

# IADMIN



## 2022 GROUP B PUBLIC COMMENT AGENDA

SEPTEMBER 14 - 21, 2022  
KENTUCKY INTERNATIONAL CONVENTION CENTER  
LOUISVILLE, KY

## 2022 Public Comment Agenda

First Printing

Publication Date: August 2022

Copyright © 2022

by

International Code Council, Inc.

ALL RIGHTS RESERVED. This 2022 Public Comment Agenda is a copyrighted work owned by the International Code Council, Inc. ("ICC"). Without advance written permission from the ICC, no part of this book may be reproduced, distributed, or transmitted in any form or by any means, including, without limitations, electronic, optical or mechanical means (by way of example and not limitation, photocopying, or recording by or in an information storage retrieval system). For information on use rights and permissions, please contact: ICC Publications, 4051 Flossmoor Road, Country Club Hills IL, 60478. Phone 1-888-ICC-SAFE (422-7233).

Trademarks: "International Code Council," the "International Code Council" logo, "ICC," the "ICC" logo and other names and trademarks appearing in this book are registered trademarks of the International Code Council, Inc., and/or its licensors (as applicable), and may not be used without permission.

PRINTED IN THE USA

## ADM6-22

### **Proposed Change as Submitted**

**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:** 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.

ADM6-22

### **Public Hearing Results**

**Committee Action:**

**Disapproved**

**Committee Reason:** The committee stated that the reason for disapproval was that there are big issues with legality as well as enforceability and that there are better ways to address it through adoption. It was also stated that there was concern about the automatic nature of the proposed requirement taking effect without prior analysis. (Vote: 13-0)

ADM6-22

### **Individual Consideration Agenda**

#### **Public Comment 1:**

IWUIC: [A] 101.2, SECTION 202, SECTION 202 (New)

**Proponents:** Kota Wharton, City of Grove City, representing City of Grove City (kwharton@grovecityohio.gov) requests As Modified by Public Comment

**Modify as follows:**

## 2021 International Wildland-Urban Interface Code

**[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.~~

When a wildfire spreads from or through a wildland-urban interface area and causes substantial damage to a building or structure outside the wildland-urban interface area within this jurisdiction, all new construction of such building or structure shall be designed and constructed to conform to the provisions of this code as applicable to the wildland-urban interface area.

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.

## SECTION 202 DEFINITIONS

**[BS] SUBSTANTIAL DAMAGE..** Damage from a wildfire sustained by a structure whereby the cost of restoring the structure to its before-damaged condition would equal or exceed 50 percent of the market value of the structure before the damage occurred.

**Commenter's Reason:** This modification takes the intent of the original proponent and addresses the legality and enforceability issues brought up by the committee. The automatic nature of the modification is intentional.

**Cost Impact:** The net effect of the public comment and code change proposal will increase the cost of construction. The cost of rebuilding to conform to the WUIC will increase the cost of construction, regardless of any offset by the savings from the potential cost of future damage.

---

Public Comment# 3183

## **Proposed Change as Submitted**

**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 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 extent of the performance-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:** 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 first 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.

## **Public Hearing Results**

**Committee Action:**

**Disapproved**

**Committee Reason:** The committee stated that the reasons for disapproval were that there is a lot of work that still needs to be done and maybe it could have been done in multiple modifications had they chose to do that from the floor. There was some support for the proposal itself, but it still in need to be cleaned up and fixed. (Vote: 13-0)

ADM11-22

## **Individual Consideration Agenda**

### **Public Comment 1:**

ICCP: [A] 102.3.4.2, [A] 102.3.9.2.2, [A] 102.3.9.2.4

**Proponents:** Paul Karrer, representing The American Institute of Architects (paulkarrer@aia.org); Ronald Geren, representing The American Institute of Architects (ron@specsandcodes.com) requests As Modified by Public Comment

**Modify as follows:**

### **2021 International Code Council Performance Code**

**[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 extent of~~ of the performance-based performance-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] 102.3.9.2.2 Renewal frequency.** The certificate of compliance issued subject to this code shall be renewed at a frequency ~~of not more than every 2 years as determined in the design and approved by the code official~~. The certificate of ~~compliance~~ compliance 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] 102.3.9.2.4 Certificate of compliance renewal inspector.** 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. ~~The code official may choose to~~ Where approved by the code official, the owner is permitted 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.

**Commenter's Reason:** This code change proposal is connected with a separate code change proposal sponsored by AIA modifying the administration and enforcement requirements in Chapter 1 of seven other I-Codes (IBC, IEBC, IFC, IFGC, IPC, IPSDC, and IMC). The ADMIN Committee recommended that code change proposal (ADM35-22) for Approval as Modified at the Group B Committee Action Hearings in Rochester this spring.

This public comment was developed to address concerns or opposition raised by ADMIN Committee members on ADM11-22 during the Group B Committee Action Hearings in Rochester. The proposed fixes here were originally intended to be offered through multiple floor modifications that have been consolidated here into one public comment. Multiple committee members expressed general support for the overall code change

proposal itself as long as the issues below could be addressed in this public comment phase.

The public comment addresses issues in three parts of the original code change proposal:

1. **Section 102.3.4.2 Reports and manual:** Corrects typos in the proposed language to be added.
2. **Section 102.3.9.2.2 Renewal frequency:** Removes originally proposed language requiring that certificates of compliance be renewed at a frequency “of not more than every two years” and restores the language currently in the ICCPC (renewed at a frequency “as determined in the design and approved by the code official.”). It also removes the originally proposed addition of a sentence addressing requests for inspection by the building official and transfers it to a new proposed subsection 102.3.9.2.4 (see item #3 below).
3. **Section 102.3.9.2.4 Certificate of compliance renewal inspector:** Relocates a sentence addressing requests for inspection by the building official that had originally been proposed to be added to section 102.3.9.2.2 (see item #2 above) and places it at the beginning of the originally proposed addition here of a new subsection 102.3.9.2.4. It also revises a sentence of the originally proposed addition of this new subsection due to concerns that it contained permissive language directed at the code official. This revision clarifies that, with the approval of the code official, the owner is permitted to have the building inspected by a special expert as defined in Chapter 2 of the ICCPC and meeting the qualifications required by Appendix D101.4.

**Cost Impact:** The net effect of the public comment and code change proposal will not increase or decrease the cost of construction

This code change proposal is connected with a separate code change proposal sponsored by AIA modifying the administration and enforcement requirements in Chapter 1 of seven other I-Codes (IBC, IEBC, IFC, IFGC, IPC, IPSDC, and IMC). The ADMIN Committee recommended that code change proposal (ADM35-22) for Approval as Modified at the Committee Action Hearings in Rochester this spring.

This code change proposal and this public comment provide 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 with which individual projects must comply. 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.

---

Public Comment# 3258



# ADM13-22 Part I

## ***Proposed Change as Submitted***

**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:

**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 fire 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 FIRE CODE OFFICIAL~~**  
***(Delete entire section and replace as follows)***

Add new text as follows:

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

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

**[A] 104.2 Determination of compliance.** The fire 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 fire code official upon request.

**[A] 104.2.2 Technical assistance.** To determine compliance with this code, the fire 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 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.

**[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 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

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 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.

**[A] 104.2.3.7 Peer review.** The fire 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 fire code official.

**[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**

#### **~~AUTHORITY 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.

**Reason:** 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 be 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 autoforformatting 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.

ADM13-22 Part I

## **Public Hearing Results**

**Committee Action:**

**As Modified**

**Committee Modification:**

**2021 International Building 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, ~~and procedures, rules and regulations~~ in order to clarify the application of this code's provisions. Such interpretations, policies, ~~and 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.** Where this code or a referenced standard requires equipment, materials, products or services to be listed and a listing standard is specified, the listing shall be based on the specified standard. Where a listing standard is not specified, the listing shall be based on an approved listing criteria. Listings shall be germane to the provision requiring the listing. Installation shall be in accordance with the listing and the manufacturer's instructions, and where required to verify compliance, the listing standard and manufacturer's instructions shall be made available to the building official.

~~**[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] 104.2.2.3 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. Such tests shall be performed by a party acceptable to the building official.

**[A] 104.2.3.2 Application and disposition.** Where required, 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] 104.2.3.4 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, other than fire safety
6. Fire 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] 104.2.3.6 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~~ and use of the evaluation report shall require approval by the building official for the installation. The alternate material, design or method of construction and product evaluated shall be within the scope of the building official's recognition-accreditation of the approved agency. Criteria used for the evaluation shall be identified within the report and where required, provided to the building official. ~~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] 104.3 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] 104.6 Notices and orders.** The ~~building code~~ official shall issue necessary notices or orders to ensure compliance with this code. Notices of violations shall be in accordance with Section 114.

## 2021 International Existing Building 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, ~~and procedures, rules and regulations~~ in order to clarify the application of this code's provisions. Such interpretations, policies, ~~and 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.** Where this code or a referenced standard requires equipment, materials, products or services to be listed and a listing standard is specified, the listing shall be based on the specified standard. Where a listing standard is not specified, the listing shall be based on an approved listing criteria. Listings shall be germane to the provision requiring the listing. Installation shall be in accordance with the listing and the manufacturer's instructions, and where required to verify compliance, the listing standard and manufacturer's instructions shall be made available to the code official.

~~**[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] 104.2.2.3 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] 104.2.3.2 Application and disposition.** ~~Where required, 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] 104.2.2.4 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. Such tests shall be performed by a party acceptable to the building official.

**[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, other than fire safety
6. Fire 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] 104.2.3.6 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 and use of the evaluation report shall require approval by the code official for the installation. The alternate material, design or method of construction and product evaluated shall be within the scope of the code official's recognition accreditation of the approved agency. Criteria used for the evaluation shall be identified within the report and where required, provided to the code official, ~~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] 104.3 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] 104.6 Notices and orders.** The code official shall issue necessary notices or orders to ensure is authorized to issue such notices or orders as are required to affect compliance with this code. Notices of violations shall be in accordance with Section 113.

## 2021 International Fire Code

**[A] 104.2 Determination of Compliance.** The fire code official shall have the authority to determine compliance with this code, to render interpretations of this code and to adopt policies, ~~and procedures, rules and regulations~~ in order to clarify the application of this code's provisions. Such interpretations, policies, ~~and 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.** ~~Where this code or a referenced standard requires equipment, materials, products or services to be listed and a listing standard is specified, the listing shall be based on the specified standard. Where a listing standard is not specified, the listing shall be based on an approved listing criteria. Listings shall be germane to the provision requiring the listing. Installation shall be in accordance with the listing and the manufacturer's instructions, and where required to verify compliance, the listing standard and manufacturer's instructions shall be made available to the fire code official.~~

~~**[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.~~

**[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. Such tests shall be performed by a party acceptable to the fire code official.

**[A] 104.2.3.2 Application and disposition.** ~~Where required, a~~ **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] 104.2.3.4 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, other than fire safety
6. Fire 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] 104.2.3.6 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~~ and use of the evaluation report shall require approval by the fire code official for the installation. The alternate material, design or method of construction and product evaluated shall be within the scope of the fire code official's recognition-accreditation of the *approved agency*. Criteria used for the evaluation shall be identified within the report and where required, provided to the fire code official, ~~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.

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

## 2021 International Property Maintenance 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, and procedures, ~~rules and regulations~~ in order to clarify the application of this code's provisions. Such interpretations, policies, and 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] 105.2.1.3 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] 105.2.2.2 Application and disposition.** ~~Where required, 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] 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. Quality
2. Strength
3. Effectiveness
4. Durability
5. Safety, other than fire safety
6. Fire 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.** 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. Such tests shall be performed by a party acceptable to the building 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 104.2.3.6.1 and 104.2.3.6.2.

**[A] 105.2.2.6.1 Evaluation reports.** Evaluation reports shall be issued by an *approved agency* ~~accredited to evaluate or certify products~~ and use of the evaluation report shall require approval by the code official for the installation. The alternate material, design or method of construction and product evaluated shall be within the scope of the code official's recognition-accreditation of the *approved agency*. Criteria used for the evaluation shall be identified within the report and where required, provided to the code official, ~~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] 105.3 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] 105.6 Notices and orders.** The code official shall issue all necessary notices or orders to ensure compliance with this code. Notices of violations shall be in accordance with Section ~~111.4~~ 109.

**[A] 105.7.2 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.

The ~~building~~ code official shall keep a record of each inspection made, including notices and orders issued, showing the findings and disposition of each.

## 2021 International Wildland-Urban Interface 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, ~~and~~ procedures, rules and regulations in order to clarify the application of this code's provisions. Such interpretations, policies, ~~and~~ 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] 104.2.1.3 Content.** The technical opinion and report shall analyze the ~~fire safety properties~~ 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] 104.2.2.2 Application and disposition.** ~~Where required, a~~ 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] 104.2.2.4 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, other than fire safety
6. Fire 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.** 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. Such tests shall be performed by a party acceptable to the

building 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 104.2.3.6.1 and 104.2.3.6.2.

**[A] 104.2.2.6.1 Evaluation reports.** Evaluation reports shall be issued by an *approved agency* ~~accredited to evaluate or certify products and use of the evaluation report shall require approval by the code official for the installation.~~ The alternate material, design or method of construction and product evaluated shall be within the scope of ~~the code official's recognition accreditation of the approved agency.~~ Criteria used for the evaluation shall be identified within the report ~~and where required, provided to the code official, 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] 104.6 Notices and orders.** The code official ~~shall issue necessary notices or orders to ensure is authorized to issue such notices or orders as are required to affect compliance with this code.~~ Notices of violations shall be in accordance with Section 110.2.

## 2021 International Green Construction Code

**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, ~~and procedures, rules and regulations~~ in order to clarify the application of this code's provisions. Such interpretations, policies, ~~and 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.

**104.2.1 Listed compliance.** ~~Where this code or a referenced standard requires equipment, materials, products or services to be listed and a listing standard is specified, the listing shall be based on the specified standard. Where a listing standard is not specified, the listing shall be based on an approved listing criteria. Listings shall be germane to the provision requiring the listing. Installation shall be in accordance with the listing and the manufacturer's instructions, and where required to verify compliance, the listing standard and manufacturer's instructions shall be made available to the code official.~~

~~**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.~~

**104.2.5.2 Application and disposition.** ~~Where required, 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 code official shall respond in writing, stating the reasons the alternative was not approved.

**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, other than fire safety
6. Fire 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. Such 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, and use of the evaluation report shall require approval by the code official for the installation.~~ The alternate material, design or method of construction and product evaluated shall be within the scope of the code official's recognition-accreditation of the *approved agency*. Criteria used for the evaluation shall be identified within the report and where required, provided to the code official, ~~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.

**104.4 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.~~

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

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

**Committee Reason:** The committee stated that the reasons for the approval of the modifications by number were as follows:

2: Safety and fire safety should be identified separately as the modification does and it is significantly easier to read especially for the new or small jurisdiction code officials.

19: It clears up the notices section and the items that were identified which is an improvement to the code.

24: It clears up some of the different concerns with the proposal and provides clarity to the sections as noted.

37: It furthers the family of changes in clarifications by improving the language.

38: It creates consistency between the codes.

39: It addresses concerns originally with an agency accredited to certify products by cleaning that up because as was mentioned, an engineering firm may not be accredited by anybody but it is appropriate for them to do this work.

40: It provides clarification and coordination between all the codes.

41: It addresses another concern with the original proposal that requires that the documentation be provided, and the modification allows for field approval of small modifications or alternatives.

The committee stated multiple reasons for approval as well as opposition to the proposal. In support, it was noted that overall the proposal was an improvement to the existing section and specifically the first two paragraphs are better than what is now in the code. The organizing of that portion is worth it and taken together with all the approved modifications the section is better than the current section. In opposition, it was stated that with all the modifications taken together with the complexity of the entire proposal, it is more than can be thoroughly evaluated at this point. (Vote: 9-4)

ADM13-22 Part I

## **Individual Consideration Agenda**

### **Public Comment 1:**

IBC: [A] 104.2.3, [A] 104.2.3.1, [A] 104.2.4; IEBC: [A] 104.2.3, [A] 104.2.3.1, [A] 104.2.4; IFC: [A] 104.2.3, [A] 104.2.3.1, [A] 104.2.4; IPMC: [A] 105.2.2, [A] 105.2.2.1, [A] 105.2.3; IWUIC: [A] 104.2.2, [A] 104.2.2.1, [A] 104.2.3; IGCC: 104.2.5, 104.2.5.1, 104.2.6

**Proponents:** Jenifer Gilliland, representing Washington Association of Building Officials (jenifer.gilliland@seattle.gov); Micah Chappell, representing Washington Association of Building Officials Technical Code Development Committee (micah.chappell@seattle.gov) requests As Modified by Public Comment

**Further modify as follows:**

## 2021 International Building Code

**[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.~~ the building official has approved and authorized its use.

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

**[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 where considered together with other safety features of the building or other relevant circumstances. 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.

## 2021 International Existing Building Code

**[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.~~ the building official has approved and authorized its use.

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

**[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~~ safety, fire safety, or structural requirements where considered together with other safety features of the building or other relevant circumstances. 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.

## 2021 International Fire Code

**[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.~~ the fire code official has approved and authorized its use.

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

**[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~~ safety, fire safety requirements. The details of the ~~written~~ request for and action granting modifications shall be recorded and ~~entered~~ maintained in the official record of the fire code official ~~files of the department of fire prevention.~~

## 2021 International Property Maintenance Code

**[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~~ the code official has approved and authorized its use.

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

**[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~~ safety, and fire safety requirements where considered together with other safety features of the building or other relevant circumstances. The details of the ~~written~~ request for and action granting modifications shall be recorded and ~~entered in the department files~~ maintained in the official record by the code official.

## 2021 International Wildland-Urban Interface Code

**[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~~ the code official has approved and authorized its use.

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

**[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 with the intent and purpose of this code, and that such modification does not lessen health, ~~life~~ safety and fire safety requirements where considered together with other safety features of the building or other relevant circumstances. The details of the ~~written~~ request and action granting modifications shall be recorded and ~~entered~~ maintained in the official record by the code official ~~into the files of the code enforcement agency~~.

## 2021 International Green Construction 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~~ the authority having jurisdiction has approved and authorized its use.

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

**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 considered together with other features of the building or other relevant circumstances. The details of the ~~written~~ request for and granting modifications shall be recorded and ~~entered in the files of the department~~ maintained in the official record by the authority having jurisdiction.

### **Commenter's Reason: The code proposal as currently written unduly constrains the building official.**

This PC restores flexibility for the building official to use judgement when evaluating alternative means, methods, materials and equipment as well as modifications. Controversial language restricting building official approval of items prohibited elsewhere in this code is removed and replaced with a blanket statement giving the building official the ability to approve alternatives as long as the building official authorizes its use. In a newly formed section, Approval authority, the building official is permitted to approve alternatives that are suitable and comply with the equivalency criteria in Sections 104.2.3.4-104.2.3.7.

In modifications, additional flexibility is provided for the building official to first, evaluate a proposal based on the current criteria, ie. health, accessibility, safety and fire safety features of the building and second, consider with other safety features of the building or relevant circumstances if necessary. Modifications are by definition not compliant with the strict letter of the code. For instance, a building official might want to consider other issues when approving a proposal such as how their local fire department stages for a fire and whether or not a building has been voluntarily sprinklered. If fire department policy is to "Run the stairs" rather than use ladder trucks to access an upper story it may impact your approval of a modification.

**Cost Impact:** The net effect of the public comment and code change proposal will not increase or decrease the cost of construction

This proposal is mainly aimed at delineating the authority of the building official to approve non-conventional approaches to solving code issues. If anything, costs might be reduced because there is more flexibility to approve a creative approach to a code problem.

## **Public Comment 2:**

IBC: [A] 104.2.3.5, [A] 104.2.3.5.1 (New); IEBC: [A] 104.2.3.5, 104.2.3.5.1 (New); IFC: [A] 104.2.3.5, [A] 104.2.3.5.1 (New); IPMC: [A] 105.2.2.5, [A] 105.2.2.5.1 (New); IWUIC: [A] 104.2.2.5, 104.2.2.5.1 (New); IGCC: 104.2.5.5, 104.2.5.5 (New)

**Proponents:** Jenifer Gilliland, representing Washington Association of Building Officials (jenifer.gilliland@seattle.gov); Micah Chappell, representing Seattle Department of Construction & Inspections (micah.chappell@seattle.gov) requests As Modified by Public Comment

**Further modify as follows:**

## **2021 International Building Code**

**[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~~ simulate performance of ~~in~~ the end use configuration. ~~Tests shall be performed by a party acceptable to the building official.~~

**[A] 104.2.3.5.1 Performance.** Tests shall be performed by a party acceptable to the building official.

## **2021 International Existing Building Code**

**[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~~ simulate performance of ~~in~~ the end use configuration. ~~Tests shall be performed by a party acceptable to the code official.~~

**104.2.3.5.1 Performance.** Tests shall be performed by a party acceptable to the code official.

## **2021 International Fire Code**

**[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~~ simulate performance of ~~in~~ the end use configuration. ~~Tests shall be performed by a party acceptable to the fire code official.~~

**[A] 104.2.3.5.1 Performance.** Tests shall be performed by a party acceptable to the fire code official.

## **2021 International Property Maintenance Code**

**[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~~ simulate performance of ~~in~~ the end use configuration. ~~Tests shall be performed by a party acceptable to the code official.~~

**[A] 105.2.2.5.1 Performance.** Tests shall be performed by a party acceptable to the code official.

## **2021 International Wildland-Urban Interface Code**

**[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~~ simulate performance of ~~in~~ the end use configuration. ~~Tests shall be performed by a party acceptable to the code official.~~

**104.2.2.5.1 Performance.** Tests shall be performed by a party acceptable to the code official.

## **2021 International Green Construction Code**

**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. ~~Such tests shall be performed by a party acceptable to the authority having jurisdiction.~~

**104.2.5.5 Performance.** Tests shall be performed by a party acceptable to the authority having jurisdiction.

**Commenter's Reason:** This PC seeks to further clarify that full-scale testing is not necessary to support an alternative material, design or method of construction. It only needs to be large enough to give confidence to the building official that a product, component or assembly will perform as expected in the end use configuration. We don't want to just "predict" performance—we need more assurance than that—we actually want to simulate performance in testing. If the performance is simulated then this knowledge can be used to determine how the product, component or assembly will perform in situ.

Testing doesn't always occur in a lab. It could be a fire test of the material of a temporary tent that has no labeling witnessed by the fire department. These tests can consist of burning a tiny piece of the fabric. The language here needs to be written in a general manner to cover all situations where testing may be required.



This is one of three public comments submitted related to fire testing found through out the ICC Family of Codes.

**Cost Impact:** The net effect of the public comment and code change proposal will not increase or decrease the cost of construction. The changes in the PC should not impact costs. If anything the changes would reduce costs because full-scale testing would not be required.

Public Comment# 3311

### **Public Comment 3:**

IBC: [A] 104.2.3.2, [A] 104.2.4, [A] 104.7, [A] 104.7.1, [A] 104.7.2, [A] 104.7.3, [A] 104.7.4, [A] 104.7.5; IEBC: [A] 104.2.3.2, [A] 104.2.4, [A] 104.7, [A] 104.7.1, [A] 104.7.2, [A] 104.7.3, [A] 104.7.4, [A] 104.7.5; IFC: [A] 104.2.3.2, [A] 104.2.4, [A] 104.7, [A] 104.7.1, [A] 104.7.2, [A] 104.7.3, [A] 104.7.4, [A] 104.7.5, [A] 104.7.6; IPMC: [A] 105.2.2.2, [A] 105.2.3, [A] 105.7, [A] 105.7.1, [A] 105.7.2, [A] 105.7.3, [A] 105.7.4, [A] 105.7.5; IWUIC: [A] 104.2.2.2, [A] 104.2.3, [A] 104.7, [A] 104.7.1, [A] 104.7.2, [A] 104.7.3, [A] 104.7.4, [A] 104.7.5; IGCC: 104.2.5.2, 104.2.6, 104.8, 104.8.1, 104.8.2, 104.8.3, 104.8.4, 104.8.5

**Proponents:** Jenifer Gilliland, representing Washington Association of Building Officials (jenifer.gilliland@seattle.gov); Micah Chappell, representing Washington Association of Building Officials Technical Code Development Committee (micah.chappell@seattle.gov) requests As Modified by Public Comment

**Further modify as follows:**

## **2021 International Building Code**

**[A] 104.2.3.2 Application and disposition.** Where required 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 ~~provide a response in writing~~ provide a response, stating the reasons the alternative was not approved.

