Fire Tests of Fire Protective Curtain Assemblies | IBC | | | | |
| 1240—2005 | Electric Commercial Clothes-Drying Equipment—with revisions through ~~March 2018~~ September 2021 | IMC | | | | |
| 1261—2001 | Electric Water Heaters for Pools and Tubs—with revisions through September 2017 | IMC | | | | |
| 1275—~~2014~~ 2021 | Flammable Liquid Storage Cabinets~~—with revisions through February 2018~~ | IFC | | | | |
| 127—2011 | Factory-built Fireplaces—with Revisions through ~~July 2016~~ February 2020 | IFGC | IMC | IBC | IECC® | IRC® |

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|---|---|---|---|---|
| 1316—~~1994~~ 2018 | ~~Glass~~ Fiber Reinforced ~~Plastic~~ Underground ~~Storage~~ Tanks for ~~Petroleum Products~~, ~~Alcohols and Alcohol-gasoline Mixtures~~ Flammable and Combustible Liquids—with revisions through ~~May 2006~~ March 2019 | IFC | | |
| 1369—18 | ~~Standard for~~ Aboveground Piping for Flammable and Combustible Liquids -with revisions through August 2020 | IMC | | |
| 1370—11 | Unvented Alcohol Fuel Burning Decorative Appliances—with revisions through March~~ 25,~~ 2016 | IMC | | |
| 1389—~~2017~~ 19 | Plant Oil Extraction~~ Units~~ Equipment for Installation and Use in Ordinary (Unclassified) Locations and Hazardous (Classified) Locations - with revisions through October 2020 | IFC | | |
| 142—2006 | Steel Aboveground Tanks for Flammable and Combustible Liquids—with revisions through ~~August 2014~~ January 2021 | IFC | | |
| 1479—2015 | Fire Tests of Penetration Firestops with revisions through May 2021 | IMC | IBC | IRC® |
| 1482—2011 | Solid-fuel Type Room Heaters—with Revisions through ~~August 2015~~ February 2020 | IMC | IBC | IRC® |
| 1489—2016 | Fire Tests of Fire Resistant Pipe Protection Systems Carrying Combustible Liquids -with revisions through October 2021 | IBC | IFC | |
| 14B—2008 | Sliding Hardware for Standard Horizontally Mounted Tin Clad Fire Doors—with Revisions through ~~July 2017~~ September 2021 | IBC | | |
| 14C—2006 | Swinging Hardware for Standard Tin Clad Fire Doors Mounted Singly and in Pairs—with Revisions through ~~July 2017~~ October 2021 | IBC | | |

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|---|---|---|---|---|
| 1563—2009 | Standard for Electric Spas, Hot Tubs and Associated Equipment —with revisions through ~~October 2017~~ September 2020 | IMC | ISPSC | IRC® |
| 1703—2002 | Flat-plate Photovoltaic Modules and Panels—with Revisions through ~~September 2018~~ November 2019 | IBC | | IRC® |
| 1738—2010 | Venting Systems for Gas Burning Appliances, Categories II, III and IV ~~with revisions through November 2014~~ August 2021 | IFGC | | IRC® |
| 1741—2010 | Inverters, Converters, Controllers and Interconnection System Equipment for Use with Distributed Energy Resources—with Revisions through ~~February 2018~~ June 2021 | IBC | IFC | IRC® |
| 174—04 | Household Electric Storage Tank Water Heaters—with revisions through ~~December 2016~~ October 2021 | IMC | | |
| 1777—~~2007~~ 2015 | Chimney Liners—with Revisions through April ~~2014~~ 2019 | IFGC | IMC | IBC |
| 1784—2015 | Air Leakage Tests of Door Assemblies-with revisions through February 2020 | IBC | | |
| 180—~~2012~~ 2019 | Liquid-level Indicating Gauges for Oil Burner Fuels and Other Combustible Liquids—with revisions through ~~May 2017~~ August 2021 | IMC | | IRC® |
| 1812—2013 | Ducted Heat Recovery Ventilators—with revisions through ~~July 2018~~ April 2021 | IMC | | |
| 1815—2012 | Nonducted Heat Recovery Ventilators—with revisions through ~~July 2018~~ April 2021 | IMC | | |
| 181—~~05~~ 13 | Factory-made Air Ducts and Air Connectors~~—with revisions through April 2017~~ | IMC | | |