**[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 ~~maintained entered in the files of the department of building safety~~ in the official record by the building official.

**[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 ~~laws, regulations, or rules~~. Such records shall be made available for public inspection.

**[A] 104.7.1 Approvals Applications.** A record of ~~approvals~~ the status or the final disposition of shall be maintained by the ~~applications submitted to the building official and shall be maintained available for public inspection during business hours in accordance with applicable laws.~~

**[A] 104.7.2 Inspections.** The building official shall ~~keep~~ maintain a record of each inspection made, including notices and orders ~~, and notices of violation~~ 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~~ maintain 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~~ maintain a record of fees collected and refunded in accordance with Section 109.

## **2021 International Existing Building Code**

**[A] 104.2.3.2 Application and disposition.** Where required 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~~ provide a response, stating the reasons the alternative was not approved.

**[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 ~~maintained entered in the files of the department of building safety~~ in the official record by the building official.

**[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 laws, regulations, or rules. Such records shall be made available for public inspection.

**[A] 104.7.1 Approvals-Applications.** A record of ~~approvals~~ the status or the final disposition of ~~shall be maintained by the~~ applications submitted to the code official for review and shall be maintained. ~~available for public inspection during business hours in accordance with applicable laws.~~

**[A] 104.7.2 Inspections.** The code official shall ~~keep~~ maintain a record of each inspection made, including notices and orders, ~~and notices of violation~~ issued, showing the findings and disposition of each. Such records shall be made available for public inspection during business hours in accordance with applicable laws.

**[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 ~~officially recorded in the permanent official records of the code official.~~

**[A] 104.7.4 Tests.** The code official shall ~~keep~~ maintain 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~~ maintain a record of fees collected and refunded in accordance with Section 108.

## 2021 International Fire Code

**[A] 104.2.3.2 Application and disposition.** Where required 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~~ provide a response, stating the reasons the alternative was not approved.

**[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] 104.7 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 laws, regulations, or rules. Such records shall be made available for public inspection.

**[A] 104.7.1 Approvals-Applications.** A record of ~~approvals~~ the status or the final disposition of ~~shall be maintained by the~~ applications submitted to the fire code official for review and shall be available. ~~maintained as part of the official record.~~ ~~for public inspection during business hours in accordance with applicable laws.~~ Where required, documentation including construction documents and supporting reports shall be retained in the official record.

**[A] 104.7.2 Inspections.** The fire code official shall ~~keep~~ maintain a record of each inspection made, including notices and orders, ~~and notices of violation~~ 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.** Applications 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~~ maintained in the officially recorded in the permanent official records of the fire code official.

**[A] 104.7.5 Tests.** The fire code official shall ~~keep~~ maintain 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~~ maintain a record of fees collected and refunded in accordance with Section 107.

## 2021 International Property Maintenance Code

**[A] 105.2.2.2 Application and disposition.** Where required 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~~ provide a response stating the reasons the alternative was not approved.

**[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 maintained entered in the department files in the official record by the code official.

**[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 laws, regulations, or rules. Such records shall be made available for public inspection.

**[A] 105.7.1 Approvals Applications.** A record of ~~approvals~~ the status or final disposition of ~~shall be maintained by the~~ applications submitted to the code official for review ~~and shall be maintained~~ available for public inspection during business hours in accordance with applicable laws. Where required, documentation including construction documents and supporting reports shall be maintained in the official record.

**[A] 105.7.2 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.~~ The code official shall ~~keep~~ maintain a record of each inspection made, including notices and orders and notices of violations 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~~ maintain a record of fees collected and refunded in accordance with Section 104.

## 2021 International Wildland-Urban Interface Code

**[A] 104.2.2.2 Application and disposition.** Where required 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~~ provide a response, stating the reasons the alternative was not approved.

**[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 for and action granting modifications shall be recorded and ~~entered into the files of the code enforcement agency~~ maintained in the official record by the code official.

**[A] 104.7 Official records.** The code official shall ~~keep~~ maintain 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 laws, regulations, or rules. Where required, documentation including construction documents and supporting reports shall be retained in the official record.

**[A] 104.7.1 Approvals Applications.** A record of ~~approvals~~ the status or the final disposition of ~~shall be maintained by the~~ applications submitted to the code official for review ~~and shall be available for public inspection during business hours in accordance with applicable laws~~ maintained.

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

**[A] 104.7.3 Code alternatives and modifications.** Applications 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~~ maintain 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~~ maintain a record of fees collected and refunded in accordance with Section 109.

## 2021 International Green Construction Code

**104.2.5.2 Application and disposition.** Where required 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~~ provide a response stating the reasons the alternative was not approved.

**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 ~~maintained~~ entered in the files of the department in the official record by the authority having jurisdiction.

**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 laws, regulations or rules. Such records shall be made available for public inspections.

**104.8.1 Approvals Applications.** A record of ~~approvals~~ the status or the final disposition of ~~shall be maintained~~ applications submitted to by the

authority having jurisdiction for review and shall be maintained ~~available for public inspection during business hours in accordance with applicable laws.~~ Where required, documentation including construction documents and supporting reports shall be retained in the official record.

**104.8.2 Inspections.** The code official shall ~~keep~~ maintain a record of each inspection made, including notices and orders and notices of violation issued, showing the findings and disposition of each.

**104.8.3 Code alternatives and modifications.** Applications 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~~ maintain 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~~ maintain a record of fees collected and refunded in accordance with Section 108.

**Commenter's Reason: This PC attempts to coordinate terms and eliminate dated language, by making the following changes to the original proposal:**

- The 5-year minimum time limit for keeping records is eliminated in this PC because public record retention laws vary so much from place to place. There really is no best practice. Some jurisdictions keep permit and inspections records for the life of the building, while others keep no records of residential buildings after a few years. It takes time and money to keep records in a format that allows access to them by the public. Individual jurisdictions will need to customize this section to meet their local conditions.
- More than just approvals need to be kept as part of the official record. Tracking disapprovals of applications and permits is just as important. The requirement to track "status" and "final disposition" makes it clear that records relating to important approval milestones and the final outcome are to be maintained.
- Language is added to make it clear that the building official authority can require the retention of construction documents as part of the public record.
- Language about maintaining construction documents and supporting reports as part of the official record is added but only "where required". This again allows the building official to keep the records based on local and state retention requirements as well as department capacity.
- All records should be subject to "public inspection", not just the inspection records. This language has been relocated 104.7.2 inspections from the charging statement to 104.7 Official Records.
- Notices of violation are added to the list of inspection items in 104.7.2 that need to be maintained as the part of the public record.
- Plan review and inspection results are now recorded and maintained almost entirely electronically in most building departments. There is no need to keep outdated language that requires a department to maintain records "in writing" or a "written response".
- Also, the word "kept" is replaced by "maintained" in this PC. "Kept" implies that the record is being saved "as is". "Maintained" implies more effort to include actions like moving the record from paper to microfiche and finally to a digitized record. "Maintain" might also include sorting, storing and indexing documents in an organized manner.

This PC is the 1st of 3 submitted public comments dealing with record keeping by the code official.

**Cost Impact:** The net effect of the public comment and code change proposal will not increase or decrease the cost of construction. This PC is just describing the official record that is being kept by the building official/code official or authority having jurisdiction. It should not increase the costs for a department as most of the records, outside of the inspection and plan review results, are permitted to be kept by the code official rather than required.

#### **Public Comment 4:**

**IBC:** [A] 104.2.3.4; **IEBC:** [A] 104.2.3.4; **IFC:** [A] 104.2.3.4; **IPMC:** [A] 105.2.2.4; **IWUIC:** [A] 104.2.2.4; **IGCC:** 104.2.5.4

**Proponents:** Bill McHugh, representing Firestop Contractors International Assn., National Fireproofing Contractors Assn. (bill@mc-hugh.us)  
requests As Modified by Public Comment

**Further modify as follows:**

### **2021 International Building 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, other than fire safety
6. Fire safety
7. Fire Resistance

### **2021 International Existing Building 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, other than fire safety
6. Fire safety
7. Fire Resistance

### **2021 International Fire 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, other than fire safety
6. Fire safety
7. Fire Resistance

### **2021 International Property Maintenance 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, other than fire safety
6. Fire safety
7. Fire Resistance

## 2021 International Wildland-Urban Interface 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, other than fire safety
6. Fire safety
7. Fire Resistance

## 2021 International Green Construction 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, other than fire safety
6. Fire safety
7. Fire Resistance

**Commenter's Reason:** The reason for this public comment is to re-insert the words 'Fire Resistance'. Fire Resistance has been in the BOCA National Building Code 104.11 ('96 and before), the Uniform Building Code ('97 and before), and for a reason. Fire Resistance is a critical part of the building's fire and life safety protection package. Any alternative to fire-resistance needs to be equal to the fire resistance provided. During the Committee Action Hearings, a list of items explaining what's in 'Fire Safety' including Fire Resistance was deleted, leaving 'Fire Safety' with no definition. Because the term Fire-Resistance has in the International Building Code since the 2000 version, and in the BOCA National Building Code, Uniform Building Code - as a stand alone item - we believe it needs to remain a stand alone item in this section.

**Cost Impact:** The net effect of the public comment and code change proposal will not increase or decrease the cost of construction. This code proposal would put a term back in the code that was removed. Therefore, it is cost neutral.

Public Comment# 3329

### **Public Comment 5:**

IBC: [A] 104.1, [A] 104.2, [A] 104.2.2; IEBC: [A] 104.1, [A] 104.2, [A] 104.2.2; IFC: [A] 104.1, [A] 104.2, [A] 104.2.2; IPMC: [A] 105.1, [A] 105.2, [A] 105.2.1; IWUIC: [A] 104.1, [A] 104.2, [A] 104.2.1; IGCC: 104.1, 104.2, 104.2.2

**Proponents:** Shane Nilles, representing Self (snilles@cityofcheney.org) requests As Modified by Public Comment

**Further modify as follows:**

## 2021 International Building Code

**[A] 104.1 General.** The building official is hereby authorized and directed to enforce the provisions of this code: and shall have the authority to render interpretations of this code and to adopt policies and procedures in order to clarify the application of this code's provisions. Such interpretations, policies and procedures:

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 ~~Determination of~~ Evaluate for Compliance.** The building official shall ~~have the authority to determine~~ evaluate for compliance with this code in accordance with this section and the, ~~to render interpretations of this code and to adopt~~ ed policies and procedures as authorized by Section 104.1 in order to clarify the application of this code's provisions. Such interpretations, policies and procedures:

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] 104.2.2 Technical assistance.** To ~~determine~~ evaluate for 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.

## 2021 International Existing Building Code

**[A] 104.1 General.** The code official is hereby authorized and directed to enforce the provisions of this code: and shall have the authority to render interpretations of this code and to adopt policies and procedures in order to clarify the application of this code's provisions. Such interpretations, policies and procedures:

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 ~~Determination of~~ Evaluate for Compliance.** The code official shall ~~have the authority to determine~~ evaluate for compliance with this code in accordance with this section and the, ~~to render interpretations of this code and to adopt~~ ed policies and procedures as authorized by Section 104.1 in order to clarify the application of this code's provisions. Such interpretations, policies and procedures:

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] 104.2.2 Technical assistance.** To ~~determine~~ evaluate for 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.

## 2021 International Fire Code

**[A] 104.1 General.** The fire code official is hereby authorized to enforce the provisions of this code: and shall have the authority to render interpretations of this code and to adopt policies and procedures in order to clarify the application of this code's provisions. Such interpretations, policies and procedures:

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 ~~Determination of~~ Evaluate for compliance.** The fire code official shall ~~have the authority to determine~~ evaluate for compliance with this code in accordance with this section and the, ~~to render interpretations of this code and to adopt~~ ed policies and procedures as authorized by Section 104.1 in order to clarify the application of this code's provisions. Such interpretations, policies and procedures:

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

## 2021 International Property Maintenance Code

**[A] 105.1 General.** The code official is hereby authorized and directed to enforce the provisions of this code: and shall have the authority to render interpretations of this code and to adopt policies and procedures in order to clarify the application of this code's provisions. Such interpretations, policies and procedures:

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 ~~Determination of~~ Evaluate for compliance.** The code official shall ~~have the authority to determine~~ evaluate for compliance with this code in accordance with this section and the ~~to render interpretations of this code and to adopt ed~~ policies and procedures as authorized by Section 104.1 ~~in order to clarify the application of this code's provisions. Such interpretations, policies and procedures:-~~

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~~ evaluate for 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.

## 2021 International Wildland-Urban Interface Code

**[A] 104.1 Powers and duties of the code official.** The code official is hereby authorized to enforce the provisions of this code ~~and shall have the authority to render interpretations of this code and to adopt policies and procedures in order to clarify the application of this code's provisions. Such interpretations, policies and procedures:-~~

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 ~~Determination of~~ Evaluate for compliance.** The code official shall ~~have the authority to determine~~ evaluate for compliance with this code in accordance with this section and the ~~to render interpretations of this code and to adopt ed~~ policies and procedures as authorized by Section 104.1 ~~in order to clarify the application of this code's provisions. Such interpretations, policies and procedures:-~~

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~~ evaluate for 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.

## 2021 International Green Construction Code

**104.1 General.** The authority having jurisdiction is hereby authorized and directed to enforce the provisions of this code ~~and shall have the authority to render interpretations of this code and to adopt policies and procedures in order to clarify the application of this code's provisions. Such interpretations, policies and procedures:-~~

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.

**104.2 ~~Determination of~~ Evaluate for compliance.** The code official shall ~~have the authority to determine~~ evaluate for compliance with this code in accordance with this section and the ~~to render interpretations of this code and to adopt ed~~ policies and procedures as authorized by Section 104.1 ~~in order to clarify the application of this code's provisions. Such interpretations, policies and procedures:-~~

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.~~

**104.2.2 Technical assistance.** To ~~determine~~ evaluate for 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.

**Commenter's Reason:** Currently the code does not grant the code official the authority to determine that any work fully complies with the code, but rather the authority to enforce the code by reviewing, inspecting, and evaluating for compliance with the code. This is an important distinction because it is not the responsibility of the code official to guarantee that there are no violations when they complete plan reviews or inspections. If that were the case, then contractors, designers, and owners would be able to be absolved of all responsibility for any violations that were not caught by the code official. This public comment corrects that critical oversight that was made by the original proposal and maintains the current intent of the administrative authorities while supporting the original proposal's effort to clarify these sections.

**Cost Impact:** The net effect of the public comment and code change proposal will not increase or decrease the cost of construction. The proposal and this public comment only clarifies the current intent of the code and does not directly affect the cost of construction.



## Public Comment 6:

IBC: [A] 104.2.1; IEBC: [A] 104.2.1; IFC: [A] 104.2.1; IGCC: 104.2.1

**Proponents:** John Woestman, representing Composite Lumber Manufacturers Association (CLMA) (jwoestman@kellencompany.com) requests As Modified by Public Comment

**Further modify as follows:**

## 2021 International Building Code

**[A] 104.2.1 Listed compliance.** Where this code or a referenced standard requires equipment, materials, products or services to be listed and a listing standard is specified, the listing shall be based on the specified standard. Where a listing standard is not specified, the listing shall be based on an *approved* listing criteria. Listings shall be germane to the provision requiring the listing. Installation shall be in accordance with the listing and the manufacturer's instructions, and where required to verify compliance, the listing ~~standard~~ and the manufacturer's instructions shall be made available to the building official.

## 2021 International Existing Building Code

**[A] 104.2.1 Listed compliance.** Where this code or a referenced standard requires equipment, materials, products or services to be listed and a listing standard is specified, the listing shall be based on the specified standard. Where a listing standard is not specified, the listing shall be based on an *approved* listing criteria. Listings shall be germane to the provision requiring the listing. Installation shall be in accordance with the listing and the manufacturer's instructions, and where required to verify compliance, the listing ~~standard~~ and the manufacturer's instructions shall be made available to the code official.

## 2021 International Fire Code

**[A] 104.2.1 Listed compliance.** Where this code or a referenced standard requires equipment, materials, products or services to be listed and a listing standard is specified, the listing shall be based on the specified standard. Where a listing standard is not specified, the listing shall be based on an *approved* listing criteria. Listings shall be germane to the provision requiring the listing. Installation shall be in accordance with the listing and the manufacturer's instructions, and where required to verify compliance, the listing ~~standard~~ and the manufacturer's instructions shall be made available to the fire code official.

## 2021 International Green Construction Code

**104.2.1 Listed compliance.** Where this code or a referenced standard requires equipment, materials, products or services to be listed and a listing standard is specified, the listing shall be based on the specified standard. Where a listing standard is not specified, the listing shall be based on an *approved* listing criteria. Listings shall be germane to the provision requiring the listing. Installation shall be in accordance with the listing and the manufacturer's instructions, and where required to verify compliance, the listing ~~standard~~ and the manufacturer's instructions shall be made available to the code official.

**Commenter's Reason:** We recommend revising the last sentence in this section for consistency between the installation requirements and the information required to be made available to the code official. That is: install per the listing and the manufacturer's instructions, and to make this same information available to the code official if needed to verify compliance.

We agree with the intent of the provisions in Section 104.2.1. However, we have concerns with the ambiguity of part of the last sentence of 104.2.1 and the likelihood of job-by-job and product-by-product interpretation and enforcement of this particular part of the that sentence: "... and where required to verify compliance, the listing standard ... shall be made available to the building official."

Regarding ambiguity of "... shall be made available ...", we anticipate some code officials will ask for a printed copy of a specific standard for a specific product on specific projects. Other code officials will consider the standard available if the standard can be viewed online. And, other code officials may interpret this phrase different than either of these examples.

Standards to which products are listed are typically available from the standards development organization (SDO), or from their authorized agent (e.g. techstreet.com). Some standards are posted online by the SDO for downloading at no cost. Some standards are available from the SDO for viewing online at no cost, but have document protection that prevents copying / pasting and / or downloading, and may be purchased for downloading and printing. And, some standards are available online and require purchasing to view, download, or print.

The standard to which a product is listed is almost always a copyrighted document. Typically, only the copyright owner of a standard, the SDO, can make available copyrighted material. The current language implies the party responsible for complying with the code would be responsible for making available an SDO's copyrighted material, which would likely infringe on the copyright.

Unlike the copyrighted standard, the listing is typically publicly available, With these concerns in mind, we recommend revising Section R104.2.1 as proposed in this public comment.

**Cost Impact:** The net effect of the public comment and code change proposal will not increase or decrease the cost of construction. This public comment will not increase the cost of construction. On the other hand, this public comment may, or may not, decrease the cost of construction. Without this public comment, standards which are referenced in the code could be requested to be made available by the project owner - and that may require purchase of the standard.

---

Public Comment# 3487

# ADM13-22 Part II

## **Proposed Change as Submitted**

**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:** 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 be 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 generated 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.

This proposal is submitted by the ICC Building Code Action Committee (BCAC), ICC Fire Code Action Committee (FCAC) and ICC



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/>.

**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.

## **Public Hearing Results**

### **Committee Action:**

### **As Modified**

### **Committee Modification:**

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

**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, and procedures, ~~rules and regulations~~ in order to clarify the application of this code's provisions. Such interpretations, policies, and 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.~~

**R104.2.1 Listed compliance.** Where this code or a referenced standard requires equipment, materials, products or services to be listed and a listing standard is specified, the listing shall be based on the specified standard. Where a listing standard is not specified, the listing shall be based on an approved listing criteria. Listings shall be germane to the provision requiring the listing. Installation shall be in accordance with the listing and the manufacturer's instructions, and where required to verify compliance, the listing standard and manufacturer's instructions shall be made available to the building official.

~~**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.~~

**R104.2.3.2 Application and disposition.** Where required, a ~~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.

**R104.2.3.4 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, other than fire safety
6. Fire 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. Such tests ~~Tests~~ shall be performed by a party acceptable to the building official.

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

~~**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.~~

**R104.3 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.

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

**Committee Reason:** This proposal, as modified, is a much needed clean up of Section R104 on Duties and Powers of the Code Official. There was a coordinated series of modifications to address areas of concern.

Section R104.2 - The removal of 'rules and regulations' removes some ambiguity and is positive from a builder's perspective.

Section R104.2.1 - The rewrite of this section adds clarity for compliance for what is considered 'listed'. This also provided listing criteria and manufacturer's instructions.

Sections R104.2.2 through R104.2.2.4 - In the IRC, the sections on technical opinions and reports was removed as a requirement for determination of compliance. Systems in the IRC are not as complex as those in many IBC buildings.

Section R104.2.3.2 - This modification makes testing only required when needed.

Section R104.2.3.5 - Adding 'such' takes the ambiguity out of what testing is required.

Section R104.2.3.6.1 - This modification makes the evaluations reports available to the code official when needed. It took out items of concern, such as costs associated with providing hard copies all the time and a requirement for 'input from the public and made available for review by the public' for evaluations.

Section R104.2.3.7 - The requirement for peer review (and the definition) was removed from the IRC proposal. Systems in the IRC are not as complex as those in many IBC buildings.

Section R104.3 - The modification clarifies the permit process.

Section R104.2.3.4 and R104.2.3.4.1 - Fire safety was include in the list of items required for consideration of 'equivalent'. While fire safety is a subsection of 'safety', pulling it out of the list could be interpreted that fire safety was more important than other items in the list. The criteria for what should be considered 'fire safety' should be included in the commentary for this section.

Section R104.6 - Breaking this requirement into two makes better sense for the reference to Section R113.2.

## **Individual Consideration Agenda**

### **Public Comment 1:**

**IRC: R104.2.3, R104.2.3.1, R104.2.4**

**Proponents:** Jenifer Gilliland, representing Washington Association of Building Officials (jenifer.gilliland@seattle.gov); Micah Chappell, representing Washington Association of Building Officials Technical Code Development Committee (micah.chappell@seattle.gov) requests As Modified by Public Comment

**Further modify as follows:**

### **2021 International Residential Code**

**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.~~ the building official has approved and authorized its use.

**R104.2.3.1 Approval authority.** ~~The building official shall be permitted to approve~~ A ~~an~~ alternative material, design or method of construction ~~shall be approved where the building official finds~~ provided that the proposed alternative is satisfactory and complies with Sections 104.2.3 through 104.2.3.7, as applicable.

**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 safety,~~ fire safety or structural requirements where considered together with other safety features of the building or other relevant circumstances. 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.

**Commenter's Reason: The code proposal as currently written unduly constrains the building official.**

The PC restores flexibility for the building official to use judgement when evaluating alternative means, methods, materials and equipment as well as modifications. Controversial language restricting building official approval of items prohibited elsewhere in this code is removed and replaced with a blanket statement giving the building official the ability to approve alternatives as long as the building official authorizes its use. In a newly formed section, Approval authority, the building official is permitted to approve alternatives that are suitable and comply with the equivalency criteria in Sections 104.2.3.4-104.2.3.7.

Under modifications, additional flexibility is provided for the building official to first, evaluate a proposal based on the current criteria, ie. health, accessibility, safety and fire safety features of the building and second, consider with other safety features of the building or relevant circumstances if necessary. Modifications are by definition not compliant with the strict letter of the code. For instance, a building official might want to consider other issues when approving a proposal such as how their local fire department stages for a fire and whether or not a building has been voluntarily sprinklered. If fire department policy is to "Run the stairs" rather than use ladder trucks to access an upper story it may impact your approval of a modification.

This is the second of three proposals addressing the powers of the building official through out the ICC family of codes.

**Cost Impact:** The net effect of the public comment and code change proposal will not increase or decrease the cost of construction

This proposal is mainly aimed at delineating the authority of the building official to approve non-conventional approaches to solving code issues. If anything, costs might be reduced because there is more flexibility to approve a creative approach to a code problem.

Public Comment# 3437

### **Public Comment 2:**

**IRC: R104.2.3.5, R104.2.3.5.1 (New)**

**Proponents:** Jenifer Gilliland, representing Washington Association of Building Officials (jenifer.gilliland@seattle.gov); Micah Chappell, representing

Further modify as follows:

## 2021 International Residential Code

**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-stimulate performance of in the end use configuration. ~~Such tests shall be performed by a party acceptable to the building official.~~

**R104.2.3.5.1 Performance.** Such tests shall be performed by a party acceptable to the building official.

**Commenter's Reason:** This PC seeks to further clarify that full-scale testing is not necessary to support an alternative material, design or method of construction. It only needs to be large enough to give confidence to the building official that a product, component or assembly will perform as expected in the end use configuration. We don't want to just "predict" performance—we need more assurance than that—we actually want to simulate performance in testing. If the performance is simulated then this knowledge can be used to determine how the product, component or assembly will perform in situ.

Testing doesn't always occur in a lab. It could be a fire test of the material of a temporary tent that has no labeling witnessed by the fire department. These tests can consist of burning a tiny piece of the fabric. The language here needs to be written in a general manner to cover all situations where testing may be required.

This is the second of three public comments submitted related to fire testing found through out the ICC Family of Codes.

**Cost Impact:** The net effect of the public comment and code change proposal will not increase or decrease the cost of construction. If anything, unnecessary costs will be avoided as it is more clear with the amendments that full scale testing is not required to show compliance.

Public Comment# 3316

### Public Comment 3:

IRC: R104.2.3.2, R104.2.4, R104.7, R104.7.1, R104.7.2, R104.7.3, R104.7.4, R104.7.5

**Proponents:** Jenifer Gilliland, representing Washington Association of Building Officials (jenifer.gilliland@seattle.gov); Micah Chappell, representing Washington Association of Building Officials Technical Code Development Committee (micah.chappell@seattle.gov) requests As Modified by Public Comment

Further modify as follows:

## 2021 International Residential Code

**R104.2.3.2 Application and disposition.** Where required 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~~ provide a response, stating the reasons the alternative was not approved.

**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~~ in the official record by the building official.

**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 laws, regulations, or rules. Such records shall be made available for public inspection.

**R104.7.1 Approvals Applications.** ~~A record of approvals, the status or the final disposition of shall be maintained by the applications submitted to the building official for review and shall be maintained, available for public inspection during business hours in accordance with applicable laws. Where required, documentation including construction documents and supporting reports shall be retained in the official record.~~

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

**R104.7.3 Code alternatives and modifications.** Applications 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 and/or either shall be in writing shall be retained in the official records.

**R104.7.4 Tests.** The building official shall ~~keep~~ maintain 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~~ maintain a record of fees collected and refunded in accordance with Section R108.

**Commenter's Reason:** This PC attempts to coordinate terms and eliminate dated language, by making the following changes to the original proposal:

- The 5-year minimum time limit for keeping records is eliminated in this PC because public record retention laws vary so much from place to place. There really is no best practice. Some jurisdictions keep permit and inspections records for the life of the building, while others keep no records of residential buildings after a few years. It takes time and money to keep records in a format that allows access to them by the public. Individual jurisdictions will need to customize this section to meet their local conditions.
- More than just approvals need to be kept as part of the official record. Tracking disapprovals of applications and permits is just as important. The requirement to track "status" and "final disposition" makes it clear that records relating to important approval milestones and the final outcome are to be maintained.
- Language is added to make it clear that the building official authority can require the retention of construction documents as part of the public record.
- Language about maintaining construction documents and supporting reports as part of the official record is added but only "where required". This again allows the building official to keep the records based on local and state retention requirements as well as department capacity.
- All records should be subject to "public inspection", not just the inspection records. This language has been relocated 104.7.2 inspections from the charging statement to 104.7 Official Records.
- Notices of violation are added to the list of inspection items in 104.7.2 that need to be maintained as the part of the public record.
- Plan review and inspection results are now recorded and maintained almost entirely electronically in most building departments. There is no need to keep outdated language that requires a department to maintain records "in writing" or a "written response".
- Also, the word "kept" is replaced by "maintained" in this PC. "Kept" implies that the record is being saved "as is". "Maintained" implies more effort to include actions like moving the record from paper to microfiche and finally to a digitized record. "Maintain" might also include sorting, storing and indexing documents in an organized manner.

This PC is the 2nd of 3 submitted public comments dealing with record keeping by the code official.

**Cost Impact:** The net effect of the public comment and code change proposal will not increase or decrease the cost of construction. This PC is just describing the official record that is being kept by the building official. It should not increase the costs for a department as most of the records, outside of the inspection and plan review results, are permitted to be kept by the code official rather than required.

Public Comment# 3383

---

## **Public Comment 4:**

**IRC: R104.2.3.4**

**Proponents:** Bill McHugh, representing Firestop Contractors International Assn., National Fireproofing Contractors Assn. (bill@mc-hugh.us) requests As Modified by Public Comment

**Further modify as follows:**

## **2021 International Residential 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, other than fire safety
6. Fire safety
7. Fire Resistance

**Commenter's Reason:** The reason for this public comment is to re-insert the words 'Fire Resistance'. Fire Resistance has been in the BOCA National Building Code 104.11 ('96 and before), the Uniform Building Code ('97 and before), and for a reason. Fire Resistance is a critical part of the building's fire and life safety protection package. Any alternative needs to be equal to the fire resistance provided. During the Committee Action Hearings, a list of items including Fire Resistance was deleted, leaving 'Fire Safety' with no definition. Because the term Fire Resistance was in the International Building Code since the 2000 version, and in the BOCA National Building Code, Uniform Building Code - as a stand alone item - we believe it needs to remain a stand alone item in this section.

**Cost Impact:** The net effect of the public comment and code change proposal will not increase or decrease the cost of construction. The net effect of this change is that it returns to text already in the code, and will not increase or decrease the cost of construction.

Public Comment# 3327

## **Public Comment 5:**

**IRC: R104.1, R104.2**

**Proponents:** Shane Nilles, representing Self (snilles@cityofcheney.org) requests As Modified by Public Comment

**Further modify as follows:**

## **2021 International Residential Code**

**R104.1 General.** The building official is hereby authorized and directed to enforce the provisions of this code- and shall have the authority to render interpretations of this code and to adopt policies and procedures in order to clarify the application of this code's provisions. Such interpretations, policies and procedures:

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 ~~Determination of~~ Evaluation for compliance.** The building official shall ~~have the authority to determine~~ evaluate for compliance with this code in accordance with this section and the ~~to render interpretations of this code and to adopt ed~~ policies and procedures as authorized by Section 104.1, in order to clarify the application of this code's provisions. Such interpretations, policies and procedures:-

- 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.~~

**Commenter's Reason:** Currently the code does not grant the code official the authority to determine that any work fully complies with the code, but rather the authority to enforce the code by reviewing, inspecting, and evaluating for compliance with the code. This is an important distinction because it is not the responsibility of the code official to guarantee that there are no violations when they complete plan reviews or inspections. If that were the case, then contractors, designers, and owners would be able to be absolved of all responsibility for any violations that were not caught by the code official. This public comment corrects that critical oversight that was made by the original proposal and maintains the current intent of the administrative authorities while supporting the original proposal's effort to clarify these sections.

**Cost Impact:** The net effect of the public comment and code change proposal will not increase or decrease the cost of construction. The proposal and this public comment only clarifies the current intent of the code and does not directly affect the cost of construction.

Public Comment# 3452

## Public Comment 6:

### IRC: R104.2.1

**Proponents:** John Woestman, representing Composite Lumber Manufacturers Association (CLMA) (jwoestman@kellencompany.com) requests As Modified by Public Comment

**Further modify as follows:**

## 2021 International Residential Code

**R104.2.1 Listed compliance.** Where this code or a referenced standard requires equipment, materials, products or services to be *listed* and a listing standard is specified, the listing shall be based on the specified standard. Where a listing standard is not specified, the listing shall be based on an *approved* listing criteria. Listings shall be germane to the provision requiring the listing. Installation shall be in accordance with the listing and the manufacturer's instructions, and where required to verify compliance, the listing ~~standard~~ and the manufacturer's instructions shall be made available to the *building official*.

**Commenter's Reason:** We recommend revising the last sentence in this section for consistency between the installation requirements and the information required to be made available to the code official. That is: install per the listing and the manufacturer's instructions, and to make this same information available to the code official if needed to verify compliance.

We agree with the intent of the provisions in Section 104.2.1. However, we have concerns with the ambiguity of part of the last sentence of 104.2.1 and the likelihood of job-by-job and product-by-product interpretation and enforcement of this particular part of the that sentence: "... and where required to verify compliance, the listing standard ... shall be made available to the building official."

Regarding ambiguity of "... shall be made available . . .", we anticipate some code officials will ask for a printed copy of a specific standard for a specific product on specific projects. Other code officials will consider the standard available if the standard can be viewed online. And, other code officials may interpret this phrase different than either of these examples.

Standards to which products are listed are typically available from the standards development organization (SDO), or from their authorized agent (e.g. techstreet.com). Some standards are posted online by the SDO for downloading at no cost. Some standards are available from the SDO for viewing online at no cost, but have document protection that prevents copying / pasting and / or downloading, and may be purchased for downloading and printing. And, some standards are available online and require purchasing to view, download, or print.

The standard to which a product is listed is almost always a copyrighted document. Typically, only the copyright owner of a standard, the SDO, can make available copyrighted material. The current language implies the party responsible for complying with the code would be responsible for making available an SDO's copyrighted material, which would likely infringe on the copyright.

Unlike the copyrighted standard, the listing is typically publicly available, With these concerns in mind, we recommend revising Section R104.2.1 as proposed in this public comment.

**Cost Impact:** The net effect of the public comment and code change proposal will not increase or decrease the cost of construction

The net effect of the public comment and code change proposal will not increase or decrease the cost of construction This public comment will not increase the cost of construction. On the other hand, this public comment may, or may not, decrease the cost of construction. Without this public comment, standards which are referenced in the code could be requested to be made available by the project owner - and that may require purchase of the standard.

---

Public Comment# 3493

# ADM14-22

## *Proposed Change as Submitted*

**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:** 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 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 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 generated 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

## **Public Hearing Results**

### **Committee Action:**

### **As Modified**

### **Committee Modification:**

#### **2021 International Mechanical 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, and procedures, ~~rules and regulations~~ in order to clarify the application of this code's provisions. Such interpretations, policies, and 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.

**[A] 104.2.1 Listed compliance.** Where this code or a referenced standard requires equipment, materials, products or services to be listed and a listing standard is specified, the listing shall be based on the specified standard. Where a listing standard is not specified, the listing shall be based on an approved listing criteria. Listings shall be germane to the provision requiring the listing. Installation shall be in accordance with the listing and the manufacturer's instructions, and where required to verify compliance, the listing standard and manufacturer's instructions shall be made available to the code official.

~~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] 104.2.2.3 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. Such tests shall be performed by a party acceptable to the code official.

**[A] 104.2.3.2 Application and disposition.** ~~Where required, 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] 104.2.3.4 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, other than fire safety
6. Fire 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] 104.2.3.6 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 and use of the evaluation report shall require approval by the code official for the installation. The alternate material, design or method of construction and product evaluated shall be within the scope of the code official's recognition accreditation of the approved agency. Criteria used for the evaluation shall be identified within the report and where required, provided to the code official ~~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] 104.3 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] 104.6 Notices and orders.** The code official shall issue necessary notices or orders to ensure compliance with this code. Notices of violations shall be in accordance with Section 114.~~

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

**[A] 104.2 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, ~~and procedures, rules and regulations~~ in order to clarify the application of this code's provisions. Such interpretations, policies, ~~and 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.

**[A] 104.2.1 Listed compliance.** Where this code or a reference standard requires equipment, materials, products or services to be listed and a listing standard is specified, the listing shall be based on the specified standard. Where a listing standard is not specified, the listing shall be based on an approved listing criteria. Listings shall be germane to the provision requiring the listing. Installation shall be in accordance with the listing and the manufacturer's instructions, and where required to verify compliance, the listing standard and manufacturer's instructions shall be made available to the code official.

~~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] 104.2.2.3 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. Such tests shall be performed by a party acceptable to the code official.

**[A] 104.2.3.2 Application and disposition.** Where required, 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] 104.2.3.4 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, other than fire safety

6. Fire 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] 104.2.3.6 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 and use of the evaluation report shall require approval by the code official for the installation.~~ The alternate material, design or method of construction and product evaluated shall be within the scope of ~~the code official's recognition accreditation~~ of the approved agency. Criteria used for the evaluation shall be identified within the report ~~and where required, provided to the code official, 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] 104.3 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] 104.6 Notices and orders.** The code official shall issue necessary notices or orders to ensure compliance with this code. Notices of violations shall be in accordance with Section 114.

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

## 2021 International Plumbing 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, ~~and procedures, rules and regulations~~ in order to clarify the application of this code's provisions. Such interpretations, policies, ~~and 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.

**[A] 104.2.1 Listed compliance.** ~~Where this code or a reference standard requires equipment, materials, products or services to be listed and a listing standard is specified, the listing shall be based on the specified standard. Where a listing standard is not specified, the listing shall be based on an approved listing criteria. Listings shall be germane to the provision requiring the listing. Installation shall be in accordance with the listing and the manufacturer's instructions, and where required to verify compliance, the listing standard and manufacturer's instructions shall be made available to the code official.~~

~~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] 104.2.2.3 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. Such tests shall be performed by a party acceptable to the code official.

**[A] 104.2.3.2 Application and disposition.** ~~Where required, 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] 104.2.3.4 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, other than fire safety
6. Fire 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] 104.2.3.6 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~~ and use of the evaluation report shall require approval by the code official for the installation. The alternate material, design or method of construction and product evaluated shall be within the scope of the code official's recognition accreditation of the approved agency. Criteria used for the evaluation shall be identified within the report and where required, provided to the code official, ~~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] 104.3 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] 104.6 Notices and orders.** The code official shall issue necessary notices or orders to ensure compliance with this code. Notices of violations

shall be in accordance with Section 114.

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

## **2021 International Swimming Pool and Spa 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, ~~and procedures, rules and regulations~~ in order to clarify the application of this code's provisions. Such interpretations, policies, ~~and 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.

**[A] 104.2.1 Listed compliance.** Where this code or a reference standard requires equipment, materials, products or services to be listed and a listing standard is specified, the listing shall be based on the specified standard. Where a listing standard is not specified, the listing shall be based on an approved listing criteria. Listings shall be germane to the provision requiring the listing. Installation shall be in accordance with the listing and the manufacturer's instructions, and where required to verify compliance, the listing standard and manufacturer's instructions shall be made available to the code official.

~~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] 104.2.2.3 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. Such tests shall be performed by a party acceptable to the code official.

**[A] 104.2.3.2 Application and disposition.** Where required, a ~~request~~ 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] 104.2.3.4 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, other than fire safety
6. Fire 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] 104.2.3.6 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~~ and use of the evaluation report shall require approval by the code official for the installation. The alternate material, design or method of construction and product evaluated shall be within the scope of ~~the code official's recognition accreditation~~ of the approved agency. Criteria used for the evaluation shall be identified within the report ~~and where required, provided to the code official~~ 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] 104.3 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]104.6 Notices and orders.** The code official shall issue necessary notices or orders to ensure compliance with this code. Notices of violations shall be in accordance with Section 114.

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

## 2021 International Private Sewage Disposal 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, ~~and procedures, rules and regulations~~ in order to clarify the application of this code's provisions. Such interpretations, policies, ~~and 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.

**[A] 104.2.1 Listed compliance.** Where this code or a reference standard requires equipment, materials, products or services to be listed and a listing standard is specified, the listing shall be based on the specified standard. Where a listing standard is not specified, the listing shall be based on an approved listing criteria. Listings shall be germane to the provision requiring the listing. Installation shall be in accordance with the listing and the manufacturer's instructions, and where required to verify compliance, the listing standard and manufacturer's instructions shall be made available to the code official.

~~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] 104.2.2.3 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. Such tests shall be performed by a party acceptable to the code official.

**[A] 104.2.3.2 Application and disposition.** ~~Where required, 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] 104.2.3.4 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, other than fire safety
6. Fire 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] 104.2.3.6 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~~ and use of the evaluation report shall require approval by the code official for the installation. The alternate material, design or method of construction and product evaluated shall be within the scope of the code official's recognition accreditation of the approved agency. Criteria used for the evaluation shall be identified within the report and where required, provided to the code official, 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] 104.3 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]104.6 Notices and orders.** The code official shall issue necessary notices or orders to ensure compliance with this code. Notices of violations shall be in accordance with Section 114.

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

**Committee Reason:** The committee stated that the reason for the approval of the modifications and proposal was based on correlation and consistency with the action taken on ADM13-22 Part I. (Vote: 9-4)

ADM14-22

## **Individual Consideration Agenda**

### **Public Comment 1:**

**IMC:** [A] 104.2.3, [A] 104.2.3.1, [A] 104.2.4; **IFGC:** [A] 104.2.3, [A] 104.2.3.1, [A] 104.2.4; **IPC:** [A] 104.2.3, [A] 104.2.3.1, [A] 104.2.4; **ISPSC:** [A] 104.2.3, [A] 104.2.3.1, [A] 104.2.4; **IPSDC:** [A] 104.2.3, [A] 104.2.3.1, [A] 104.2.4

**Proponents:** Jenifer Gilliland, representing Washington Association of Building Officials (jenifer.gilliland@seattle.gov); Micah Chappell, representing Washington Association of Building Officials Technical Code Development Committee (micah.chappell@seattle.gov) requests As Modified by Public Comment

**Further modify as follows:**

## **2021 International Mechanical Code**

**[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~~ the code official has approved and authorized its use

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

**[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 safety,~~ fire safety or structural requirements where considered together with other safety features of the building or other relevant circumstances. 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~~ maintained in the official record by the code official.

## **2021 International Fuel Gas Code**

**[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~~ the code official has approved and authorized its use.

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

**[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 safety~~, fire safety or structural requirements where considered together with other safety features of the building or other relevant circumstances. 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 maintained in the official record by the code official~~.

## 2021 International Plumbing Code

**[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.~~ the code official has approved and authorized its use.

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

**[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 safety~~, fire safety or structural requirements where considered together with other safety features of the building or other relevant circumstances. 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 maintained in the official record by the code official~~.

## 2021 International Swimming Pool and Spa Code

**[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.~~ the code official has approved and authorized its use.

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

**[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 safety~~, 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 maintained in the official record by the code official~~.

## 2021 International Private Sewage Disposal Code

**[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.~~ the building official has approved and authorized its use.

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

**[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 safety~~, 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 maintained in the official record by the code official~~.

### Commenter's Reason: The code proposal as currently written unduly constrains the building official.

This PC restores flexibility for the building official to use judgement when evaluating alternative means, methods, materials and equipment as well as modifications. Controversial language restricting building official approval of items prohibited elsewhere in this code is removed and replaced with a blanket statement giving the building official the ability to approve alternatives as long as the building official authorizes its use. In a newly formed section, Approval authority, the building official is permitted to approve alternatives that are suitable and comply with the equivalency criteria in Sections 104.2.3.4-104.2.3.7.

In modifications, additional flexibility is provided for the building official to first, evaluate a proposal based on the current criteria, ie. health, accessibility, safety and fire safety features of the building and second, consider with other safety features of the building or relevant circumstances if necessary. Modifications are by definition not compliant with the strict letter of the code. For instance, a building official might want to consider other issues when approving a proposal such as how their local fire department stages for a fire and whether or not a building has been voluntarily sprinklered. If fire department policy is to "Run the stairs" rather than use ladder trucks to access an upper story it may impact your approval of a

modification.

This is the third of three proposals addressing the authority of the building official across the ICC Family of Codes.

**Cost Impact:** The net effect of the public comment and code change proposal will not increase or decrease the cost of construction. This proposal is mainly aimed at delineating the authority of the building official to approve non-conventional approaches to solving code issues. If anything, costs might be reduced because there is more flexibility to approve a creative approach to a code problem.

Public Comment# 3455

## **Public Comment 2:**

**IPC:** [A] 104.2.3.5, [A] 104.2.3.5.1 (New); **IMC:** [A] 104.2.3.5, [A] 104.2.3.5.1 (New); **IFGC:** [A] 104.2.3.5, [A] 104.2.3.5.1 (New); **ISPSC:** [A] 104.2.3.5, [A] 104.2.3.5.1 (New); **IPSDC:** [A] 104.2.3.5, [A] 104.2.3.5.1 (New)

**Proponents:** Jenifer Gilliland, representing Washington Association of Building Officials (jenifer.gilliland@seattle.gov); Micah Chappell, representing Washington Association of Building Officials (micah.chappell@seattle.gov) requests As Modified by Public Comment

**Further modify as follows:**

## **2021 International Plumbing Code**

**[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~~ simulate performance of in the end use configuration. ~~Tests shall be performed by a party acceptable to the code official.~~

**[A] 104.2.3.5.1 Performance.** Tests shall be performed by a party acceptable to the code official.

## **2021 International Mechanical Code**

**[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~~ simulate performance of in the end use configuration. ~~Tests shall be performed by a party acceptable to the code official.~~

**[A] 104.2.3.5.1 Performance.** Tests shall be performed by a party acceptable to the code official.

## **2021 International Fuel Gas Code**

**[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~~ simulate performance of in the end use configuration. ~~Tests shall be performed by a party acceptable to the code official.~~

**[A] 104.2.3.5.1 Performance.** Tests shall be performed by a party acceptable to the code official.

## **2021 International Swimming Pool and Spa Code**

**[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~~ simulate performance of in the end use configuration. ~~Tests shall be performed by a party acceptable to the code official.~~

**[A] 104.2.3.5.1 Performance.** Tests shall be performed by a party acceptable to the code official.

## **2021 International Private Sewage Disposal Code**

**[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~~ simulate performance of in the end use configuration. ~~Tests shall be performed by a party acceptable to the code official.~~

**[A] 104.2.3.5.1 Performance.** Tests shall be performed by a party acceptable to the code official.

**Commenter's Reason:** This PC seeks to clarify that full-scale testing is not necessary to support an alternative material, design or method of construction. It only needs to be large enough to give confidence to the building official that a product, component or assembly will perform as expected in the end use configuration. We don't want to just "predict" performance—we need more assurance than that—we actually want to simulate performance in testing. If the performance is simulated then this knowledge can be used to determine how the product, component or assembly will perform in situ.

Testing doesn't always occur in a lab. It could be a fire test of the material of a temporary tent that has no labeling witnessed by the fire department. These often consist of burning a tiny piece of the fabric. The language needs to be written in a general manner to cover all situations where testing may be required.

This is the third PC of three identical PC's addressing testing.

**Cost Impact:** The net effect of the public comment and code change proposal will not increase or decrease the cost of construction. The changes in the PC should not impact costs. If anything the changes would reduce costs because full-scale testing would not be required.

Public Comment# 3387

### **Public Comment 3:**

IMC: [A] 104.2.3.2, [A] 104.2.4, [A] 104.7, [A] 104.7.1, [A] 104.7.2, [A] 104.7.3, [A] 104.7.4, [A] 104.7.5; IFGC: [A] 104.2.3.2, [A] 104.2.4, [A] 104.7, [A] 104.7.1, [A] 104.7.2, [A] 104.7.3, [A] 104.7.4; IPC: [A] 104.2.3.2, [A] 104.2.4, [A] 104.7, [A] 104.7.1, [A] 104.7.2, [A] 104.7.3, [A] 104.7.4, [A] 104.7.5; ISPSC: [A] 104.2.3.2, [A] 104.2.4, [A] 104.7, [A] 104.7.1, [A] 104.7.2, [A] 104.7.3, [A] 104.7.4, [A] 104.7.5; IPSDC: [A] 104.2.3.2, [A] 104.2.4, [A] 104.7, [A] 104.7.1, [A] 104.7.2, [A] 104.7.3, [A] 104.7.4, [A] 104.7.5

**Proponents:** Jenifer Gilliland, representing Washington Association of Building Officials (jenifer.gilliland@seattle.gov); Micah Chappell, representing Washington Association of Building Officials Technical Code Development Committee (micah.chappell@seattle.gov) requests As Modified by Public Comment

**Further modify as follows:**

## **2021 International Mechanical Code**

**[A] 104.2.3.2 Application and disposition.** Where required 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~~ provide a response, stating the reasons the alternative was not approved.

**[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 maintained entered in the files of the department of building safety in the official record by the code official.

**[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 laws, regulations, or rules. Such records shall be made available for public inspection.

**[A] 104.7.1 Approvals-Applications.** A record of ~~approvals~~ the status or the final disposition of ~~shall be maintained by the~~ applications submitted to the code official for review and shall be available for public inspection during business hours in accordance with applicable laws. Where required, documentation including construction documents and supporting reports shall be maintained in the official record.