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|---|---|---|---|---|---|
| 1887—04 | Fire Tests of Plastic Sprinkler Pipe for Visible Flame and Smoke Characteristics—with revisions through ~~July 2017~~ October 2021 | IMC | | | |
| 1897—2015 | Uplift Tests for Roof Covering Systems with revisions through September 2020 | IBC | IRC® | | |
| 1974—~~2017~~ 2018 | ~~Standard for~~ Evaluation for Repurposing Batteries | IFC | | | |
| 1978—2010 | Grease Ducts—with revisions through ~~April 2017~~ October 2021 | IMC | | | |
| 1994—2015 | Luminous Egress Path Marking Systems with revisions through July 2020 | IBC | IFC | | |
| 1996—2009 | Electric Duct Heaters—with revisions through ~~July 2016~~ September 2021 | IMC | IRC® | | |
| 2011—2019 | Outline for investigation for Machinery with revisions through October 2020 | IFC | | | |
| 2017—2008 | General-purpose Signaling Devices and Systems—with revisions through ~~January 2016~~ December 2016 | IFC | ISPSC | | |
| 2024—2014 | ~~Safety Optical fiber~~ Cable Routing Assemblies and Communications Cable Raceway —with revisions through August 2015 | IMC | | | |
| 2075—2013 | ~~Standard for~~ Gas and Vapor Detectors and Sensors-with Revisions through ~~December 2017~~ August 2021 | IMC | IBC | IFC | IRC® |
| 2079—2015 | Tests for Fire Resistance of Building Joint Systems - with revisions through July 2020 | IBC | IFC | | |
| 207—2009 | Refrigerant-containing Components and Accessories, Nonelectrical—with revisions through ~~June 2014~~ January 2020 | IMC | | | |

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|---|---|---|---|---|---|---|
| 2152—~~2016~~ 2021 | Outline of Investigation for Special Purpose Nonmetallic Containers and Tanks for Specific Combustible or Noncombustible Liquids | IFC | | | | |
| 2158A—2013 | ~~Outline of Investigation for~~ Clothes Dryer Transition Duct—with revisions through ~~April 2017~~ October 2021 | IFGC | IMC | IRC® | | |
| 2158—~~2018~~ 2021 | Electric Clothes Dryers | IMC | | | | |
| 2162—2014 | ~~Outline of Investigation for~~ Commercial Wood-fired Baking Ovens—Refractory Type -with revisions through August 2019 | IMC | | | | |
| 217—2015 | Single and Multiple Station Smoke Alarms—with Revisions through ~~November 2016~~ April 2021 | IBC | IFC | IRC® | | |
| 2196—2017 | ~~Standard for~~ Fire Test for Circuit Integrity of Fire-Resistive Power, Instrumentation, Control and Data Cables - with revisions through December 2020 | IBC | IFC | | | |
| 2200—~~2012~~ 2020 | Stationary Engine Generator Assemblies~~—with Revisions through October 2015~~ | IFGC | IMC | IBC | IFC | IRC® |
| 2208—2010 | Solvent Distillation Units—with revisions through June 2020 | IFC | | | | |
| 2518—2016 | Air Dispersion Systems - with revisions June 2021 | IMC | | | | |
| 2524—2019 | ~~Standard for~~ In-building 2-way Emergency Radio Communication Enhancement Systems - revisions through February 2019 | IFC | | | | |
| 263—11 | Fire Test~~s~~ of Building Construction and Materials—with Revisions through ~~March 2018~~ August 2021 | IBC | | | | |
| 268A—2008 | Smoke Detectors for Duct Application—with revisions through August ~~2016~~ 2020 | IMC | | | | |