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

**[A] 104.7.3 Code alternatives and modifications.** Applications 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~~ maintain 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~~ maintain a record of fees collected and refunded in accordance with Section 109.

## **2021 International Fuel Gas Code**

**[A] 104.2.3.2 Application and disposition.** Where required 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~~ provide a response stating the reasons the alternative was not approved.

**[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 maintained entered in the files of the department of building safety in the official record by the building official.

**[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 laws, regulations, or rules. Such records shall be made available for public inspection.

**[A] 104.7.1 Approvals Applications.** A record of ~~approvals~~ the status or the final disposition of ~~shall be maintained by the~~ applications submitted to the code official for review and shall be maintained available for public inspection during business hours in accordance with applicable laws. Where required, documentation including construction documents and supporting reports shall be maintained in the official record.

**[A] 104.7.2 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. 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.** Applications 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~~ maintain a record of tests conducted to comply with Sections 104.2.2.4 and 104.2.3.5.

**[A] 104.7.4.5 Fees.** The code official shall ~~keep~~ maintain a record of fees collected and refunded in accordance with Section 109.

## 2021 International Plumbing Code

**[A] 104.2.3.2 Application and disposition.** Where required 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~~ provide a response, stating the reasons the alternative was not approved.

**[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 maintained entered in the files of the department of building safety in the official record by the code official.

**[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 laws, regulations, or rules. Such records shall be made available for public inspection.

**[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 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. The code official shall keep a record of each inspection made, including notices and orders and notices of violations 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~~ maintain 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~~ maintain a record of fees collected and refunded in accordance with Section 109.

## 2021 International Swimming Pool and Spa Code

**[A] 104.2.3.2 Application and disposition.** Where required 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~~ provide a response, stating the reasons the alternative was not approved.

**[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 maintained entered in the files of the department of building safety in the official record by the building official.

**[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 laws, regulations, or rules. Such records shall be made available for public inspection.

**[A] 104.7.1 Approvals Applications.** A record of ~~approvals~~ the status or the final disposition of ~~shall be maintained by~~ applications submitted to the code official and shall be ~~available for public inspection during business hours in accordance with applicable laws maintained.~~ Where required, documentation including *construction documents* and supporting reports shall be retained in the official record.

**[A] 104.7.2 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. The code official shall ~~keep~~ maintain a record of each inspection made, including notices and orders and notices of violation 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~~ maintain 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~~ maintain a record of fees collected and refunded in accordance with Section 109.

## 2021 International Private Sewage Disposal Code

**[A] 104.2.3.2 Application and disposition.** Where required, 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~~ provide a response, stating the reasons the alternative was not approved.

**[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 maintained entered in the files of the department of building safety in the official record by the code official.

**[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 laws, regulations, or rules. Such records shall be made available for public inspection.

**[A] 104.7.1 Approvals Applications.** A record of ~~approvals~~ the status or the final disposition of ~~shall be maintained by the~~ applications submitted to the code official and shall be ~~maintained available for public inspection during business hours in accordance with applicable laws.~~ Where required, documentation including *construction documents* and supporting reports shall be retained in the official record.

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

**[A] 104.7.3 Code alternatives and modifications.** Applications 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~~ maintain 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~~ maintain a record of fees collected and refunded in accordance with Section 109.

**Commenter's Reason: This PC attempts to coordinate terms and eliminate dated language, by making the following changes to the original proposal:**

• The 5-year minimum time limit for keeping records is eliminated in this PC because public record retention laws vary so much from place to place. There really is no best practice. Some jurisdictions keep permit and inspections records for the life of the building, while others keep no records of residential buildings after a few years. It takes time and money to keep records in a format that allows access to them by the public. Individual jurisdictions will need to customize this section to meet their local conditions.

- More than just approvals need to be kept as part of the official record. Tracking disapprovals of applications and permits is just as important. The requirement to track “status” and “final disposition” makes it clear that records relating to important approval milestones and the final outcome are to be maintained.
- Language is added to make it clear that the building official authority can require the retention of construction documents as part of the public record.
- Language about maintaining construction documents and supporting reports as part of the official record is added but only “where required”. This again allows the building official to keep the records based on local and state retention requirements as well as department capacity.
- All records should be subject to “public inspection”, not just the inspection records. This language has been relocated 104.7.2 inspections from the charging statement to 104.7 Official Records.
- Notices of violation are added to the list of inspection items in 104.7.2 that need to be maintained as the part of the public record.
- Plan review and inspection results are now recorded and maintained almost entirely electronically in most building departments. There is no need to keep outdated language that requires a department to maintain records “in writing” or a “written response”.
- Also, the word “kept” is replaced by “maintained” in this PC. “Kept” implies that the record is being saved “as is”. “Maintained” implies more effort to include actions like moving the record from paper to microfiche and finally to a digitized record. “Maintain” might also include sorting, storing and indexing documents in an organized manner.

This is the third of three public comments submitted to make changes to the record keeping sections in the ICC family of codes.

**Cost Impact:** The net effect of the public comment and code change proposal will not increase or decrease the cost of construction. This PC just describes the official record that is being kept by the building official. It should not increase the costs for a department as most of the records, outside of the inspection and plan review results, are permitted to be kept by the code official rather than required.

Public Comment# 3417

## ***Public Comment 4:***

**IMC:** [A] 104.2.3.4; **IFGC:** [A] 104.2.3.4; **IPC:** [A] 104.2.3.4; **ISPSC:** [A] 104.2.3.4; **IPSDC:** [A] 104.2.3.4

**Proponents:** Bill McHugh, representing National Fireproofing Contractors Association, Firestop Contractors International Association (bill@mc-hugh.us) requests As Modified by Public Comment

**Further modify as follows:**

## **2021 International Mechanical 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, other than fire safety
6. Fire safety
7. Fire resistance

## **2021 International Fuel Gas 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, other than fire safety
6. Fire safety
7. Fire resistance

## 2021 International Plumbing 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, other than fire safety
6. Fire safety
7. Fire resistance

## 2021 International Swimming Pool and Spa 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, other than fire safety
6. Fire safety
7. Fire resistance

## 2021 International Private Sewage Disposal 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, other than fire safety
6. Fire safety
7. Fire resistance

**Commenter's Reason:** The reason for this public comment is to re-insert the words 'Fire Resistance'. Fire Resistance has been in the BOCA National Building Code 104.11 ('96 and before), the Uniform Building Code ('97 and before), and for a reason. Fire Resistance is a critical part of the building's fire and life safety protection package. Any alternative to fire-resistance needs to be equal to the fire resistance provided. During the Committee Action Hearings, a list of items explaining what's in 'Fire Safety' including Fire Resistance was deleted, leaving 'Fire Safety' with no definition. Because the term Fire-Resistance has in the International Building Code since the 2000 version, and in the BOCA National



Building Code, Uniform Building Code - as a stand alone item - we believe it needs to remain a stand alone item in this section.

**Cost Impact:** The net effect of the public comment and code change proposal will not increase or decrease the cost of construction. This code proposal would put a term back in the code that was removed. Therefore, it is cost neutral.

Public Comment# 3546

### **Public Comment 5:**

**IMC:** [A] 104.1 , [A] 104.2, [A] 104.2.2; **IFGC:** [A] 104.1, [A] 104.2, [A] 104.2.2; **IPC:** [A] 104.1, [A] 104.2, [A] 104.2.2; **ISPSC:** [A] 104.1, [A] 104.2, [A] 104.2.2; **IPSDC:** [A] 104.1, [A] 104.2, [A] 104.2.2

**Proponents:** Shane Nilles, representing Self (snilles@cityofcheney.org) requests As Modified by Public Comment

**Further modify as follows:**

## **2021 International Mechanical Code**

**[A] 104.1 General.** The building official is hereby authorized and directed to enforce the provisions of this code- and shall have the authority to render interpretations of this code and to adopt policies and procedures in order to clarify the application of this code's provisions. Such interpretations, policies and procedures:

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 ~~Determination of~~ Evaluate for Compliance.** The building official shall ~~have the authority to determine~~ evaluate for compliance with this code in accordance with this section and the, ~~to render interpretations of this code and to adopt ed~~ policies and procedures as authorized by Section 104.1 in order to clarify the application of this code's provisions. Such interpretations, policies and procedures:-

- 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] 104.2.2 Technical assistance.** To ~~determine~~ evaluate for 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.

## **2021 International Fuel Gas Code**

**[A] 104.1 General.** The building official is hereby authorized and directed to enforce the provisions of this code- and shall have the authority to render interpretations of this code and to adopt policies and procedures in order to clarify the application of this code's provisions. Such interpretations, policies and procedures:

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 ~~Determination of~~ Evaluate for Compliance.** The building official shall ~~have the authority to determine~~ evaluate for compliance with this code in accordance with this section and the, ~~to render interpretations of this code and to adopt ed~~ policies and procedures as authorized by Section 104.1 in order to clarify the application of this code's provisions. Such interpretations, policies and procedures:-

- 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] 104.2.2 Technical assistance.** To ~~determine~~ evaluate for 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.

## **2021 International Plumbing Code**

**[A] 104.1 General.** The building official is hereby authorized and directed to enforce the provisions of this code- and shall have the authority to render interpretations of this code and to adopt policies and procedures in order to clarify the application of this code's provisions. Such interpretations, policies and procedures:

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 ~~Determination of~~ Evaluate for compliance.** The building official shall ~~have the authority to determine~~ evaluate for compliance with this code in accordance with this section and the, ~~to render interpretations of this code and to adopt ed~~ policies and procedures as authorized by Section 104.1 in order to clarify the application of this code's provisions. Such interpretations, policies and procedures:-

- 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] 104.2.2 Technical assistance.** To ~~determine~~ evaluate for 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.

## 2021 International Swimming Pool and Spa Code

**[A] 104.1 General.** The building official is hereby authorized and directed to enforce the provisions of this code- and shall have the authority to render interpretations of this code and to adopt policies and procedures in order to clarify the application of this code's provisions. Such interpretations, policies and procedures:-

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 ~~Determination of~~ Evaluate for compliance.** The building official shall ~~have the authority to determine~~ evaluate for compliance with this code in accordance with this section and the, ~~to render interpretations of this code and to adopt ed~~ policies and procedures as authorized by Section 104.1 in order to clarify the application of this code's provisions. Such interpretations, policies and procedures:-

- 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] 104.2.2 Technical assistance.** To ~~determine~~ evaluate for 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.

## 2021 International Private Sewage Disposal Code

**[A] 104.1 General.** The building official is hereby authorized and directed to enforce the provisions of this code- and shall have the authority to render interpretations of this code and to adopt policies and procedures in order to clarify the application of this code's provisions. Such interpretations, policies and procedures:-

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 ~~Determination of~~ Evaluate for compliance.** The building official shall ~~have the authority to determine~~ evaluate for compliance with this code in accordance with this section and the, ~~to render interpretations of this code and to adopt ed~~ policies and procedures as authorized by Section 104.1 in order to clarify the application of this code's provisions. Such interpretations, policies and procedures:-

- 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] 104.2.2 Technical assistance.** To ~~determine~~ evaluate for 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.

**Commenter's Reason:** Currently the code does not grant the code official the authority to determine that any work fully complies with the code, but rather the authority to enforce the code by reviewing, inspecting, and evaluating for compliance with the code. This is an important distinction because it is not the responsibility of the code official to guarantee that there are no violations when they complete plan reviews or inspections. If that were the case, then contractors, designers, and owners would be able to be absolved of all responsibility for any violations that were not caught by the code official. This public comment corrects that critical oversight that was made by the original proposal and maintains the current intent of the administrative authorities while supporting the original proposal's effort to clarify these sections.

**Cost Impact:** The net effect of the public comment and code change proposal will not increase or decrease the cost of construction. The proposal and this public comment only clarifies the current intent of the code and does not directly affect the cost of construction.

## **Public Comment 6:**

**IMC: 104.2.1; IFGC: [A] 104.2.1; IPC: [A] 104.2.1; ISPSC: [A] 104.2.1; IPSDC: [A] 104.2.1**

**Proponents:** John Woestman, representing Composite Lumber Manufacturers Association (CLMA) (jwoestman@kellencompany.com) requests As Modified by Public Comment

**Further modify as follows:**

## **2021 International Mechanical Code**

**[A] 104.2.1 Listed compliance.** Where this code or a referenced standard requires equipment, materials, products or services to be listed and a listing standard is specified, the listing shall be based on the specified standard. Where a listing standard is not specified, the listing shall be based on an approved listing criteria. Listings shall be germane to the provision requiring the listing. Installation shall be in accordance with the listing and the manufacturer's instructions, and where required to verify compliance, the listing ~~standard~~ and the manufacturer's instructions shall be made available to the code official.

## **2021 International Fuel Gas Code**

**[A] 104.2.1 Listed compliance.** Where this code or a reference standard requires equipment, materials, products or services to be listed and a listing standard is specified, the listing shall be based on the specified standard. Where a listing standard is not specified, the listing shall be based on an approved listing criteria. Listings shall be germane to the provision requiring the listing. Installation shall be in accordance with the listing and the manufacturer's instructions, and where required to verify compliance, the listing ~~standard~~ and the manufacturer's instructions shall be made available to the code official.

## **2021 International Plumbing Code**

**[A] 104.2.1 Listed compliance.** Where this code or a reference standard requires equipment, materials, products or services to be listed and a listing standard is specified, the listing shall be based on the specified standard. Where a listing standard is not specified, the listing shall be based on an approved listing criteria. Listings shall be germane to the provision requiring the listing. Installation shall be in accordance with the listing and the manufacturer's instructions, and where required to verify compliance, the listing ~~standard~~ and the manufacturer's instructions shall be made available to the code official.

## **2021 International Swimming Pool and Spa Code**

**[A] 104.2.1 Listed compliance.** Where this code or a reference standard requires equipment, materials, products or services to be listed and a listing standard is specified, the listing shall be based on the specified standard. Where a listing standard is not specified, the listing shall be based on an approved listing criteria. Listings shall be germane to the provision requiring the listing. Installation shall be in accordance with the listing and the manufacturer's instructions, and where required to verify compliance, the listing ~~standard~~ and the manufacturer's instructions shall be made available to the code official.

## **2021 International Private Sewage Disposal Code**

**[A] 104.2.1 Listed compliance.** Where this code or a reference standard requires equipment, materials, products or services to be listed and a listing standard is specified, the listing shall be based on the specified standard. Where a listing standard is not specified, the listing shall be based on an approved listing criteria. Listings shall be germane to the provision requiring the listing. Installation shall be in accordance with the listing and the manufacturer's instructions, and where required to verify compliance, the listing ~~standard~~ and the manufacturer's instructions shall be made available to the code official.

**Commenter's Reason:** We recommend revising the last sentence in this section for consistency between the installation requirements and the information required to be made available to the code official. That is: install per the listing and the manufacturer's instructions, and to make this same information available to the code official if needed to verify compliance.

We agree with the intent of the provisions in Section 104.2.1. However, we have concerns with the ambiguity of part of the last sentence of 104.2.1 and the likelihood of job-by-job and product-by-product interpretation and enforcement of this particular part of the that sentence: " . . . and where required to verify compliance, the listing standard . . . shall be made available to the building official."

Regarding ambiguity of " . . . shall be made available . . . ", we anticipate some code officials will ask for a printed copy of a specific standard for a specific product on specific projects. Other code officials will consider the standard available if the standard can be viewed online. And, other code officials may interpret this phrase different than either of these examples.

Standards to which products are listed are typically available from the standards development organization (SDO), or from their authorized agent (e.g. techstreet.com). Some standards are posted online by the SDO for downloading at no cost. Some standards are available from the SDO for viewing online at no cost, but have document protection that prevents copying / pasting and / or downloading, and may be purchased for downloading and printing. And, some standards are available online and require purchasing to view, download, or print.

The standard to which a product is listed is almost always a copyrighted document. Typically, only the copyright owner of a standard, the SDO, can make available copyrighted material. The current language implies the party responsible for complying with the code would be responsible for making available an SDO's copyrighted material, which would likely infringe on the copyright.

Unlike the copyrighted standard, the listing is typically publicly available, With these concerns in mind, we recommend revising Section 104.2.1 as proposed in this public comment.

**Cost Impact:** The net effect of the public comment and code change proposal will not increase or decrease the cost of construction. This public comment will not increase the cost of construction. On the other hand, this public comment may, or may not, decrease the cost of construction. Without this public comment, standards which are referenced in the code could be requested to be made available by the project owner - and that may require purchase of the standard.

---

Public Comment# 3542

# ADM17-22 Part I

## **Proposed Change as Submitted**

**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 ies 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.

**Reason:** 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.

ADM17-22 Part I

---

## **Public Hearing Results**

**Committee Action:**

**Disapproved**

**Committee Reason:** The committee stated that the reason for the disapproval was that the change focuses on the use of the adding the word interpretations throughout and that seems to create some conflicts. Additionally, it was stated that a code official can wave code requirements in certain situations with an example provided by the committee in response to the concern about arbitrary and capricious enforcement. (Vote: 9-3)

## **Individual Consideration Agenda**

### **Public Comment 1:**

**Proponents:** John-Jozef Proczka, representing Self (john-jozef.proczka@phoenix.gov) requests As Submitted

**Commenter's Reason:** This one word addition is to make it crystal clear that you can't waive a specific code requirement. The current absence of this word leaves an odd situation where it is potentially OK for a code official to waive code requirements on a case-by-case basis, but not in policies. When a requirement is impractical there is already a code provision for how to deal with that situation - code modification - where an impracticality of the code provision is demonstrated for that case. Note that there is no requirement that a separate application has to be filed every time a code modification approach is used.

Voluntary enforcement of some of the provisions of the building code while waiving other requirements on a case-by-case basis doesn't make for an International Building Code or any other base code, it makes for the code only according to the specific building official. That is not the overall intent of having a base code. As stated in the original proposal's reason statement the lack of this one word can lead to favoritism in enforcement of building codes.

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

---

Public Comment# 3120

## ADM17-22 Part II

### **Proposed Change as Submitted**

**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:** 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.

ADM17-22 Part II

---

### **Public Hearing Results**

**Committee Action:**

**Disapproved**

**Committee Reason:** This proposal was disapproved for consistency with the Administrative committee action on ADM17-22 Part 1. Adding 'interpretation' could be read to waive code requirements. (Vote: 10-0)

ADM17-22 Part II

---

### **Individual Consideration Agenda**

#### **Public Comment 1:**

**Proponents:** John-Jozef Proczka, representing Self (john-jozef.proczka@phoenix.gov) requests As Submitted

**Commenter's Reason:** This one word addition is to make it crystal clear that you can't waive a specific code requirement. The current absence of this word leaves an odd situation where it is potentially OK for a building official to waive code requirements on a case-by-case basis, but not in policies. When a requirement is impractical there is already a code provision for how to deal with that situation - code modification - where an impracticality of the code provision is demonstrated for that case. Note that there is no requirement that a separate application has to be filed every time a code modification approach is used.

Voluntary enforcement of some of the provisions of the building code while waiving other requirements on a case-by-case basis doesn't make for an International Residential Code or any other base code, it makes for the code only according to the specific building official. That is not the overall intent of having a base code. As stated in the original proposal's reason statement the lack of this one word can lead to favoritism in enforcement of building codes.

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





## **Proposed Change as Submitted**

**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:** 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.

ADM18-22

## **Public Hearing Results**

**Committee Action:**

**As Modified**

**Committee Modification:**

**[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 in accordance with Section 104.9.1 or 104.9.2.

**[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~~ code compliance agency.

**[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, ~~or rules or regulations~~ that modify this code as necessary to protect life and property. Such policies, procedures, ~~or 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.

**Committee Reason:** The committee stated that the reason for the approval of the modifications were the improvement of the language to clarify the requirements and consistency with existing language and terms. The committee stated multiple reasons for approval as well as opposition to the proposal. It was noted that it is important that some authority beyond one individual person be able to make these decisions. This could be the mayor of the city or the City Council or the governing body of the county. This would give more meaning to the declaration rather than leaving it up to the fire code official to make the only determination. However, there was acknowledgement that this is something that has already been done during emergencies in Texas and over the last couple years with COVID. Inspection requirements and procedures have had to be modified within the codes and jurisdictions or allowed entities to not have inspections in order to not send somebody who could possibly be infected into an assisted living facility as a result of emergencies. (Vote: 7-6)

ADM18-22

## **Individual Consideration Agenda**

### **Public Comment 1:**

IFC: [A] 104.9, [A] 104.9.1, [A] 104.9.2, [A] 104.9.2.1 (New), [A] 104.9.2 (New)

**Proponents:** Kota Wharton, representing City of Grove City (kwharton@grovecityohio.gov) requests As Modified by Public Comment

**Further modify as follows:**

### **2021 International Fire Code**

**[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 in accordance with Section 104.9.1 ~~or~~ and 104.9.2.

**[A] 104.9.1 Individual cases.** The *fire code official* shall have the authority to grant modifications for individual cases, upon application of the owner or the owner's authorized agent, 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 code compliance agency.

**[A] 104.9.2 Natural disasters.** ~~In preparation for~~ Imminently before, during and reasonably after a natural disaster event, as determined by the ~~fire code official~~ chief executive officer of the jurisdiction, the ~~fire code official~~ *fire code official* shall have the authority to issue written policies, procedures ~~or~~ and rules that modify this code as necessary to protect life and property. Such policies, procedures ~~or~~ and rules shall be made available to the public, and shall include start effective and end expiration dates and shall recorded and entered into the files of the code compliance agency, ~~which can be extended at the fire code official's discretion.~~

**[A] 104.9.2.1 Extensions.** The *fire code official* shall have the authority to reasonably extend policies, rules and procedures issued pursuant to Section 104.9.2. Such extensions shall be made available to the public, shall include the original effective date and new expiration date and shall be recorded and entered into the files of the code compliance agency.

**[A] 104.9.2 Notification to the building official.** The *fire code official*, prior to issuing or extending any policies, procedures or rules shall notify the building official in writing.

**Commenter's Reason:** The reason statement from the original proposal stands with exception to the uniqueness of the IFC from the other iCodes. The following modifications were made:

- **International Fire Code Section 104.9.** Replace *or* with *and* for clarity.
- **International Fire Code Section 104.9.1.** Added *upon application of the owner or the owner's authorized agent* for clarity of process.
- **International Fire Code Section 104.9.2.**
  - Replaced *In preparation for* with *Imminently before* to limit the authority of the *fire code official*.

- Added *reasonably* to *after* to read *reasonably after* to limit the *fire code official's* authority to the disaster's span (including recovery). Modifications to the code made under this section should be confined.
- Replaced *fire code official* to *chief executive officer of the jurisdiction* to vest the power to declare a natural disaster, as it relates to this code. *Chief executive officer* is not defined in this code or any other code, however should be defined in the adopting body's charter, constitution or similar founding document. For this modification, the *chief executive officer* may refer to City's mayor, County's commissioner, State's governor, Tribe's chieftain, Country's president or another elected person of the like.
- Replaced *or* with *and* for clarity.
- Struck *and* for clarity of next.
- Expanded the requirements for policies, procedures and rules.
  - Replaced *start* with *effective* and *end* with *expiration* for clarity. An order should not start, stop, and start; it should be effective and subsequently, once need is met, expire. If needed again it should be recreated.
  - Added *and shall be recorded...* to require documentation for accountability.
- **International Fire Code Section 104.9.2.1 Extensions.** Subsection added to clarify the intent of the initial proposals "which can be extended at the fire code official's discretion". The term *reasonably* is used to restrict any extension of policies, procedures and rules relevant. The requirements of publication are maintained to maintain transparency and accountability.
- **International Fire Code Section 104.9.2.2 Notification to the building official.** Added to ensure the building official is aware the policies, procedures and rules prior to their enactment and to give the building official the opportunity to make comments to the fire code official.
- **International Building Code and International Residential Code.** The IRC and IBC should be considered for correlation in the next code cycle.

The terms *imminently* and *reasonably* are throughout intentionally as a check on the *fire code official's* authority. Where wide interpretation is an issue, either jurisdictional legislation or case law shall be used to determine each term's extent.

**Cost Impact:** The net effect of the public comment and code change proposal will decrease the cost of construction  
No change to the initial proposals cost statement.

---

Public Comment# 3360

## ADM19-22

### **Proposed Change as Submitted**

**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:** 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.

---

ADM19-22

### **Public Hearing Results**

**Committee Action:**

**Disapproved**

**Committee Reason:** The committee stated that the reasons for disapproval were language issues, it should be across codes and the preference for other code change proposals specifically including ADM13. (Vote: 10-3)

---

ADM19-22

### **Individual Consideration Agenda**

#### **Public Comment 1:**

**IFC: SECTION 202; IBC: SECTION 202; IPMC: SECTION 202 (New); IWUIC: SECTION 202 (New)**

**Proponents:** Manny Muniz, representing Representing self (mannymuniz.mm@gmail.com); Kristen Owen, representing Myself (kowen4568@gmail.com) requests As Modified by Public Comment

**Modify as follows:**

#### **2021 International Fire Code**

**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*.

#### **2021 International Building Code**

**[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*.

#### **2021 International Property Maintenance Code**

**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.

#### **2021 International Wildland-Urban Interface Code**

**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*.

**Commenter's Reason:** In response to the committee reason for disapproval which preferred the language in ADM13, the proposed modification now uses the same language as ADM13 and now applies across the codes. If ADM13 is not approved, this proposed modification will allow this single code change to be considered on its own for approval.

**Cost Impact:** The net effect of the public comment and code change proposal will not increase or decrease the cost of construction. This is only defining a term already used in the codes.

---

Public Comment# 3428

## ADM20-22

### **Proposed Change as Submitted**

**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:** 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.

---

ADM20-22

### **Public Hearing Results**

**Committee Action:**

**Disapproved**

**Committee Reason:** The committee stated that the reason for disapproval was consistency with the action taken on ADM19. (Vote: 11-2)

---

ADM20-22

### **Individual Consideration Agenda**

#### **Public Comment 1:**

**Proponents:** Manny Muniz, representing Representing self (mannymuniz.mm@gmail.com); Kristen Owen, representing Myself (kowen4568@gmail.com) requests As Submitted

**Commenter's Reason:** In response to the committee reason for disapproval which preferred the language in ADM13, the proposed modification now uses the same language as ADM13 and now applies across the codes. If ADM13 is not approved, this proposed modification will allow this single code change to be considered on its own for approval.

**Cost Impact:** The net effect of the public comment and code change proposal will not increase or decrease the cost of construction  
This only defines a term already in the codes.

---

Public Comment# 3436

## ADM21-22

### **Proposed Change as Submitted**

**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:** 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.

ADM21-22

---

### **Public Hearing Results**

**Committee Action:**

**Disapproved**

**Committee Reason:** The committee stated that the reasons for disapproval were that it is not clear where the listing is currently problematic, there is no approved listing evaluation and the language is just not what it should be and not achieving what it is trying to do. Additionally, it was noted that the use of the language of "anything required by this code" is confusing. (Vote: 13-0)

ADM21-22

---

### **Individual Consideration Agenda**

#### **Public Comment 1:**

**IBC: 104.1.1 (New)**

**Proponents:** Manny Muniz, representing Representing self (mannymuniz.mm@gmail.com); Kristen Owen, representing Myself (kowen4568@gmail.com) requests As Modified by Public Comment

**Replace as follows:**

#### **2021 International Building Code**

**104.1.1 Listed compliance.** Where this code or a referenced standard requires equipment, materials, products or services to be listed and a listing standard is specified, the listing shall be based on the specified standard. Where a listing standard is not specified, the listing shall be based on an approved listing criteria. Listings shall be germane to the provision requiring the listing. Installation shall be in accordance with the listing and the manufacturer's instructions, and where required to verify compliance, the listing standard and manufacturer's instructions shall be made available to the building official.

**Commenter's Reason:** In response to the committee reason for disapproval, the proposed modification now uses the same language as ADM13 and now applies across the codes. If ADM13 is not approved, this proposed modification will allow this single code change to be considered on its own for approval.

**Cost Impact:** The net effect of the public comment and code change proposal will not increase or decrease the cost of construction



The proposal does not require new listings other than what is already required.

Public Comment# 3438

---

## ADM25-22

### **Proposed Change as Submitted**

**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 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:** 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.

ADM25-22

### **Public Hearing Results**

**Committee Action:**

**As Submitted**

**Committee Reason:** The committee stated that the reason for approval was that the change provides clarity in the code. (Vote: 11-2)

ADM25-22

### **Individual Consideration Agenda**

#### **Public Comment 1:**

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

**Commenter's Reason:** The text of ADM13 and ADM14 is preferred.

**Cost Impact:** The net effect of the public comment and code change proposal will not increase or decrease the cost of construction

No change to code.

Public Comment# 3394

---

## ADM26-22

### **Proposed Change as Submitted**

**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 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:** 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.

ADM26-22

### **Public Hearing Results**

**Committee Action:**

**As Submitted**

**Committee Reason:** The committee stated that the reason for approval was the same as ADM25. (Vote: 12-1)

ADM26-22

### **Individual Consideration Agenda**

#### **Public Comment 1:**

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

**Commenter's Reason:** The text of ADM13 and ADM14 is preferred.

**Cost Impact:** The net effect of the public comment and code change proposal will not increase or decrease the cost of construction

No change to code.

Public Comment# 3395

---

## ADM27-22

### **Proposed Change as Submitted**

**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 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:** 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.

ADM27-22

### **Public Hearing Results**

**Committee Action:**

**As Submitted**

**Committee Reason:** The committee stated that the reason for approval was the same as ADM25. (Vote: 12-1)

ADM27-22

### **Individual Consideration Agenda**

#### **Public Comment 1:**

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

**Commenter's Reason:** The text of ADM13 and ADM14 is preferred.

**Cost Impact:** The net effect of the public comment and code change proposal will not increase or decrease the cost of construction  
No change to code.

Public Comment# 3396

---

## ADM28-22

### **Proposed Change as Submitted**

**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:** 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.

ADM28-22

---

### **Public Hearing Results**

**Committee Action:**

**Disapproved**

**Committee Reason:** The committee stated that the reasons for disapproval were that it is inconsistent with the other codes to make the change to just the proposed code, it is not necessarily something that always has to be in writing, and it could restrict code officials by making it a requirement. (Vote: 11-2)

ADM28-22

---

### **Individual Consideration Agenda**

#### **Public Comment 1:**

**IWUIC: [A] 105.3**

**Proponents:** Manny Muniz, representing Representing self (mannymuniz.mm@gmail.com); Kristen Owen, representing Myself (kowen4568@gmail.com) requests As Submitted

**Commenter's Reason:** ADM28-22 for the IWUIC and ADM29-22 for the IEBC was also discussed in ADM13-22. Towards the end of the ADMIN hearings and after considerable discussions with various stake holders, ADM13 was approved with a requirement that a request to use an alternative material, design or method of construction shall be submitted in writing to the building official for approval. If ADM13 is not approved, this proposed modification will allow this single code change to be considered on its own for approval.

**Cost Impact:** The net effect of the public comment and code change proposal will not increase or decrease the cost of construction. It will avoid confusion and misunderstandings as to what the alternate is.

Public Comment# 3443

---



## ADM29-22

### **Proposed Change as Submitted**

**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:** 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

---

### **Public Hearing Results**

**Committee Action:**

**Disapproved**

**Committee Reason:** The committee stated that the reason for disapproval was based on the action taken on ADM28. (Vote: 11-2)

ADM29-22

---

### **Individual Consideration Agenda**

#### **Public Comment 1:**

**Proponents:** Manny Muniz, representing Representing self (mannymuniz.mm@gmail.com); Kristen Owen, representing Myself (kowen4568@gmail.com) requests As Submitted

**Commenter's Reason:** ADM28-22 for the IWUIC and ADM29-22 for the IEBC was also discussed in ADM13-22. At the end of the ADMIN hearings and after considerable discussions with various stake holders, ADM13 was approved with a requirement that a request to use an alternative material, design or method of construction shall be submitted in writing to the building official for approval. The proposed modification now uses the same language as ADM13. If ADM13 is not approved, this proposed modification will allow this single code change to be considered on its own for approval.

**Cost Impact:** The net effect of the public comment and code change proposal will not increase or decrease the cost of construction  
It will avoid confusion and misunderstandings as to what the alternate is.

Public Comment# 3444

---

## ADM30-22

### **Proposed Change as Submitted**

**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 source 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:** 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.

ADM30-22

### **Public Hearing Results**

**Committee Action:**

**Disapproved**

**Committee Reason:** The committee stated that the reason for disapproval was that it limits the flexibility of both design professionals and building officials. (Vote: 13-0)

ADM30-22

### **Individual Consideration Agenda**

#### **Public Comment 1:**

**IBC:** 104.11.1 (New), 104.11.1.1 (New), 104.11.1.2 (New)

**Proponents:** Manny Muniz, representing Representing self (mannymuniz.mm@gmail.com); Kristen Owen, representing Myself (kowen4568@gmail.com) requests As Modified by Public Comment

**Replace as follows:**

#### **2021 International Building Code**

**104.11.1 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 104.11.1.1 and 104.11.1.2.

**104.11.1.1 Evaluation reports.** Evaluation reports shall be issued by an approved agency accredited to evaluate or certify products and use of the evaluation report shall require approval by the building official for the installation. The alternate material, design or method of construction and product evaluated shall be within the scope of the building official's recognition accreditation of the approved agency. Criteria used for the evaluation shall be identified within the report and where required, provided to the building official.. developed using a process that includes input from the public and made available for review by the public.

**104.11.1.2 Other reports.** Reports not complying with Section 104.11.1.1 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.

**Commenter's Reason:** ADM30-22 for the IBC, ADM31-22 for the IEBC, ADM32-22 for the IFC, ADM33-22 for the IWUIC saw discussions

regarding the difficulties of determining the legitimacy of research reports. This was also discussed in ADM13-22. At the end of the ADMIN hearings and after considerable discussions with various stake holders, ADM13 was approved with specific requirements for reports and supporting documentation.

The proposed modification now uses the same language as ADM13 and now applies across the codes. If ADM13 is not approved, this proposed modification will allow this single code change to be considered on its own for approval.

**Cost Impact:** The net effect of the public comment and code change proposal will not increase or decrease the cost of construction. The proposal clarifies the requirements for reports.

---

Public Comment# 3445

NOTE: ADM34-22 PART I DID NOT RECEIVE A PUBLIC COMMENT AND IS REPRODUCED FOR INFORMATIONAL PURPOSES ONLY

## ADM34-22 Part I

### **Proposed Change as Submitted**

**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.

**Reason:** 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.

ADM34-22 Part I

## **Public Hearing Results**

**Committee Action:**

**As Submitted**

**Committee Reason:** The committee stated that the reason for approval was that it is very similar to the previous changes made in Section 104.11 for alternate materials and it provides consistency in the codes. (Vote: 11-2)

ADM34-22 Part I

# ADM34-22 Part II

## Proposed Change as Submitted

**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:** 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.

ADM34-22 Part II

---

## **Public Hearing Results**

**Committee Action:**

**Disapproved**

**Committee Reason:** The proposal was disapproved because there was concern about a list not being all inclusive. Building officials should be 'granted authority' rather than 'shall' approve alternative means. There were concerns that the IRC does not currently appear to allow research reports as part of a justification. (Vote: 8-2)

ADM34-22 Part II

---

## **Individual Consideration Agenda**

### **Public Comment 1:**

**IRC:** R104.11.1

**Proponents:** Mike Nugent, representing Building Code Action Committee (bcac@iccsafe.org) requests As Modified by Public Comment

**Modify as follows:**

### **2021 International Residential Code**

**R104.11.1 Research reports.** Supporting ~~data~~ documentation, 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.

**Commenter's Reason:** The committee disapproved this proposal because they did not like the laundry list. This change is not adding a laundry list. It is simply reformatting the existing text for consistency with the other codes.

The committee supported an allowance for research reports, which is currently not specifically addressed in the IRC. This proposal should be approved so that research reports are permitted as an option in the IRC.

It is also the intent of this proposal to be consistent with the ADM13-22 Part 2. If ADM13-22 Part 2 is approved, this section would be replaced with the more extensive information for reports in that proposal for reports.

**Cost Impact:** The net effect of the public comment and code change proposal will not increase or decrease the cost of construction  
The change to alternative means is editorial only. Adding an allowance for research reports increases options to provide information on alternative means.

Public Comment# 3019

---

# ADM35-22

## **Proposed Change as Submitted**

**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:** 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 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.

ADM35-22

## **Public Hearing Results**

**Committee Action:**

**As Modified**

**Committee Modification:**

### **2021 International Building Code**

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

1. The alternative material, design or method of construction is satisfactory and complies with the intent of the provisions of this code,
2. The material, method or work offered is, for the purpose intended, not less than the equivalent of that prescribed in this code as it pertains to the following:
  - 2.1. Quality.
  - 2.2. Strength.
  - 2.3. Effectiveness.
  - 2.4. *Fire 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 and equipment complying with the *ICC Performance Code*. This exception shall not apply to alternative structural materials or to alternative structural designs.

### **2021 International Existing Building Code**

**[A]104.11 Alternative materials, design and methods of construction, and equipment.** The provisions of this code are not intended to prevent the installation of any material or to prohibit any design or method of construction not specifically prescribed by this code, provided that any such alternative has been *approved*. An alternative material, design or method of construction shall be *approved* where the *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*. This exception shall not apply to alternative structural materials or to alternative structural designs.

**Committee Reason:** The committee stated that the reason for the approval of the modification was that since the exception is referring to the performance code and if the performance code is not ready for structural type situations you need to have this exception in there to make sure that somebody doesn't try to use it for that purpose. The stated reasons for the approval were that this is another tool in the toolbox and owners can take advantage of this requirement and it brings more attention to it and this path especially with the modification. It was additionally stated that this proposal and the modification are critical as it brings another type of alternative that is performance based. (Vote: 7-6)

## **Individual Consideration Agenda**

### **Public Comment 1:**

**Proponents:** Bill McHugh, representing Firestop Contractors International Assn., National Fireproofing Contractors Assn. (bill@mc-hugh.us) requests Disapprove

**Commenter's Reason:** This new addition to the administrative section of the code is not needed, because the code already allows this to occur. Also, Proposal S134-22 was Disapproved by the structural committee, heard later in the week in Rochester, NY. This is a similar performance based design proposal. The same reason was provided for that disapproval, that I propose above.

**Cost Impact:** The net effect of the public comment and code change proposal will not increase or decrease the cost of construction  
No change to code.

---

Public Comment# 3331

# ADM36-22 Part I

## *Proposed Change as Submitted*

**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:** 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 I

## **Public Hearing Results**

**Committee Action:**

**As Modified**

**Committee Modification:**

### **2021 International Building Code**

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

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

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

~~**[A] 104.11.1 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.~~

### **2021 International Existing Building Code**

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

~~**[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.~~

### **2021 International Fire Code**

**[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, durability, fire safety, 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*.

~~**[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.~~

## 2021 International Fuel Gas Code

**[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, durability, fire safety, 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*.

~~**[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.~~

## 2021 International Mechanical Code

**[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, durability, fire safety, 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*.

~~**[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.~~

## 2021 International Plumbing Code

**[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, durability, fire safety, 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*.

~~**[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.~~

## 2021 International Property Maintenance Code

**[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, durability, fire safety, 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*.

~~[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.~~

## 2021 International Wildland-Urban Interface Code

**[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, durability, fire safety, 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*.

~~[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.~~

**Committee Reason:** The committee stated that the reason for the approval of the modification was that proposed fire safety equivalency section is not needed in the code. The stated reason for the approval of the proposal is that it correlates with the other code changes that were previously approved. (Vote: 13-0)

ADM36-22 Part I

## Individual Consideration Agenda

### Public Comment 1:

IBC: [A] 104.11.2; IEBC: [A] 104.11.2; IFC: [A] 104.10.2; IFGC: [A] 105.2.2; IMC: [A] 105.2.2; IPC: [A] 105.2.2; IPMC: [A] 106.2.2; IWUIC: [A] 105.3.2

**Proponents:** Mike Nugent, representing Building Code Action Committee (bcac@iccsafe.org) requests As Modified by Public Comment

**Further modify as follows:**

## 2021 International Building Code

~~[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. 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. Such Tests shall be performed by a party acceptable to the code official.~~

## 2021 International Existing Building Code

~~[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. 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. Such Tests shall be performed by a party acceptable to the code official.~~

## 2021 International Fire Code

~~[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. 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. Such~~ Tests shall be performed by a party acceptable to the fire code official.

## 2021 International Fuel Gas Code

~~[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. 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. Such~~ Tests shall be performed by a party acceptable to the code official.

## 2021 International Mechanical Code

~~[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. 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. Such~~ Tests shall be performed by a party acceptable to the code official.

## 2021 International Plumbing Code

~~[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. 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. Such~~ Tests shall be performed by a party acceptable to the code official.

## 2021 International Property Maintenance Code

~~[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. 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. Such~~ Tests shall be performed by a party acceptable to the code official.

## 2021 International Wildland-Urban Interface Code

~~[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. 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. Such~~ Tests shall be performed by a party acceptable to the building official.

**Commenter's Reason:** This proposal provides testing for fire safety only. This could be read that only fire safety can use testing, rather than everything in the list for alternative means. The public comment language is to allow for testing for any requirements. The public comment language would be consistent with the approved language in ADM13-22 and ADM14-22.

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, 2021 and 2022 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 net effect of the public comment and code change proposal will not increase or decrease the cost of construction. This modification allows testing as an option for alternative means, therefore, by increasing options, which could reduce costs.

## ADM36-22 Part II

### Proposed Change as Submitted

**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:** 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.

ADM36-22 Part II

### Public Hearing Results

**Committee Action:**

**Disapproved**

**Committee Reason:** The proposal was disapproved because the committee felt that fire safety equivalency and fire tests should not be pulled out



and described separately. This appears to set this as a higher priority over the other items considered for equivalency. The committee preferred the modifications approved in ADM13-22. (Vote: 10-0)

## **Individual Consideration Agenda**

### **Public Comment 1:**

**IRC: R104.11**

**Proponents:** Marcelo Hirschler, representing GBH International (mmh@gbhint.com) requests As Modified by Public Comment

**Modify as follows:**

### **2021 International Residential Code**

**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~~ (other than fire safety) and fire 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*.

**Commenter's Reason:** The proposed language in the public comment is equivalent to the language approved in ADM 13 and ADM 14 for the section dealing with the equivalency properties without dealing with any other section of chapter 1. It is also equivalent to what the committee approved for ADM 36 part I for all other codes dealing with fire issues. It simply deletes the incorrect term "fire resistance" (because fire resistance is simply one aspect of fire safety) and replaces it with "fire safety". In order to clarify further, the proposal (just like ADM 13, ADM 14 and ADM 36 part I) replaces "safety" with "safety (other than fire safety)".

If ADM 13 Part II is approved as the committee approved it, this proposal becomes moot but will not create a conflict.

**Cost Impact:** The net effect of the public comment and code change proposal will not increase or decrease the cost of construction. This proposal and public comment clarifies the intent of the section.

# ADM37-22 Part I

## **Proposed Change as Submitted**

**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<sup>2</sup>).
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~~ 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 *dwelling*s.
12. Window awnings in Group R-3 and U occupancies, supported by an *exterior wall* that do not project more than 54 inches (1372 mm) from the *exterior wall* and do not require additional support.
13. Nonfixed and movable fixtures, cases, racks, counters and partitions not over 5 feet 9 inches (1753 mm) in height.

### **Electrical:**

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

### **Gas:**

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

**Mechanical:**

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

**Plumbing:**

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

**Reason:** The 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 I

---

## **Public Hearing Results**

**Committee Action:****Disapproved**

**Committee Reason:** The committee stated that the reason for disapproval was that the code change as proposed does not do what it was intended to do and will cause more confusion. It was noted that although there is a problem that should be addressed, it is not done appropriately in the proposed language to address the issue. (Vote: 13-0)

ADM37-22 Part I

---

## **Individual Consideration Agenda**

**Public Comment 1:**

IBC: [A] 105.2

**Proponents:** Robert Frances, representing Self (bfrances@howardcountymd.gov) requests As Modified by Public Comment

**Modify as follows:**

### **2021 International Building Code**

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

**Building:**

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<sup>2</sup>).
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 lowest adjacent finished grade 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.

**Commenter's Reason:** What is intended to be excluded from needing a permit is a retaining wall with an unbalanced fill condition of 4 feet or less. The current language in the code references a measurement from the footing to the top of the wall, which is not necessarily relevant to an unbalanced fill situation and as such should be changed. I think this language captures what the original proponent intended in a more clear manner in that the measurement should be from the lowest adjacent grade to the top of the wall. The original proponent's language of "the finish grade" was too ambiguous.

**Bibliography:** N/A

**Cost Impact:** The net effect of the public comment and code change proposal will not increase or decrease the cost of construction. This will have no impact on the cost of construction.

---

Public Comment# 3251

NOTE: ADM37-22 PART II DID NOT RECEIVE A PUBLIC COMMENT AND IS REPRODUCED FOR INFORMATIONAL PURPOSES ONLY

## ADM37-22 Part II

### **Proposed Change as Submitted**

**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 ADMINISTRATIVE 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<sup>2</sup>).
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~~ 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<sup>2</sup>) 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 *apermit* shall be obtained and inspection made as provided in this code.
2. The clearing of stoppages or the repairing of leaks in pipes, valves or fixtures, and the removal and reinstallation of water closets, provided such repairs do not involve or require the replacement or rearrangement of valves, pipes or fixtures.

**Reason:** The 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

---

## **Public Hearing Results**

**Committee Action:**

**Disapproved**

**Committee Reason:** This proposal was disapproved because the proposed language does not match the intent expressed in the reason. Retaining walls may have soil at different height to the top of the wall on each side. This could allow tall walls that could be unreinforced. (Vote: 10-0)

ADM37-22 Part II

---

# ADM38-22 Part I

## *Proposed Change as Submitted*

**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<sup>2</sup>).
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.

**Reason:** 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 I

---

## **Public Hearing Results**

**Committee Action:****As Submitted**

**Committee Reason:** The committee stated that the reason for approval was that ISPSC has requirements for pool barriers and this change ensures that those requirements are still subject to a permit. It was also stated that this alleviates a potential conflict between the IBC and the ISPSC. (Vote: 13-0)

ADM38-22 Part I

---

## **Individual Consideration Agenda**

**Public Comment 1:**

**Proponents:** Kota Wharton, representing City of Grove City (kwharton@grovecityohio.gov) requests Disapprove

**Commenter's Reason:** The ISPSC does not require a permit for a fence used as a barrier (2021 International Swimming Pool and Spa Code 105.1). Nor does it require a permit when a fence used as a barrier is altered or replaced. This is an issue. Regardless, because the ISPSC does not require a permit it does not make sense to require a permit for a pool barrier in the IBC. This proposal is well-intended but is not ready for submittal. A proposal should be submitted first to the ISPSC to require a permit specifically, then or concomitantly a proposal should be submitted to resolve any conflict.

**Cost Impact:** The net effect of the public comment and code change proposal will not increase or decrease the cost of construction  
No change to code.

Public Comment# 3238

---

## ADM38-22 Part II

### **Proposed Change as Submitted**

**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<sup>2</sup>).
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<sup>2</sup>) 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 *apermit* 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:** 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

---

## **Public Hearing Results**

**Committee Action:**

**Disapproved**

**Committee Reason:** The proposal was disapproved because the committee found the way it is written, the 7 foot height requirement will be confusing. (Vote: 9-1)

ADM38-22 Part II

---

## *Proposed Change as Submitted*

**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 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:** 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

---

## **Public Hearing Results**

**Committee Action:**

**As Submitted**

**Committee Reason:** The committee stated that the reason for approval was for consistency across the codes. (Vote: 13-0)

ADM40-22

---

## **Individual Consideration Agenda**

### **Public Comment 1:**

**IPSDC: 107.3**

**Proponents:** Kota Wharton, representing City of Grove City (kwharton@grovecityohio.gov) requests As Modified by Public Comment

**Modify as follows:**

### **2021 International Private Sewage Disposal Code**

**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 code official, the valuation is underestimated~~ the applicant underestimates the valuation of the work on the application, and the applicant fails to provide detailed estimates acceptable to the code official, the permit shall be denied ~~the code official shall have the authority to deny the permit unless the applicant can show detailed estimates acceptable to the building code official.~~ The building official code official shall have the authority to adjust the final valuation for permit fees.

**Commenter's Reason:** Will request that this proposal be heard after ADM43 Part I and Part II.

- Gives authority to the *code official* to deny a permit, rather than requires the *code official* to deny the permit.
- Changes *building official* with *code official* for consistency within this code.