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|---|---|---|---|---|---|---|
| 268—2016 | Smoke Detectors for Fire Alarm Systems-with revisions through ~~July 2016~~ October 2019 | IMC | IPMC | IBC | IFC | IRC® |
| 2703—2014 | Mounting Systems, Mounting Devices, Clamping/Retention Devices and Ground Lugs for Use with Flat-plate Photovoltaic Modules and Panels-with Revisions through ~~December 2019~~ March 2021 | IBC | | | IRC® | |
| 2846—2014 | Fire Test of Plastic Water Distribution Plumbing Pipe for Visible Flame and Smoke Characteristics—with revisions through ~~December 2016~~ January 2021 | IMC | | | | |
| 300—~~2005~~ 2019 | Fire Testing of Fire Extinguishing Systems for Protection of Commercial Cooking Equipment~~—with revisions through December 2014~~ | IFC | | | | |
| 30—1995 | Metal Safety Cans—with revisions through ~~June 2014~~ September 2019 | IFC | | | | |
| 325—2017 | Door, Drapery, Gate, Louver and Window Operations and Systems with revisions through February 2020 | IBC | | IFC | | IRC® |
| 343—~~2017~~ 2008 | Pumps for Oil-burning Appliances with revisions through December 2017 | IMC | | | IRC® | |
| 372—2007 | Automatic Electrical Controls for Household and Similar Use—Part 2: Particular Requirements for Burner Ignition Systems and Components—with revisions through ~~July 2012~~ June 2012 | ISPSC | | | | |
| 391—2010 | Solid-fuel and Combination-fuel Central and Supplementary Furnaces—with revisions through ~~June 2014~~ August 2019 | IMC | | | | |
| 399—2017 | Drinking-Water Coolers—with revisions through ~~August 2018~~ July 2020 | IPC | | | | |

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|---|---|---|---|---|
| 427—11 | Standard for Refrigerating Units with revisions through February 2014 | IMC | | |
| 430—2015 | Waste Disposers—with revisions through ~~February 2018~~ September 2021 | IPC | | |
| 441—16 | Gas Vents—with revisions through ~~July 2016~~ August 2019 | IRC® | | |
| 471—2010 | Commercial Refrigerators and Freezers—with revisions through ~~November 2018~~ September 2019 | IMC | | |
| 484—14 | ~~Standard for~~ Room Air Conditioners with revisions through May 2019 | IMC | | |
| 507—2017 | Electric Fans—with revisions through ~~August 2018~~ May 2020 | IMC | IRC® | |
| 508—2018 | Industrial Control Equipment with revisions through July 2021 | IMC | IPC | IRC® |
| 515—2015 | ~~Standard for~~ Electric~~al~~ Resistance Trace Heating for Commercial Applications | IECC® | | |
| 536—~~2014~~ 2021 | Flexible Metallic Hose | IMC | IRC® | |
| 555C—2014 | Ceiling Dampers—with Revisions through ~~May 2017~~ January 2021 | IMC | IBC | |
| 555S—2014 | Smoke Dampers—with Revisions through October ~~2016~~ 2020 | IMC | IBC | |
| 555—2006 | Fire Dampers—with Revisions through October ~~2016~~ 2020 | IBC | | |
| 55A—2004 | Materials for Built-up Roof Coverings | IBC | IRC® | |
| 580—2006 | Test for Uplift Resistance of Roof Assemblies—with Revisions through ~~October 2018~~ March 2019 | IBC | IRC® | |

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|---|---|---|---|---|
| 60335-2-1000-17 | ~~Standard for~~ Household and Similar Electrical Appliances: Particular Requirements for Electrically Powered Pool Lifts~~,~~ ~~with revisions through September 29, 2017~~ | ISPSC | | |
| 60601-1—2003 | Medical Electrical Equipment, Part I: General Requirements for Safety - with revisions through April 2006 | IFC | | |
| 60950-1—~~2014~~ 2007 | Information Technology Equipment—Safety Requirements with revisions through May 2019 | IFC | | |
| 61730-1—2017 | Photovoltaic (PV) Module Safety Qualification - Part 1: Requirements for Construction - with revisions through April 2020 | IBC | IRC® | |
| 61730-2—2017 | Photovoltaic (PV) Module Safety Qualification - Part 2: Requirements for Testing - with revisions through April 2020 | IBC | IRC® | |
| 62368-1—~~2014 19~~ | Audio/video, Information and Communication Technology Equipment—Safety Requirements - with revisions through October 2021 | IFC | | |
| 651—2011 | Schedule 40 and Schedule 80~~, Type EB and A~~ Rigid PVC Conduit and Fittings—with Revisions through ~~June 2016~~ March 2020 | IFGC | IRC® | |
| 705—2017 | Power Ventilators—with revisions through ~~October 2018~~ August 2021 | IFGC | IMC | IRC® |
| 710B—2011 | Recirculating Systems—with Revisions through ~~August 2014~~ February 2019 | IMC | IBC | IFC |
| 710—12 | Exhaust Hoods for Commercial Cooking Equipment—with Revisions through ~~November 2013~~ February 2021 | IECC® | | |