**Cost Impact:** The net effect of the public comment and code change proposal will not increase or decrease the cost of construction  
No net change in cost. This is for coordination and clarity.

---

Public Comment# 3403

# ADM41-22 Part II

## Proposed Change as Submitted

**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:** 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

---

## **Public Hearing Results**

**Committee Action:**

**Disapproved**

**Committee Reason:** The proposal was disapproved because the revision uses the undefined term 'system'. (Vote: 6-5)

ADM41-22 Part II

---

## **Individual Consideration Agenda**

### **Public Comment 1:**

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

**Commenter's Reason:** We respectively disagree with the decision of the IRC committee. 'Systems' is used throughout the existing text in Section R111 and is a commonly used and understood term. A definition is not needed. Words not defined are addressed in Sections R201.3 and R201.4. Elements of mechanical, electrical, plumbing or other system must be compatible and listed together. BCAC feels that this term is appropriate in this context.

The intent of this proposal is consistent terminology between Section R107 and R111 and with the other I-codes. The deletion in Section R107.3 is strictly to remove redundant language in Section 107.3 and replace it with a reference.

**Cost Impact:** The net effect of the public comment and 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.

Public Comment# 3020

---



NOTE: ADM41-22 PART I DID NOT RECEIVE A PUBLIC COMMENT AND IS REPRODUCED FOR INFORMATIONAL PURPOSES ONLY

## ADM41-22 Part I

### *Proposed Change as Submitted*

**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.

**Reason:** 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.

## **Public Hearing Results**

**Committee Action:**

**As Submitted**

**Committee Reason:** The committee stated that the reason for the approval was that it coordinates the requirements for temporary structures across the codes using the same language while making it appropriate for each code. (Vote: 13-0)

ADM41-22 Part I

---

## ADM42-22

### **Proposed Change as Submitted**

**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:** 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.

ADM42-22

### **Public Hearing Results**

**Committee Action:**

**As Submitted**

**Committee Reason:** The committee stated that the reason for the approval was to provide consistency with previous actions and consistency across the codes. (Vote: 12-0)

ADM42-22

### **Individual Consideration Agenda**

#### **Public Comment 1:**

IPC: 109.3

**Proponents:** Mike Nugent, representing Building Code Action Committee (bcac@iccsafe.org) requests As Modified by Public Comment

**Modify as follows:**

### **2021 International Plumbing Code**

**[A] 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 work, such as electrical, gas, mechanical, plumbing equipment and permanent systems. ~~Where, in the opinion of the code official, the valuation is underestimated, the permit shall be denied, unless the applicant can show detailed estimates acceptable to the code official. The code official shall have the authority to adjust the final valuation for permit fees.~~ Where inconsistencies occur within the submitted valuation, the final building permit valuation shall be determined by the building official. The building official shall notify the applicant in writing, stating the reasons why the valuation was



altered.

**Commenter's Reason:** BCAC received comments after the spring hearings with concern about the possible mis-interpretation of the last two sentences. The public comment removes the last two sentences and replaces them with clarifying text. This proposed language provides the building official the authority to set accurate building valuations as currently regulated within the I codes. At the same time provides the applicant the documentation they are entitled in order to proceed with any potential appeals, the same as any other code section. This eliminates potential subjectivity from either party and ensures consistency in fees implemented by the locality.

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

Public Comment# 3540

---

## ***Public Comment 2:***

**IPC:** 109.3

**Proponents:** Kota Wharton, representing City of Grove City (kwharton@grovecityohio.gov) requests As Modified by Public Comment

**Modify as follows:**

### **2021 International Plumbing Code**

**[A] 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 code official, ~~the valuation is underestimated the applicant underestimates the valuation of the work on the permit, and the applicant fails to provide detailed estimates acceptable to the code official, the permit shall be denied the code official shall have the authority to deny the permit, unless the applicant can show detailed estimates acceptable to the code official.~~ The building code official shall have the authority to adjust the final valuation for permit fees.

**Commenter's Reason:** This proposal addresses an issue brought up in ADM43-22 Part II, which applies here, where the committee had an issue with the restrictiveness of requiring the official to deny a permit that isn't estimated correctly. The solution is to give the official authority, which is done.

**Cost Impact:** The net effect of the public comment and code change proposal will not increase or decrease the cost of construction. No net change for construction costs.

Public Comment# 3541

---

# ADM43-22 Part I

## *Proposed Change as Submitted*

**Proponents:** Mike Nugent, representing Building Code Action Committee (bcac@iccsafe.org); Joseph J. Summers, representing Plumbing, Mechanical and Fuel Gas Code Action Committee (pmgacac@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. ~~Where~~ 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. ~~Where~~ 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. ~~Where~~ 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. ~~Where~~ 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. ~~Where~~ 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. ~~Where~~ 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. ~~Where~~ 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. ~~Where~~ 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.

**Reason:** 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.

ADM43-22 Part I

## **Public Hearing Results**

**Committee Action:**

**As Submitted**

**Committee Reason:** The committee stated that the reason for the approval was that the permit valuation needs to be in the hands of the building, code or fire code official and this change clarifies it by making it consistent across the other codes in a plain language correction. (Vote: 12-1)

ADM43-22 Part I

## **Individual Consideration Agenda**

### **Public Comment 1:**

IBC: [A] 109.3; IEBC: [A] 108.3; IFC: 107.3; IFGC: 109.3; IMC: [A] 109.3; ISPS: [A] 108.3; IWUIC: [A] 109.3; IGCC: 108.3

**Proponents:** Mike Nugent, representing Building Code Action Committee (bcac@iccsafe.org) requests As Modified by Public Comment

**Modify as follows:**

### **2021 International Building Code**

**[A] 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 work~~ 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.~~

Where inconsistencies occur within the submitted valuation, the final building permit valuation shall be determined by the building official. The building official shall notify the applicant in writing, stating the reasons why the valuation was altered.

### **2021 International Existing Building Code**

**[A] 108.3 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 work~~ such as electrical, gas, mechanical, plumbing equipment and permanent systems. ~~Where, in the opinion of the code official, the valuation is underestimated, the permit shall be denied unless the applicant can show detailed estimates acceptable to the code official. The code official shall have the authority to adjust the final valuation for permit fees.~~ Where inconsistencies occur within the submitted valuation, the final building permit valuation shall be determined by the building official. The building official shall notify the applicant in writing, stating the reasons why the valuation was altered.

### **2021 International Fire Code**

**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 work~~ such as electrical, gas, mechanical, plumbing equipment and permanent systems. ~~Where, in the opinion of the fire code official, the valuation is underestimated, the permit shall be denied unless the applicant can show detailed estimates acceptable to the fire code official. The fire code official shall have the authority to adjust the final valuation for permit fees.~~ Where inconsistencies occur within the submitted valuation, the final building permit valuation shall be determined by the building official. The building official shall notify the applicant in writing, stating the reasons why the

valuation was altered.

## 2021 International Fuel Gas Code

**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 work~~, such as electrical, gas, mechanical, plumbing equipment and permanent systems. ~~Where, in the opinion of the code official, the valuation is underestimated, the permit shall be denied, unless the applicant can show detailed estimates acceptable to the code official. The code official shall have the authority to adjust the final valuation for permit fees.~~ Where inconsistencies occur within the submitted valuation, the final building permit valuation shall be determined by the building official. The building official shall notify the applicant in writing, stating the reasons why the valuation was altered.

## 2021 International Mechanical Code

**[A] 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 work~~, such as electrical, gas, mechanical, plumbing equipment and permanent systems. ~~Where, in the opinion of the code official, the valuation is underestimated, the permit shall be denied, unless the applicant can show detailed estimates acceptable to the code official. The code official shall have the authority to adjust the final valuation for permit fees.~~ Where inconsistencies occur within the submitted valuation, the final building permit valuation shall be determined by the building official. The building official shall notify the applicant in writing, stating the reasons why the valuation was altered.

## 2021 International Swimming Pool and Spa Code

**[A] 108.3 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 work~~, such as electrical, gas, mechanical, plumbing equipment and permanent systems. ~~Where, in the opinion of the code official, the valuation is underestimated, the permit shall be denied, unless the applicant can show detailed estimates acceptable to the code official. The code official shall have the authority to adjust the final valuation for permit fees.~~ Where inconsistencies occur within the submitted valuation, the final building permit valuation shall be determined by the building official. The building official shall notify the applicant in writing, stating the reasons why the valuation was altered.

## 2021 International Wildland-Urban Interface Code

**[A] 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 work~~. ~~Where, in the opinion of the applicable governing authority, the valuation is underestimated, the permit shall be denied, unless the applicant can show detailed estimates acceptable to the applicable governing authority. The applicable governing authority shall have the authority to adjust the final valuation for permit fees.~~ Where inconsistencies occur within the submitted valuation, the final building permit valuation shall be determined by the building official. The building official shall notify the applicant in writing, stating the reasons why the valuation was altered.

## 2021 International Green Construction Code

**108.3 Permit valuations.** The applicant for a permit shall provide an estimated value of the work for which the permit is being issued at the time of application. Such estimated valuations shall include the total value of work, including materials and labor, for ~~which the permit is being issued work~~, such as electrical, gas, mechanical, and 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.~~ Where inconsistencies occur within the submitted valuation, the final building permit valuation shall be determined by the building official. The building official shall notify the applicant in writing, stating the reasons why the valuation was altered.

**Commenter's Reason:** BCAC received comments after the spring hearings with concern about the possible mis-interpretation of the last two sentences. The public comment removes the last two sentences and replaces them with clarifying text.

This proposed language provides the building official the authority to set accurate building valuations as currently regulated within the I codes. At the same time provides the applicant the documentation they are entitled in order to proceed with any potential appeals, the same as any other code section. This eliminates potential subjectivity from either party and ensures consistency in fees implemented by the locality.

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

## Public Comment 2:

IBC: [A] 109.3; IEBC: [A] 108.3; IFC: 107.3; IFGC: 109.3; IMC: [A] 109.3; ISPC: [A] 108.3; IWUC: [A] 109.3; IGCC: 108.3

**Proponents:** Kota Wharton, representing City of Grove City (kwharton@grovecityohio.gov) requests As Modified by Public Comment

**Modify as follows:**

## 2021 International Building Code

**[A] 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 applicant underestimates the valuation of the work on the application, and the applicant fails to provide detailed estimates acceptable to the building official, the permit shall be denied ~~the building official shall have the authority to deny the permit, 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.

## 2021 International Existing Building Code

**[A] 108.3 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 *code official*, ~~the valuation is underestimated~~ the applicant under estimates the valuation of the work on the application, and the applicant fails to provide detailed estimates acceptable to the code official, the permit shall be denied ~~the code official shall have the authority to deny the permit, unless the applicant can show detailed estimates acceptable to the code official.~~ The code official shall have the authority to adjust the final valuation for permit fees.

## 2021 International Fire Code

**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 *fire code official*, ~~the valuation is underestimated~~ the applicant underestimates the valuation of the work on the application, and the applicant fails to provide detailed estimates acceptable to the fire code official, the permit shall be denied ~~the fire code official shall have the authority to deny the permit, unless the applicant can show detailed estimates acceptable to 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

**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 *code official*, ~~the valuation is underestimated~~ the applicant underestimates the valuation of the work on the application, and the applicant fails to provide detailed estimates acceptable to the code official, the permit shall be denied ~~the code official shall have the authority to deny the permit, unless the applicant can show detailed estimates acceptable to the code official.~~ The code official shall have the authority to adjust the final valuation for permit fees.

## 2021 International Mechanical Code

**[A] 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 *code official*, ~~the valuation is underestimated~~ the applicant underestimates the valuation of the work on the permit, and the applicant fails to provide detailed estimates acceptable to the code official, the permit shall be denied ~~the code official shall have the authority to deny the permit, unless the applicant can show detailed estimates acceptable to 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

**[A] 108.3 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 *code official*, ~~the valuation is underestimated~~ the applicant underestimates the valuation of the work on the application, and the applicant fails to provide detailed estimates acceptable to the code official, the permit shall be denied ~~the code official shall have the authority to deny the permit, unless the applicant can show detailed estimates acceptable to the code official.~~ The code official shall have the authority to adjust the final valuation for permit fees.

## 2021 International Wildland-Urban Interface Code

**[A] 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 applicable governing authority, ~~the valuation is underestimated~~ the applicant underestimates the valuation of the work on the application, and the applicant fails to provide detailed estimates acceptable to the applicable governing body, ~~the permit shall be denied~~ the applicable governing body shall have the authority to deny the permit, ~~unless the applicant can show detailed estimates acceptable to 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

**108.3 Permit valuations.** The applicant for a permit shall provide an estimated value of the work for which the permit is being issued at the 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, and plumbing equipment and permanent systems. Where, in the opinion of the building official, ~~the valuation is underestimated~~ the applicant underestimates the valuation of the work on the application, and the applicant fails to provide detailed estimates acceptable to the building official, ~~the permit shall be denied unless the applicant can show detailed estimates acceptable to the building official~~ the code official shall have the authority to deny the permit. The building official shall have the authority to adjust the final valuation for permit fees.

**Commenter's Reason:** This proposal addresses an issue brought up in ADM43-22 Part II, which applies here, where the committee had an issue with the restrictiveness of requiring the official to deny a permit that isn't estimated correctly. The solution is to give the official authority, which is done.

**Cost Impact:** The net effect of the public comment and code change proposal will not increase or decrease the cost of construction  
No net change for construction costs.

---

Public Comment# 3227

# ADM43-22 Part II

## *Proposed Change as Submitted*

**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:** 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, ISPC, 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, ISPC. 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



## **Public Hearing Results**

### **Committee Action:**

**Disapproved**

**Committee Reason:** The proposal was disapproved because of concerns over the revisions to the last sentence in Section R108.3. Some of the committee members felt that "shall be denied" is too restrictive and "in the opinion" was too open for interpretation. The valuation did not include the significant rise in construction materials during the pandemic, but the existing intent is about valuation, not cost. (Vote: 7-3)

## **Individual Consideration Agenda**

### **Public Comment 1:**

**IRC: R108.3**

**Proponents:** Mike Nugent, representing Building Code Action Committee (bcac@iccsafe.org) requests As Modified by Public Comment

**Modify as follows:**

### **2021 International Residential Code**

**R108.3 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 work,~~ 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. Where inconsistencies occur within the submitted valuation, the final building permit valuation shall be determined by the building official. The building official shall notify the applicant in writing, stating the reasons why the valuation was altered.~~

**Commenter's Reason:** The IRC code development committee was concerned about the last two sentences of Section R108.3 of the original proposal. These sentences have been removed. This proposed language provides the BO the authority to set accurate building valuations as currently regulated within the I codes. At the same time provides the applicant the documentation they are entitled in order to proceed with any potential appeals, the same as any other code section. This eliminates potential subjectivity from either party and ensures consistency in fees implemented by the locality.

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

### **Public Comment 2:**

**IRC: R108.3, R108.4, R108.5, R108.6**

**Proponents:** Kota Wharton, representing City of Grove City (kwharton@grovecityohio.gov) requests As Modified by Public Comment

**Modify as follows:**

### **2021 International Residential Code**

**R108.3 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 applicant underestimates the valuation of the work on the application, and the applicant fails to provide detailed estimates acceptable to the building official, the permit shall be denied the building official shall have the authority to deny the permit, 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.

**R108.4 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.

**R108.5 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.

**R108.6 Refunds.** The *building official* is authorized to establish a refund policy.

**Commenter's Reason:** This modification coordinates changes proposed in ADM43-22-WHARTON-4 and addresses the issue where the committee had an issue with the restrictiveness of requiring the official to deny a permit that isn't estimated correctly. The solution is to give the official authority, which is done.

**Cost Impact:** The net effect of the public comment and code change proposal will not increase or decrease the cost of construction. No net change for construction costs. Coordination and clarity only.

---

Public Comment# 3228

# ADM44-22

## **Proposed Change as Submitted**

**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 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 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:** 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

## **Public Hearing Results**

**Committee Action:**

**As Submitted**

**Committee Reason:** The committee stated that the reason for approval was that it provides good clarification to the code. (Vote: 13-0)

ADM44-22

## **Individual Consideration Agenda**

### **Public Comment 1:**

IFGC: SECTION 115, [A] 115.6.2; IMC: SECTION 115, [A] 115.6.2; IPC: SECTION 115, [A] 115.6.2; IPSDC: SECTION 114, [A] 114.6.2; ISPSC: SECTION 113, [A] 113.6.2

**Proponents:** Robert Frances, representing Self (bfrances@howardcountymd.gov) requests As Modified by Public Comment

**Modify as follows:**

### **2021 International Fuel Gas Code**

#### **SECTION 115 VIOLATIONS**

~~[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.~~

### **2021 International Mechanical Code**

#### **SECTION 115 VIOLATIONS**

~~[A] 115.6.2 Authority to order disconnect service utilities. The code official shall have the authority to authorize disconnection of utility services in accordance with Section 112.3.~~

### **2021 International Plumbing Code**

#### **SECTION 115 VIOLATIONS**

~~[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.~~

## 2021 International Private Sewage Disposal Code

### SECTION 114 VIOLATIONS

~~[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.~~

## 2021 International Swimming Pool and Spa Code

### SECTION 113 VIOLATIONS

~~[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.~~

**Commenter's Reason:** Each of these sections is stating that the code official has the authority to disconnect service utilities as authorized by an earlier "service utilities" section. However, the earlier "service utilities" section already states that the code official has the authority to disconnect service utilities. Therefore, each of these sections that were significantly changed to remove duplicated language could have been completely deleted; this is what my proposal is intending to do.

**Bibliography:** N/A

**Cost Impact:** The net effect of the public comment and code change proposal will not increase or decrease the cost of construction. This will not have any impact on the cost of construction.

---

Public Comment# 3266

# ADM48-22 Part I

## **Proposed Change as Submitted**

**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 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 ~~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.

**Reason:** 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.

ADM48-22 Part I

---

## **Public Hearing Results**

### **Committee Action:**

**As Submitted**

**Committee Reason:** The committee stated that the reason for approval was the proponent's reason statement which includes coordination of the codes. It was specifically noted that most jurisdictions have a single board of appeals that covers all the codes in that jurisdiction, so it is important to only have one set of requirements that is consistent within each code. (Vote: 13-0)

ADM48-22 Part I

---

## **Individual Consideration Agenda**

### **Public Comment 1:**

IBC: [A] 113.3; IEBC: [A] 112.3

**Proponents:** Robert Frances, representing Self (bfrances@howardcountymd.gov) requests As Modified by Public Comment

**Modify as follows:**

### **2021 International Building 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.

### **2021 International Existing Building 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 the provisions of this code and are not employees of the jurisdiction.

**Commenter's Reason:** These are two minor editorial corrections to add the word "the" to Section 113.3 of the IBC, and striking out the words "to

pass" from Section 112.3 of the IEBC.

**Cost Impact:** The net effect of the public comment and code change proposal will not increase or decrease the cost of construction. This will have no cost impact on what has already been passed; it is editorial in nature only.

Public Comment# 3249

## **Public Comment 2:**

IBC: [A] 113.4; IEBC: [A] 112.4; IFC: [A] 111.4; IFGC: 113.4; IMC: [A] 114.4; IPC: [A] 114.4; IPMC: 107.4; IPSDC: [A] 112.4; ISPC: [A] 111.4; IWUIC: [A] 113.4; IGCC: 111.4

**Proponents:** Mike Nugent, representing Building Code Action Committee (bcac@iccsafe.org) requests As Modified by Public Comment

**Modify as follows:**

## **2021 International Building Code**

[A] 113.4 **Administration** . The *building official* shall take action without delay in accordance with the decision of the board.

## **2021 International Existing Building Code**

[A] 112.4 **Administration**. The *code official* shall take action without delay in accordance with the decision of the board.

## **2021 International Fire Code**

[A] 111.4 **Administration**. The *fire code official* shall take action without delay in accordance with the decision of the board.

## **2021 International Fuel Gas Code**

113.4 **Administration**. The *code official* shall take action without delay in accordance with the decision of the board.

## **2021 International Mechanical Code**

[A] 114.4 **Administration**. The *code official* shall take action without delay in accordance with the decision of the board.

## **2021 International Plumbing Code**

[A] 114.4 **Administration**. The *code official* shall take action without delay in accordance with the decision of the board.

## **2021 International Property Maintenance Code**

107.4 **Administration**. The *code official* shall take action without delay in accordance with the decision of the board.

## **2021 International Private Sewage Disposal Code**

[A] 112.4 **Administration**. The *code official* shall take action without delay in accordance with the decision of the board.

## **2021 International Swimming Pool and Spa Code**

[A] 111.4 **Administration**. The *code official* shall take action without delay in accordance with the decision of the board.

## **2021 International Wildland-Urban Interface Code**

[A] 113.4 **Administration**. The *code official* shall take action without delay in accordance with the decision of the board.

## **2021 International Green Construction Code**

111.4 **Administration**. The authority having jurisdiction shall take action without delay in accordance with the decision of the board.

**Commenter's Reason:** Last cycle the Administrative Committee asked the BCAC to remove the word 'immediate' as it could be read to require the code official to respond immediately after the board made it's decision - as in that night immediately following the conclusion of the meeting. This proposal did that. However, after the spring hearings, BCAC received comments that no timeline could be read the opposite - in that a code official could delay indefinitely. It is hope that 'without delay' is a reasonable compromise.

**Cost Impact:** The net effect of the public comment and code change proposal will not increase or decrease the cost of construction. This is an editorial correction with no changes to construction requirements.

Public Comment# 3023

---

# ADM48-22 Part II

## **Proposed Change as Submitted**

**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:** 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.

ADM48-22 Part II

## **Public Hearing Results**

### **Committee Action:**

**Disapproved**

**Committee Reason:** The proposal was disapproved. In R112.4 the word 'immediate' should not be struck. It leaves the timing ambiguous. Striking the sentence in Section R112.1 would remove the restriction that the code official could not vote, leaving the question, why would the building official be voting? Some also felt the building official should be an ex officio, non-voting member. This language is more confusing than the original. (Vote: 7-3)  
One argument against disapproval was that removing the building official from the board is not giving them a vote.

ADM48-22 Part II

## **Individual Consideration Agenda**

### **Public Comment 1:**

**IRC:** R112.4

**Proponents:** Mike Nugent, representing Building Code Action Committee (bcac@iccsafe.org) requests As Modified by Public Comment

**Replace as follows:**

### **2021 International Residential Code**

**R112.4 Administration.** The *building official* shall take action ~~immediate~~ without delay in accordance with the decision of the board.

**Commenter's Reason:** The public comments are dividing the question into two parts - R112 through R112.3 is Part 1 and R112.4 is Part 2.  
PART 2

This modification is to revise Section R112.4 so that the term 'immediate' is replaced with 'without delay' as a reasonable compromise for a building official to react promptly to a board of appeals decision, without having to respond immediately following the meeting.

**Cost Impact:** The net effect of the public comment and code change proposal will not increase or decrease the cost of construction. This is an editorial change with no change in construction requirements.

Public Comment# 3024

### **Public Comment 2:**

**IRC:** SECTION R112, R112.1, R112.2, R112.3

**Proponents:** Mike Nugent, representing Building Code Action Committee (bcac@iccsafe.org) requests As Modified by Public Comment

**Replace as follows:**

### **2021 International Residential Code**

#### **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*.

**Commenter's Reason:** The public comments are dividing the question into two parts - R112 through R112.3 is Part 1 and R112.4 is Part 2.

### PART 1

The BCAC respectively disagrees with the IRC committee's comment on the deleted sentence in Section R112.1. During the last cycle, ADM40-19 edited the sections for the Board of Appeals in each code book to limit the section to just the right and process for someone to have a means of appeal and ADM43-19 Part II, created Appendix AV for the Board of Appeals which is intended to provide a template for jurisdictions that do not already have such language. (The appendix for Board of Appeals now exists in all code books except IZC and ICCPC.) The make-up of the board is addressed in the Appendix. The role of the code official in the Board of Appeals is addressed in Sections AV101.1 and AV101.3. Since language regarding the makeup of the Board of Appeals is in the appendix and Section R112 is limited to the means of appeal, this change removes any requirements for the Board of Appeals from Section R112, which allows the jurisdiction to determine the makeup of the Board of Appeals in their specific ordinances or through the adoption of the appendix.

**Appendix AV - Board of Appeals**  
**AV101.1 Scope.** A board of appeals shall be established within the jurisdiction for the purpose of hearing applications for modification of the requirements of this code pursuant to the provisions of Section R112. The board shall be established and operated in accordance with this section, and shall be authorized to hear evidence from appellants and the building official pertaining to the application and intent of this code for the purpose of issuing orders pursuant to these provisions.

**AV101.3 Membership of board.** The board shall consist of five voting members appointed by the chief appointing authority of the jurisdiction. Each member shall serve for [INSERT NUMBER OF YEARS] years or until a successor has been appointed. The board member's terms shall be staggered at intervals, so as to provide continuity. The building official shall be an ex officio member of said board but shall not vote on any matter before the board.

**Cost Impact:** The net effect of the public comment and 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.

---

Public Comment# 3050



## ADM52-22

### **Proposed Change as Submitted**

Proponents: Janita Talmadge, representing International Code Council

ACCA		Air Conditioning Contractors of America	
Standard Reference Number	Title	Referenced in Code(s):	
ANSI/ACCA 1 Manual D— <del>2016</del> <u>2023</u>	Residential Duct Systems	IMC	IRC
ANSI/ACCA 10 Manual SPS — <del>2010</del> RA-2017	HVAC Design for Swimming Pools and Spas	IMC	
ANSI/ACCA 3 Manual S— <del>14</del> <u>2023</u>	Residential Equipment Selection	IECC®	
ANSI/ACCA 3 Manual S— <del>2014</del> <u>2023</u>	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):	
<del>FSAAS 16</del> — <del>AFSI-77</del>	<del>Fabric Structures Associated Air Structures 2016 Air Structures Design and Standards Manual</del>	IFC	
AHAM		Association of Home Appliance Manufacturers	
Standard Reference Number	Title	Referenced in Code(s):	
ANSI/AHAM RAC-1— <del>2015</del> — <u>2020</u>	Room Air Conditioners	IECC®	
AHRI		Air-Conditioning, Heating, & Refrigeration Institute	
Standard Reference Number	Title	Referenced in Code(s):	
1160 (I-P) — <del>2014</del> — <u>2022</u>	Performance Rating of Heat Pump Pool Heaters ( <del>with Addendum 1</del> )	IECC®	

1160 (I-P)— <del>2014</del> — <u>2022</u>	Performance Rating of Heat Pump Pool Heaters ( <del>with Addendum 1</del> )	ISPSC
1200 (I-P)— <del>2013</del> — <u>2022</u>	Performance Rating of Commercial Refrigerated Display Merchandisers and Storage Cabinets	IECC®
1230 (I-P)— <del>2014</del> — <u>2021</u>	Performance Rating of Variable Refrigerant Flow (VRF) Multi-split Air-Conditioning and Heat Pump Equipment ( <del>with Addendum 1</del> )	IECC®
1250 (I-P)— <del>2014</del> — <u>(2020)</u>	Standard for Performance Rating in Walk-in Coolers and Freezers	IECC®
1360 (I-P)— <u>2017</u>	Performance Rating of Computer and Data Processing Room Air Conditioners	IECC®
210/240— <del>2017 and 2023</del> — <u>(2020)</u>	Performance Rating of Unitary Air-conditioning and Air-source Heat Pump Equipment	IECC®
340/360— <del>2019</del> — <u>2022</u>	Performance Rating of Commercial and Industrial Unitary Air-conditioning and Heat Pump Equipment	IECC®
390 (I-P)— <del>2003</del> — <u>2021</u>	Performance Rating of Single Package Vertical Air-conditioners and Heat Pumps	IECC®
440 (I-P)— <del>2008</del> — <u>2019</u>	Performance Rating of Room Fan Coils— <del>with Addendum 1</del>	IECC®
550/590 (I-P)— <del>2018</del> — <u>2022</u>	Performance Rating of Water-chilling and Heat Pump Water-heating Packages Using the Vapor Compression Cycle	IECC®
560— <del>2018</del> — <u>2000</u>	Absorption Water Chilling and Water Heating Packages	IECC®
700— <del>2017</del> — <u>2019</u>	<del>with Addendum 1</del> : Specifications for Refrigerants	IMC
910 (I-P)— <u>2014</u>	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, Including Supplement 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):

<del>ANSI/AMCA 550—09 (Rev. 09/18)—22</del>	Test Method for High Velocity Wind Driven Rain Resistant Louvers	IMC		
<del>ANSI/AMCA 220—19—21</del>	Laboratory Methods of Testing Air Curtain Units for Aerodynamic Performance Rating	IECC®		
<del>ANSI/AMCA 230—15—23</del>	Laboratory Methods of Testing Air Circulating Fans for Rating and Certification	IMC	IECC®	
<del>ANSI/AMCA 540—13—23</del>	Test Method for Louvers Impacted by Wind Borne Debris	IBC		
<del>ANSI/AMCA 210—ANSI/ASHRAE 51—16—23</del>	Laboratory Methods of Testing Fans for Aerodynamic Performance Rating	IRC®		
<del>ANSI/AMCA 210—16/ANSI/ASHRAE 51—16</del>	Laboratory Methods of Testing Fans for Aerodynamic Performance Rating	IMC		
ANSI	American National Standards Institute			
Standard Reference Number	Title	Referenced in Code(s):		
<del>ANSI LC 4/CSA 6.32—2012—CSA/ANSI LC 4:23/CSA 6.32:23</del>	Press-connect Metallic Fittings <u>and valves</u> for Use in Fuel Gas Distribution Systems	IFGC	IRC	
<del>ANSI/CSA FC 1—2014 CSA/ANSI FC 1:21/CSA C22.2 NO. 62282-3-100:21</del>	Fuel Cell Technologies—Part 3-100: Stationary Fuel Cell Power Systems—Safety	IFGC	IMC	IRC®
<del>LC1/CSA 6.26—2016—CSA/ANSI LC 1:19/CSA 6.26:19</del>	Fuel Gas Piping Systems Using Corrugated Stainless Steel Tubing (CSST)	IFGC	IRC®	
<del>ANSI Z21.41 (R2019)/CSA 6.9-2014—(R2019)</del>	Quick Disconnect Devices for Use with Gas Fuel Appliances	IFGC	IRC®	
<del>ANSI Z21.22—99 (R2003)—2015 (R2020)/CSA 4.4-2015 (R2020)</del>	Relief Valves for Hot Water Supply Systems with Addenda <del>Z21.22a—2000 (R2003) and Z21.22b—2001 (R2003)</del>	IPC	IRC®	
<del>ANSI Z21.24 -2015 (R2020)/CSA 6.10—2015 (R2020)</del>	Connectors for Gas Appliances	IFGC	IRC®	

<u>ANSI Z21.40.1-1996 (R2017)/CGA 2.91—1996 M96(R2017)</u>	Gas-fired Heat Activated Air Conditioning and Heat Pump Appliances	IFGC	IRC	
<u>ANSI Z21.50 :19/CSA 2.22—2016 :19</u>	Vented Decorative Gas Fireplaces	IFGC	IRC®	
<u>ANSI Z21.69 -2015 (R2020)/CSA 6.16—2015 (R2020)</u>	Connectors for Movable Gas Appliances	IFGC	IRC®	
<u>ANSI Z21.75 -2016/CSA 6.27—2016 (R2020)</u>	Connectors for Outdoor Gas Appliances and Manufactured Homes	IFGC	IRC®	
<u>ANSI Z83.11 -2016 (R2021)/CSA 1.8—2016 (R2021)</u>	Gas Food Service Equipment	IFGC		
<u>ANSI Z83.18—2017 (R2021)</u>	Recirculating Direct Gas-fired Heating and Forced Ventilation Appliances for Commercial and Industrial Applications	IFGC		
<u>CSA/ANSI Z21.11.2—2016 :19</u>	Gas-fired Room Heaters—Volumell—Unvented Room Heaters	IFGC	IRC®	
<u>CSA/ANSI Z21.56 :19/CSA 4.7—17 :19</u>	Gas-fired Pool Heaters	IFGC	ISPSC	IRC®
<u>CSA/ANSI Z21.10.3 :19/CSA 4.3—2017 :19</u>	Gas Water Heaters—Volume III—Storage, Water Heaters with Input Ratings above 75,000 Btu per Hour, Circulating and Instantaneous	IFGC	IECC®	IRC®
<u>CSA/ANSI Z21.15 :22/CSA 9.1—09(R2014)—:22</u>	Manually Operated Gas Valves for Appliances, Appliance Connector Valves and Hose End Valves	IFGC	IRC®	
<u>CSA/ANSI Z21.19 :19/CSA 1.4—2014 :19</u>	Refrigerators Using Gas Fuel	IFGC		
<u>CSA/ANSI Z21.42—2013 (R2018)</u>	Gas-fired Illuminating Appliances	IFGC	IRC®	
<u>CSA/ANSI Z21.47 :21/CSA 2.3—16 :21</u>	Gas-fired Central Furnaces	IECC®		
<u>CSA/ANSI Z21.58 :22/CSA 1.6—2015 :22</u>	Outdoor Cooking Gas Appliances	IFGC	IRC®	

<u>CSA/ANSI Z21.80 :19</u> <del>CSA 6.22—44(R2016) :19</del>	Line Pressure Regulators	IFGC	IRC®
<u>CSA/ANSI Z21.90 :19</u> <del>CSA 6.24—2015 :19</del>	Gas Convenience Outlets and Optional Enclosures	IRC®	
<u>CSA/ANSI Z21.91—2017 :20</u>	Ventless Firebox Enclosures for Gas-fired Unvented Decorative Room Heaters	IFGC	IRC®
<u>CSA/ANSI Z21.10.1 :19</u> <del>CSA 4.1—2017 :19</del>	Gas Water Heaters—Volume I—Storage, Water Heaters with Input Ratings of 75,000 Btu per Hour or Less	IFGC	IRC®
<u>CSA/ANSI Z21.54 :19—2014</u> <u>/CSA 8.4:19</u>	Gas Hose Connectors for Portable Outdoor Gas-fired Appliances	IFGC	IRC®
<u>A108.11—10 18</u>	Interior Installation of Cementitious Backer Units	IRC®	
<u>A108.4—09 19</u>	Installation of Ceramic Tile with Organic Adhesives or Water-cleanable Tile-setting Epoxy Adhesive	IBC	IRC®
<u>A108.5—19 21</u>	<del>Installation of Ceramic Tile with Dry-set Portland Cement Mortar or Latex Portland Cement Mortar—</del> <u>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</u>	IBC	IRC®
<u>A108.6—19 99(R2019)</u>	Installation of Ceramic Tile with Chemical-resistant, Water Cleanable Tile-setting and-grouting Epoxy	IBC	IRC®
<u>A108.8—19 99(R2019)</u>	Installation of Ceramic Tile with Chemical-resistant Furan Resin Mortar and Grout	IBC	
<u>A108.9—19 99(2019)</u>	Installation of Ceramic Tile with Modified Epoxy Emulsion Mortar/Grout	IBC	

A118.10— <del>14</del> (R2019)	<u>Standard</u> Specifications for Load Bearing, Bonded, Waterproof Membranes for Thin -Set Ceramic Tile and Dimension Stone Installation	IPC	IRC®
A118.1— <del>18</del> — <u>19</u>	American National Standard Specifications for Dry-set <del>Portland Cement Mortar</del>	IBC	IRC®
A118.3— <del>20</del> — <u>21</u>	American National Standard Specifications for Chemicalresistant, Water-cleanable Tile-setting and-grouting Epoxy and Water Cleanable Tile-setting Epoxy Adhesive	IBC	IRC®
A118.4— <del>18</del> — <u>19</u>	American National Standard Specifications for Modified Dry-set Cement Mortar	IBC	IRC®
A118.5— <del>99</del> (R2021)	American National Standard Specifications for Chemical Resistant Furan Mortar and Grouts for Tile Installation	IBC	
A118.6—19	American National Standard Specifications for <u>Standard</u> Cement Grouts for Tile Installation	IBC	
A136.1— <del>19</del> — <u>20</u>	American National Standard Specifications for <u>Organic Adhesives for the</u> Installation of Ceramic Tile	IBC	IRC®
A137.1— <del>19</del> — <u>22</u>	American National Standard Specifications for Ceramic Tile	IBC	IRC®
A137.3— <del>17</del> — <u>22</u>	American National Standard Specifications for Gauged Porcelain Tiles and Gauged Porcelain Tile Panel/Slabs	IBC	
ANSI E1.21— <del>2013</del> — <u>2020</u>	Entertainment Technology: Temporary Structures Used for Technical Production of Outdoor Entertainment Events	IFC	
CSA/ANSI NGV 5.1— <del>2016</del> —:22	Residential Fueling Appliances	IFGC	
CSA/ANSI NGV 5.2— <del>2017</del> —:22	Vehicle Fueling Appliances (VFA)	IFGC	

CSA/ANSI Z21.88: <del>19</del> /CSA 2.33— <del>46—:19</del>	Vented Gas Fireplace Heaters	IFGC		IRC®	
LC 1/CSA 6.26— <del>2016—:19</del>	Fuel Gas Piping Systems Using Corrugated Stainless Steel Tubing ( <del>CSST</del> )	IFGC			
LC4/CSA 6.32—12	Press-connect Metallic Fittings for Use in Fuel Gas Distribution Systems	IRC®			
Z21.1/CSA 1.1— <del>2016—2018</del>	Household Cooking Gas Appliances	IFGC	IMC	IRC	
Z21.40.2/CSA 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: <del>19</del> /CSA 4.7— <del>2017—:19</del>	Gas Fired Pool Heaters	ISPSC			
Z21.88/CSA 2.33— <del>2016—:19</del>	Vented Gas Fireplace Heaters	IFGC			
Z21.8— <del>1994 (R2012)</del> <del>94</del> (R2017)	Installation of Domestic Gas Conversion Burners	IFGC	IMC	IRC	
Z83.20— <del>08—2016</del>	Gas-fired <del>Tubular</del> Low-intensity Infrared Heaters Outdoor Decorative Appliances	IFGC		IRC®	
Z97.1— <del>2014—2015</del> (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):
<del>ANSI/A190.1—2017</del> <u>2022</u>	<del>Product Standard for Structural Glued-laminated Timber</del>	IRC®
<del>ANSI/APA A190.1—2017</del> <u>2022</u>	Product Standard for Structural Glued Laminated Timber	IBC
<del>ANSI/APA PRR 410—16</del> <u>2021</u>	Standard for Performance-Rated Engineered Wood Rim Boards	IBC
<del>ANSI/APA PRR 410—2016</del> <u>2021</u>	Standard for Performance-rated Engineered Wood Rim Boards	IRC®
<del>ANSI/APA PRS 610.1—2018</del> <u>2023</u>	Standard for Performance-Rated Structural Insulated Panels in Wall Applications	IRC®
<del>APA PDS Supplement 1—42</del> <u>23</u>	Design and Fabrication of Plywood Curved Panels ( <del>revised 2013</del> )	IBC
<del>APA PDS Supplement 2—42</del> <u>23</u>	Design and Fabrication of Plywood-lumber Beams ( <del>revised 2013</del> )	IBC
<del>APA PDS Supplement 3—42</del> <u>23</u>	Design and Fabrication of Plywood Stressed-skin Panels ( <del>revised 2013</del> )	IBC
<del>APA PDS Supplement 4—42</del> <u>23</u>	Design and Fabrication of Plywood Sandwich Panels ( <del>revised 2013</del> )	IBC
<del>APA PDS Supplement 5—46</del> <u>23</u>	Design and Fabrication of All-plywood Beams ( <del>revised 2013</del> )	IBC
<del>APA T300—46</del> <u>23</u>	Glulam Connection Details	IBC
<del>APA X440—47</del> <u>23</u>	Product Guide: Glulam	IBC
<del>APA X450—48</del> <u>23</u>	Glulam in Residential Construction—Building—Construction Guide	IBC
<b>API</b>	<b>American Petroleum Institute</b>	
Standard Reference Number	Title	Referenced in Code(s):

<del>Publ</del> <del>RP 2028 3rd 4th Edition—</del> <del>(2002, R2010) —(2024)</del>	Flame Arrestors in Piping Systems	IFC
<del>Publ</del> <del>RP 2009—7th 8th Edition</del> <del>(2002, R2012) —(2022)</del>	Safe Welding and Cutting Practices in Refineries, Gas Plants and Petrochemical Plants	IFC
<del>Publ</del> <del>2201 5th 6th Edition—(2003, R2010) —(2023)</del>	Procedures for Welding or Hot Tapping on Equipment in Service	IFC
<del>RP 1604—3rd Edition (1996 R2010) (1996) (4th edition 2021)</del>	Closure of Underground Petroleum Storage Tanks	IFC
<del>RP 1615—(1996) (6th Edition R2020) (2014)</del>	Installation of Underground-petroleum Storage Systems	IFC
<del>RP 2001—9th 10th Edition (2012) —(2022)</del>	Fire Protection in Refineries, <del>8th Edition</del>	IFC
<del>RP 2003—8th 9th Edition (2015) —(2023)</del>	Protection Against Ignitions Arising out of Static, Lightning and Stray Currents	IFC
<del>RP 2023—3rd 4th Edition (2001, R2006) —(2023)</del>	Guide for Safe Storage and Handling of Heated Petroleum-derived Asphalt Products and Crude-oil Residue	IFC
<del>RP 651—4th 5th Edition (2014) (2022)</del>	Cathodic Protection of Aboveground Petroleum Storage Tanks	IFC
<del>RP 752— 3rd 4th Edition (2009) (2022)</del>	Management of Hazards Associated with Location of Process Plant Buildings, CMA Managers Guide	IFC
<del>Std 2000—7th Edition (2014) —(7th edition R2020) 8th edition (2023)</del>	Venting Atmosphere and Low-pressure Storage Tanks: Nonrefrigerated and Refrigerated	IFC
<del>Std 2015—8th Edition 2001—(2018) —(2023)</del>	Requirements for Safe Entry and Clearing of Petroleum Storage Tanks	IFC
<del>Std 2350— 4th 5th Edition (2012) —(2021)</del>	Overfill Protection for Storage Tanks in Petroleum Facilities	IFC
<del>Std 653 Addendum 3,—5th Edition (2018) —(2022)</del>	Tank Inspection, Repair, Alteration and Reconstruction	IFC

<b>ASABE</b>	<b>American Society of Agricultural and Biological Engineers</b>		
Standard Reference Number	Title	Referenced in Code(s):	
EP 484.3 DEC2017 <u>(R2022)</u>	Diaphragm Design of Metal-clad, Wood-frame Rectangular Buildings	IBC	
EP 486.3 SEP2017 <u>(R2021)</u>	Shallow-post and Pier Foundation Design	IBC	
EP 559.1 <del>W/Corr.</del> AUG2010 <del>(R2014)</del> <u>(R2019)</u>	Design Requirements and Bending Properties for Mechanically Laminated Wood Assemblies	IBC	
S640— <u>JUL2017 (R2022)</u>	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	<u>22</u>	Structural Applications of Steel Cables for Buildings	IBC				
29—19	<u>05</u>	Standard Calculation Methods for Structural Fire Protection	IBC				
49—12	<u>21</u>	Wind Tunnel Testing for Buildings and Other Structures	IBC				
55—16	<u>22</u>	Tensile Membrane Structures	IBC				
7—16	<u>22</u>	Minimum Design Loads and Associated Criteria for Buildings and Other Structures	IBC	IRC®			
8—20	<u>21</u>	Standard Specification for the Design of Cold-formed Stainless Steel Structural Members	IBC				
ASCE/SEI 24—20		<u>14</u>	Flood Resistant Design and Construction	IFC	IRC	ISPSC	IBC

<b>ASHRAE</b>	<b>ASHRAE</b>				
---------------	---------------	--	--	--	--

Standard Reference Number	Title	Referenced in Code(s):		
140— <del>2014</del> <u>2020</u>	<del>Standard Method of Test for the Evaluation of Building Energy Analysis Computer Programs</del> <u>Method of Test for Evaluating Building Performance Simulation Software</u>	IECC®		
146— <del>2011</del> <u>2020</u>	<del>Testing Method of Test for Rating Pool Heaters</del>	IECC®		
15— <del>2019</del> <u>2022</u>	Safety Standard for Refrigeration Systems	IMC	IFC	
170— <del>2017</del> <u>2021</u>	Ventilation of Health Care Facilities	IMC	IBC	IFC
34— <del>2019</del> <u>2022</u>	<del>Designation and Safety</del> Classification of Refrigerants	IMC	IRC®	
55— <del>2017</del> <u>2020</u>	Thermal Environmental Conditions for Human Occupancy	IECC®		
62.1— <del>2019</del> <u>2022</u>	Ventilation for Acceptable Air Quality	ISPSC		
62.1— <del>2019</del> <u>2022</u>	Ventilation for Acceptable Indoor Air Quality	IMC	IEBC	IECC®
90.1— <del>2016</del> <u>2022</u>	Energy Standard for Buildings Except Low-rise Residential Buildings	IMC	IECC®	
90.1— <del>2019</del> <u>2022</u>	Energy Standard for Buildings Except Low-rise Residential Buildings	IECC®		
90.4— <del>2016</del> <u>2022</u>	Energy Standard for Data Centers	IECC®		
ANSI/ASHRAE/ACCA Standard 183— <del>(RA 2017)</del> <u>2007 (RA 2020)</u>	Peak Cooling and Heating Load Calculations in Buildings; Except Low-rise Residential Buildings	IECC®		
ASME	American Society of Mechanical Engineers			
Standard Reference Number	Title	Referenced in Code(s):		

A112.1.3—2000 ( <del>Reaffirmed-2020</del> <u>2024</u> )	Air Gap Fittings for Use with Plumbing Fixtures, Appliances and Appurtenances	IRC®	
A112.1.3— <del>2000 (R2020)</del> — <u>2024</u>	Air Gap Fittings for Use with Plumbing Fixtures, Appliances and Appurtenances	IPC	
A112.14.1—2003 (R2022 )	Backwater Valves	IPC	
A112.14.1—2003 ( <del>R2017</del> )— <u>(2022)</u>	Backwater Valves	IRC®	
A112.14.3— <del>2021</del> — <u>2023</u>	Grease Interceptors	IPC	
A112.14.4—2001 ( <del>R2017</del> ) (R2022 )	Grease Removal Devices	IPC	
A112.14.6—2010 ( <del>R2020</del> ) (R2024)	FOG (Fats, Oils and Greases) Disposal Systems	IPC	
A112.18.1— <del>2020</del> /CSA B125.1— <del>2020</del> <u>2023</u>	Plumbing Supply Fittings	IPC	IRC®
A112.18.2— <del>2019</del> <u>2023</u> /CSA B125.2— <del>19</del> <u>2023</u>	Plumbing Waste Fittings	IPC	
A112.18.2— <del>2019</del> <u>2023</u> /CSA B125.2— <del>2019</del> <u>2023</u>	Plumbing Waste Fittings	IRC®	
A112.18.3M— <del>2002(R2020)</del> ( <u>R2022</u> )	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— <del>2019</del> <u>2024</u>	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 ( <del>R2018</del> — <u>2023</u> )	Six-Liter Water Closets Equipped with Dual Flushing Device	IRC®	
A112.19.14—2013 ( <del>R2018</del> ) ( <u>R2023</u> )	Six-liter Water Closets Equipped with a Dual Flushing Device	IPC	