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|---|---|---|---|---|
| 791—2006 | ~~Standard for~~ Residential Incinerators—with revisions through ~~November 2014~~ February 2021 | IMC | | IFC |
| 795—2016 | Commercial-Industrial Gas Heating Equipment with revisions through 2020 | IFGC | | IRC® |
| 80—2007 | Steel Tanks for Oil-burner Fuels and Other Combustible Liquids—with revisions through ~~January 2014~~ April 2019 | IFC | | IRC® |
| 817—2015 | ~~Standard for~~ Cord Sets and Power-supply Cords—with revisions through ~~August 2018~~ September 2021 | IFC | | |
| 834—04 | Heating, Water Supply and Power Boilers Electric—with revisions through ~~September 2018~~ July 2019 | IMC | | |
| 834—2004 | Heating, Water Supply and Power Boilers—Electric—with revisions through ~~September 2018~~ July 2019 | IRC® | | |
| 842—~~2015~~ 2019 | Valves for Flammable Fluids~~—with revisions through May 2015~~ | IMC | | IRC® |
| 858—2014 | Household Electric Ranges—with revisions through ~~June 2018~~ September 2019 | IMC | | IRC® |
| 864—2014 | Control Units and Accessories for Fire Alarm Systems—with Revisions through ~~March 2018~~ May 2020 | IMC | IBC | IFC |
| 867—2011 | Electrostatic Air Cleaners—with revisions through August ~~2018~~ 2021 | IMC | | |
| 875—09 | Electric Dry-bath Heaters—with revisions through ~~September 2017~~ January 2021 | IRC® | | |

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|---|---|---|---|---|
| 87A—2015 | Power-operated Dispensing Devices for Gasoline and Gasoline/Ethanol Blends with Nominal Ethanol Concentrations up to 85 Percent—with revisions through ~~June 2017~~ September 2019 | IFC | | |
| 923—2013 | Microwave Cooking Appliances—with revisions through ~~July 2017~~ August 2020 | IMC | IRC® | |
| 924—2016 | Standard for Safety Emergency Lighting and Power Equipment—with Revisions through May ~~2018~~ 2020 | IBC | IFC | |
| 9540A—~~2017~~ 2019 | Standard for Safety Test Method for Evaluating Thermal Runaway Fire Propagation in Battery Energy Storage Systems | IFC | | |
| 9540—~~2016~~ 2020 | Energy Storage Systems and Equipment - with revisions through April 2021 | IFC | IRC® | |
| 959—2010 | Medium Heat Appliance Factory-built Chimneys—with Revisions through ~~June 2014~~ August 2019 | IFGC | IMC | IRC® |
| 9—2009 | Fire Tests of Window Assemblies—with Revisions through ~~February 2015~~ March 2020 | IBC | | |
| UL/CSA 60335-2-40—~~17~~ 2019 | Household and Similar Electrical Appliances—Safety—Part 2-~~40~~: Particular Requirements for ~~Electrical Heat Pumps, Air-Conditioners and Dehumidifiers~~ Motor-Compressors | IMC | | |
| UL/CSA 60335-2-89—~~17~~ 21 | Household and Similar Electrical Appliances—Safety—Part 2-89: Particular Requirements for Commercial Refrigerating Appliances with an Incorporated or Remote Refrigerant Unit or Compressor | IMC | | |

| **WDMA** | **Window and Door Manufacturers Association** | |
|---|---|---|
| **Standard Reference Number** | **Title** | **Referenced in Code(s):** |

| | | | | |
|---|---|---|---|---|
| AAMA/WDMA/CSA 101/I.S.2/A440—~~17~~ 22 | Specifications for Windows, Doors and Unit Skylights | IBC | IECC® | IRC® |

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|---|---|---|
| I.S. 11—~~16~~ 23 | 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 WMA 100—~~2018~~ 2023 | Standard Method of Determining Structural Performance Ratings of Side-Hinged Exterior Door Systems and Procedures for Component Substitution | IRC® |

**Reason:** 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 2021, 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 standard developers.

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