A112.19.15— <del>2012 (-) R201</del> <u>2012 (R2022)</u>	Bathtub/Whirlpool Bathtubs with Pressure Sealed Doors	IPC	IRC
A112.19.19 <del>2016 (R2021)</del> — <u>2021</u>	Vitreous China Nonwater Urinals	IPC	
A112.19.1— <del>2020</del> <u>2022/CSA B45.2—20</u> <u>2022</u>	Enameled Cast Iron and Enameled Steel Plumbing Fixtures	IPC	
A112.19.1— <del>2020</del> <u>2022/CSA B45.2—2020</u> <u>2022</u>	Enameled Cast-iron and Enameled Steel Plumbing Fixtures	IRC®	
A112.19.2—/CSA B45.1— <del>20</del> <del>2020-20</del> <u>2021</u>	Ceramic Plumbing Fixtures	IPC	
A112.19.2— <del>2020</del> <u>2021/CSA B45.1—2020</u> <u>2021</u>	Ceramic Plumbing Fixtures	IPC	IRC®
A112.19.3— <u>2021/CSA B45.4—00</u> <del>(R2021)</del>	Stainless Steel Plumbing Fixtures	IPC	IRC®
A112.19.5— <del>2021</del> <u>2022/CSA B45.15—2021</u> <u>2022</u>	Flush Valves and Spuds for Water Closets, Urinals, and Tanks	IPC	IRC®
A112.19.7- <del>2012</del> <u>2023/CSA B45.10—2012 (R2021)</u> <u>2023</u>	Hydromassage Bathtub Systems	IRC®	
A112.19.7—CSA B45.10— <del>R-2012/2012 (- 2021)</del> <u>2012(R2023)</u>	Hydromassage Bathtub Systems	IPC	
A112.21.3— <del>1985 (R2017)</del> <u>2022</u>	Hydrants for Utility and Maintenance Use	IPC	
A112.3.4— <del>2020</del> <u>2022/CSA B45.9—20</u> <u>2022</u>	Macerating Toilet Systems and Related Components	IRC®	
A112.36.2M—1991 <del>(R2017)</del> <u>(R2022)</u>	Cleanouts	IPC	IRC®
A112.4.14— <del>2004 (R2019)</del> <u>2022</u>	Manually Operated, Quarter-Turn Shutoff Valves for Use in Plumbing Systems	IPC	IRC®
A112.4.14— <del>2019</del> <u>2022/CSA B125.14-19</u> <u>2022</u>	Manually Operated Valves for Use in Plumbing Systems	IPC	IRC®
A112.4.1— <del>2019</del> <u>2024</u>	Water Heater Relief Valve Drain Tubes	IRC®	

A112.4.2— <del>2020—2021</del> /CSA B45.16— <del>20—2021</del>	Water Closet Personal Hygiene Devices	IPC			
A112.4.3— <del>1999 (R2020)—2024</del>	Plastic Fittings for Connecting Water Closets to the Sanitary Drainage System	IPC		IRC®	
A112.4.4— <del>2017—2022</del>	Plastic Push-Fit Drain, Waste, and Vent (DWV) Fittings	IPC		IRC®	
A112.6.1M — <del>1997(R2017)—2022</del>	Floor-Affixed Supports for Off-the-Floor Plumbing Fixtures for Public Use	IPC			
A112.6.2— <del>2017—2022</del>	Framing-Affixed Supports for Off-the-Floor Water Closets with Concealed Tanks	IPC		IRC®	
A112.6.3— <del>2019—2022</del>	Floor and Trench Drains	IPC		IRC®	
A112.6.4— <del>2003 (R2012) (R2020)</del>	Roof, Deck, and Balcony Drains	IPC			
A112.6.7— <del>2010 (R2020) (R2024)</del>	Sanitary Floor Sinks	IPC			
A112.6.9— <del>2005 (R2020) (R2024)</del>	Siphonic Roof Drains	IPC			
A17.1— <del>2019—2022</del> /CSA B44— <del>19—2022</del>	Safety Code for Elevators and Escalators	IBC	IEBC	IFC	IRC®
A17.3— <del>2020—2023</del>	Safety Code for Existing Elevators and Escalators	IEBC		IFC	
A18.1— <del>2020—2023</del>	Safety Standard for Platform Lifts and Stairway Chairlifts	IBC	IEBC	IRC®	
ASME A17.1— <del>2019—2022</del> /CSA B44— <del>19—2022</del>	Safety Code for Elevators and Escalators	IPMC		IECC®	
ASME A17.1— <del>2019—2022</del> /CSA B44— <del>2019—2022</del>	Safety Code for Elevators and Escalators	IRC®			

ASSE 1016— <del>2020</del> <u>2021/ASME 112.1016—<del>2020</del> 2021/CSA B125.16—<del>2020</del> 2021</u>	Performance Requirements for Automatic Compensating Valves for Individual Showers and Tub/Shower Combinations	IPC		IRC®		
B1.13M— <del>2006</del> <u>2020</u>	Metric Screw Threads: M Profile	IMC				
B1.1— <del>2003</del> <u>2024</u>	Unified Inch Screw Threads, UN and UNR Thread Form	IMC				
B1.20.1— <del>2019</del> <u>2023</u>	Pipe Threads, General Purpose (inch)	IFGC	IMC	IPC	IRC®	
B1.20.3— <del>1976</del> <u>2023</u>	Dryseal Pipe Threads, Inch	IMC				
B16.12— <del>2009 (R2019)</del> <u>2024</u>	Cast Iron Threaded Drainage Fittings	IPC			IRC®	
B16.15— <del>2013</del> <u>2023</u>	Cast Alloy Threaded Fittings:- <del>Classes 125 and 250</del>	ISPSC				
B16.15— <del>2018</del> <u>2023</u>	Cast Alloy Threaded Fittings:- <del>Classes 125 and 250</del>	IMC		IPC	IRC®	
B16.18— <del>2018</del> <u>2023</u>	Cast Copper Alloy Solder Joint Pressure Fittings	IMC	IPC	IBC	IFC	IRC®
B16.22— <del>2018</del> <u>2023</u>	Wrought-Copper and Copper _ Alloy Solder Joint Pressure Fittings	IMC	IPC	IBC	IFC	IRC®
B16.26— <del>2018</del> <u>2023</u>	Cast Copper Alloy Fittings for Flared Copper Tubes	IMC		IPC	IRC®	
B16.29— <del>2017</del> <u>2022</u>	Wrought Copper and Wrought Copper Alloy Solder Joint Drainage Fittings (DWV)	IPC			IRC®	
B16.33— <del>2012 (R2017)</del> <u>2022</u>	Manually Operated Metallic Gas Valves for Use in Gas Piping Systems up to 125 psig (Sizes 1/2 through 2)	IRC®				
B16.33— <del>2012(2017)</del> <u>2022</u>	Manually Operated Metallic Gas Valves for Use in Gas Piping Systems up to 125 psig (Sizes 1/2 through 2)	IFGC				
B16.34— <del>2020</del> <u>2023</u>	Valves—Flanged, Threaded and Welding End	IPC			IRC®	



B16.44— <del>2012 (R2017)</del> — <u>2022</u>	Manually Operated Metallic Gas Valves for Use in Above-ground Piping Systems up to 5 psi	IFGC		IRC®	
B16.47— <del>2020</del> — <u>2023</u>	Large Diameter Steel Flanges: NPS 26 through NPS 60 Metric/Inch Standard	IFGC			
B16.5— <del>2019</del> — <u>2024</u>	Pipe Flanges and Flanged Fittings: NPS 1/2 through NFPS 24 Metric/Inch Standard	IFGC		IMC	
B16.9— <del>2018</del> — <u>2023</u>	Factory-Made Wrought Steel Buttwelding Fittings	IMC	IPC	IRC®	
B20.1— <del>2021</del> — <u>2024</u>	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— <del>2019</del> — <u>2024</u>	Hydrogen Piping and Pipelines	IFGC			
B31.1— <del>2020</del> — <u>2022</u>	Power Piping	IFC			
B31.3— <del>2020</del> — <u>2022</u>	Process Piping	IFGC	IBC	IFC	
B31.4— <del>2019</del> — <u>2022</u>	Pipeline Transportation Systems for Liquids and Slurries	IFC			
B31.5— <del>2019</del> — <u>2022</u>	Refrigeration Piping and Heat Transfer Components	IMC		IPC	
B31.9— <del>2020</del> — <u>2023</u>	Building Services Piping	IMC		IFC	
B36.10M— <del>2018</del> — <u>2023</u>	Welded and Seamless Wrought-steel Pipe	IFGC		IRC®	
BPVC— <del>2019</del> — <u>2023</u>	ASME Boiler and Pressure Vessel Code (Sections I, II, IV, V & VI, VIII)	IFGC	IMC	IFC	IRC®
CSD-1— <del>2021</del> — <u>2024</u>	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):			

<del>45—2013—2018</del>	Siphonic Roof Drainage <del>Systems</del>	IPC	
ASSE/IAPMO Z1034—2015 (R2020)	Test Method for Evaluating Roof Drain Performance	IPC	
ASSE		ASSE International	
Standard Reference Number	Title	Referenced in Code(s):	
<del>1003—09—2020</del>	Performance Requirements for Water Pressure Reducing Valves for Domestic Water Distribution	IPC	
<del>1003—2011—2020</del>	Performance Requirements for Water-pressure-reducing Valves for Domestic Water Distribution Systems	IRC®	
<del>1008—06—2020</del>	Performance Requirements for Plumbing Aspects of Food Waste Disposer Units	IPC	
<del>1008—2006—2020</del>	Performance Requirements for Plumbing Aspects of Residential Food Waste Disposer Units	IRC®	
<del>1013—2017—2021</del>	Performance Requirements for Reduced Pressure Principle Backflow <u>Prevention Assemblies Preventers</u> and <del>Reduced Pressure Principle Fire Protection Backflow Preventers</del>	IRC®	
<del>1015—2017—2021</del>	Performance Requirements for Double Check Backflow Prevention Assemblies and <del>Double Check Fire Protection Backflow Prevention Assemblies</del>	IPC	IRC®
<del>1018—2001—2021</del>	Performance Requirements for Trap Seal Primer Valves; Potable Water Supplied	IPC	IRC®
<del>1019—2011—(R2016)—</del>	<del>Performance Requirements for Vacuum Breaker Wall Hydrants, Freeze Resistant, Automatic Draining Type—Performance Requirements for Freeze-resistant, Wall Hydrants, Vacuum Breaker, Draining Types</del>	IPC	IRC®

<del>1020—04—</del> <u>2020</u>	Performance Requirements for Pressure Vacuum Breaker Assembly	IPC	
<del>1020—2004—</del> <u>2020</u>	Performance Requirements for Pressure Vacuum Breaker Assembly	IRC®	
<del>1022—2017—</del> <u>2021</u>	Performance Requirements for Backflow Preventer for Beverage Dispensing Equipment	IPC	
<del>1023—1979—</del> <u>2020</u>	Performance Requirements for <del>Electrically Heated or Cooled Hot</del> Water Dispensers, <del>Household-storage type—Electrical</del>	IRC®	
<del>1024—2017—</del> <u>2021</u>	Performance Requirements for Dual Check Valve Type Backflow Preventers, Anti-siphon-type, Residential Applications	IPC	IRC®
<del>1035—08—</del> <u>2020</u>	Performance Requirements for Laboratory Faucet Backflow Preventers	IPC	
<del>1035—2008—</del> <u>2020</u>	Performance Requirements for Laboratory Faucet Backflow Preventers	IRC®	
<del>1044—2015—</del> <u>2020</u>	Performance Requirements for Trap Seal Primer Devices— Drainage Types and Electronic Design Types	IPC	IRC®
<del>1047—2011—</del> <u>2021</u>	Performance Requirements for Reduced Pressure Detector Fire Protection Backflow Prevention Assemblies	IPC	IRC®
<del>1048—2011—</del> <u>2021</u>	Performance Requirements for Double Check Detector Fire Protection Backflow Prevention Assemblies	IPC	IRC®
<del>1049—2009—</del> <u>2021</u>	Performance Requirements for Individual and Branch Type Air Admittance Valves for Chemical Waste Systems	IPC	
<del>1050—2009—</del> <u>2021</u>	Performance Requirements for Stack Air Admittance Valves for Sanitary Drainage Systems	IPC	IRC®

<del>1051—2009—2021</del>	Performance Requirements for Individual and Branch Type Air Admittance Valves for Sanitary Drainage Systems <del>fixture and Branch Devices</del>	IPC		IRC®
<del>1056—2013—2021</del>	Performance Requirements for Spill-Resistant Vacuum Breaker	IPC		IRC®
<del>1060—2016—2020</del>	Performance Requirements for Outdoor Enclosures for Fluid-conveying Components	IRC®		
<del>1060—2017—2020</del>	Performance Requirements for Outdoor Enclosures for Fluid Conveying Components	IPC		
<del>1061—2015—2020</del>	Performance Requirements for Push Fit Fittings	IMC	IPC	IRC®
<del>1062—2017—2021</del>	Performance Requirements for Temperature Actuated, Flow Reduction (TAFR) Valves to Individual Supply Fittings	IPC		IRC®
<del>1064—2006 (R2011)—2020</del>	Performance Requirements for Backflow Prevention Assembly Field Test Kits	IPC		
<del>1069—05—2020</del>	Performance Requirements for Automatic Temperature Control Mixing Valves	IPC		
<del>1071—2012—2021</del>	<del>Performance Requirements for</del> Temperature Actuated Mixing Valves for Plumbed Emergency Equipment	IPC		
<del>1072—07—2020</del>	Performance Requirements for Barrier Type Floor Drain Tap Seal Protection Devices	IPC		
<del>1072—2007—2020</del>	Performance Requirements for Barrier-type <u>Trap Seal Protection for Floor Drains</u> <del>Trap Seal Protection Devices</del>	IRC®		
<del>1079—2005—2021</del>	Performance Requirements for Dielectric Pipe Unions	IMC		IPC

1081—2014— <u>2020</u>	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®
------------------------	---	-----	------

5013—2015	<del>Performance Requirements for Testing-Reduced Pressure Principle Backflow Prevention Assembly Preventers (RPA) and Reduced Pressure Principle Fire Protection Backflow Preventers (RFP)</del>	IPC	
-----------	---	-----	--

<u>ASSE/IAPMO 1055—2018—2020</u>	Performance Requirements for Chemical Dispensing Systems <u>with Integral Backflow Protection</u>	IPC	
----------------------------------	---	-----	--

ASSP	American Society of Safety Professionals		
Standard Reference Number	Title	Referenced in Code(s):	

<u>ANSI/ASSP Z359.1 —2020</u>	The Fall Protection Code	IFGC	
-------------------------------	--------------------------	------	--

<u>ANSI/ASSE Z359.1—2019—2020</u>	The Fall Protection Code	IBC	
-----------------------------------	--------------------------	-----	--

<u>ANSI/ASSP Z359.1—2019—2020</u>	The Fall Protection Code	IMC	IFC
-----------------------------------	--------------------------	-----	-----

ASTM	ASTM International		
Standard Reference Number	Title	Referenced in Code(s):	

A105/A105M—18— <u>21</u>	Standard Specification for Carbon Steel Forgings for Piping Applications	IMC	
--------------------------	--	-----	--

A106/A106M—2018— <u>2019a</u>	Specification for Seamless Carbon Steel Pipe for High-temperature Service	IFGC	IMC	IRC®
-------------------------------	---	------	-----	------

A126—04(2014— <u>2019</u> )	<u>Standard</u> 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			
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-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 <u>PSI</u> Tensile Strength	IRC®			

A312/A312M— <del>2018</del> <u>21</u>	Specification for Seamless, Welded, and Heavily Cold Worked Austenitic Stainless Steel Pipes	IPC	
A312/A312M— <del>2018</del> <u>21</u>	Standard Specification for Seamless, Welded and Heavily Cold Worked Austenitic Stainless Steel Pipes	IFGC	ISPSC
A312/A312M— <del>17</del> <u>21</u>	Standard Specification for Seamless, Welded, and Heavily Cold Worked Austenitic Stainless Steel Pipes	IMC	
A312/A312M— <del>2018</del> <u>21</u>	Specification for Seamless, Welded and Heavily Cold Worked Austenitic Stainless Steel Pipes	IRC®	
A334/A334M—04a( <del>2016</del> <u>2021</u> )	Standard Specification for Seamless and Welded Carbon and Alloy-steel Tubes for Low-temperature Service	IMC	
A36/A36M— <del>14</del> <u>19</u>	Specification for Carbon Structural Steel	IBC	IRC®
A395/A395M—99( <del>2014</del> ) <u>2018</u>	Standard Specification for Ferritic Ductile Iron Pressure-retaining Castings for Use at Elevated Temperatures	IMC	
A403/A403M— <del>2018A</del> <u>20</u>	Standard Specification for Wrought Austenitic Stainless Steel Piping Fittings	ISPSC	
A416/A416M— <del>2017A</del> <u>18</u>	Standard Specification for <u>Low-Relaxation, Uncoated Seven-Wire</u> Steel Strand for Prestressed Concrete	IBC	
A420/A420M— <del>2016</del> <u>20</u>	Specification for Piping Fittings of Wrought Carbon Steel and Alloy Steel for Low-temperature Service	IMC	
A463/A463M—15 ( <u>2020</u> )e1	Standard Specification for Steel Sheet, Aluminum-coated, by the Hot-dip Process	IBC	IRC®
A53/A53M— <del>2018</del> <u>2020</u>	Specification for Pipe, Steel, Black and Hot-dipped, Zinc-coated Welded and Seamless	IPC	

A53/A53M— <del>2018</del> <u>2020</u>	Specification for Pipe, Steel, Black and Hot Dipped Zinc-coated Welded and Seamless	IFGC	IMC	IRC®
A536— <del>84(2014)</del> ( <u>2019</u> )e1	Standard Specification for Ductile Iron Castings	IMC		
A563/A563M— <del>15</del> <u>21a</u>	Standard Specification for Carbon and Alloy Steel Nuts	IRC®		
A572/A572M— <del>2018</del> <u>21e1</u>	Specification for High-strength Low-alloy Columbium-Vanadium Structural Steel	IBC		
A588/A588M— <del>15</del> <u>19</u>	Standard Specification for High-strength Low-alloy Structural Steel, with up to 50 ksi {345 MPa} Minimum Yield Point with Atmospheric Corrosion Resistance	IBC		
A6/A6M— <del>2017A</del> <u>2019</u>	Standard Specification for General Requirements for Rolled Structural Steel Bars, Plates, Shapes and Sheet Piling	IBC		
A615/A615M— <del>15ae1</del> <u>20</u>	<del>Standard</del> Specification for Deformed and Plain Carbon- <del>s</del> Steel Bars for Concrete Reinforcement	IBC		
A615/A615M— <del>2015aE1</del> <u>20</u>	<del>Standard</del> Specification for Deformed and Plain Carbon- s Steel Bars for Concrete Reinforcement	IRC®		
A641/A641M— <del>09a(2014)</del> <u>19</u>	Specification for Zinc-coated (Galvanized) Carbon Steel Wire	IRC®		
A653/A653M— <del>2017</del> <u>2020</u>	Specification for Steel Sheet, Zinc-coated (Galvanized) or Zinc-iron Alloy-coated (Galvannealed) by the Hot-dip Process	IRC®		
A653/A653M— <del>2017</del> <u>2020</u>	Specification for Steel Sheet, Zinc-coated Galvanized or Zinc-iron Alloy-coated Galvannealed by the Hot-dip Process	IBC		



A706/A706M—2016	<u>Standard Specification for Deformed and Plain Low-alloy Steel Bars for Concrete Reinforcement</u>	IBC	IRC®
A74— 17 <u>2021</u>	Specification for Cast-iron Soil Pipe and Fittings	IPC	
A74—2017	Specification for Cast-iron Soil Pipe and Fittings	IRC®	
A755/A755M— <del>2016</del> E1—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— <del>2016</del> E1—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( <u>2021</u> )	Specification for Welded Unannealed Austenitic Stainless Steel Tubular Products	IPC	
A778M/A778M—2016 ( <u>2021</u> )	Specification for Welded Unannealed Austenitic Stainless Steel Tubular Products	IRC®	
A792/A792M— <del>10(2015)</del> —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— <del>2018</del> 21a	Specification for Hubless Cast-iron Soil Pipe and Fittings for Sanitary and Storm Drain, Waste, and Vent Piping Application	IPC	IRC®
A924/A924M— <del>2017A</del> 20	Standard Specification for General Requirements for Steel Sheet, Metallic-coated by the Hot-dip Process	IBC	
A924M— <del>2017A</del> 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	<u>Standard</u> Specification for Copper Sheet, Strip, Plate, and Rolled Bar	IPC						
B209—14 21	Specification for Aluminum and Aluminum Alloy Steel and Plate	IBC			IRC®			
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—14—19	<u>Standard</u> Specification for Seamless Copper Tube, Bright Annealed (Metric)	IMC		IBC		IFC		
B75/B75M—14 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— <del>2018—20</del>	Specification for Steel Self-piercing Tapping Screws for the Application of Gypsum Panel Products or MetalPlaster Bases to Wood Studs or Steel Studs	IBC	IRC®	
C1007— <del>14a(2015)— 20</del>	Specification for Installation of Load Bearing (Transverse and Axial) Steel Studs and Related Accessories	IBC		
C1029— <del>45— 20</del>	Specification for Spray-applied Rigid Cellular Polyurethane Thermal Insulation	IBC	IRC®	
C1047— <del>44a—19</del>	Specification for Accessories for Gypsum Wallboardand Gypsum Veneer Base	IRC®		
C1063— <del>2018B— 21</del>	Specification for Installation of Lathing and Furring to Receive Interior and Exterior Portland Cement-based Plaster	IBC	IRC®	
C1088— <del>2018—20</del>	Specification for Thin Veneer Brick Units Made from Clay or Shale	IBC	IRC®	
C1107/C1107M— <del>2017—20</del>	Standard Specification for Packaged Dry, Hydraulic-cement Grout (Nonshrink)	IRC®		
C1157/C1157M— <del>2017—20a</del>	Standard Performance Specification for Hydraulic Cement	IBC		
C126— <del>2017— 19</del>	Standard Specification for Ceramic Glazed Structural Clay Facing Tile,Facing Brick, and Solid Masonry Units	IRC®		
C1277— <del>2018—20</del>	Specification for Shielded Couplings Joining Hubless Cast Iron Soil Pipe and Fittings	IPC	IPSDC	IRC®
C1280— <del>13a—18</del>	Specification for Application of Exterior Gypsum Panel Products for Use as Sheathing	IBC		
C1283— <del>2015(2021)</del>	Practice for Installing Clay Flue Lining	IBC	IRC®	

C1288—2017	Standard Specification for <del>Discrete Nonasbestos Fiber-c</del> Cement Interior Substrate Sheets	IBC	IRC®	
C1289— <del>2018</del> — <u>21</u>	Standard Specification for Faced Rigid Cellular Polyisocyanurate Thermal Insulation Board	IBC	IRC®	
C1313/C1313M—13( <u>2019</u> )	Standard Specification for Sheet Radiant Barriers for Building Construction Applications	IBC		
C1325— <del>2018</del> — <u>21</u>	Standard Specification for Nonasbestos Fiber-mat Reinforced Cement Backer Units	IBC	IRC®	
C1328/C1328M— <del>12</del> — <u>19</u>	Specification for Plastic (Stucco Cement)	IBC	IRC®	
C1363— <del>11</del> — <u>19</u>	Standard Test Method for Thermal Performance of Building Materials and Envelope Assemblies by Means of a Hot Box Apparatus	IECC®	IRC®	
C1364— <del>2017</del> — <u>19</u>	Standard Specification for Architectural Cast Stone	IBC	IRC®	
C140/C140M— <del>2018</del> — <u>21</u>	Test Method Sampling and Testing Concrete Masonry Units and Related Units	IBC		
C1405— <del>2016</del> — <u>20a</u>	Standard Specification for Glazed Brick (Single Fired, Brick Units)	IRC®		
C143/C143M— <del>15A</del> — <u>20</u>	Test Method for Slump of Hydraulic Cement Concrete	IRC®		
C1440— <del>2017</del> — <u>21</u>	Specification for Thermoplastic Elastomeric (TPE) Gasket Materials for Drain, Waste, and Vent (DWV), Sewer, Sanitary and Storm Plumbing Systems	IPC	IPSDC	IRC
C1440— <del>2017</del> — <u>21</u>	Specification for Thermoplastic Elastomeric (TPE) Gasket Materials for Drain, Waste and Vent (DWV), Sewer, Sanitary and Storm Plumbing Systems	IRC®		

C1460— <del>2017</del> <u>21</u>	Specification for Shielded Transition Couplings for Use with Dissimilar DWV Pipe and Fittings Above Ground	IPC	IPSDC	IRC®
C1460— <del>2017</del> <u>21</u>	Specification for Shielded Transition Couplings for Use with Dissimilar DWV Pipe and Fittings Above Ground	IRC®		
C1461— <del>2008(2017)</del> <u>21</u>	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— <del>15a</del> <u>20</u>	Specification for Nonreinforced Concrete Sewer, Storm Drain and Culvert Pipe	IPC	IRC®	
C150/C150M— <del>2018</del> <u>21</u>	Specification for Portland Cement	IBC	IRC®	
C1540— <del>2018</del> <u>20</u>	Specification for Heavy Duty Shielded Couplings Joining Hubless Cast-iron Soil Pipe and Fittings	IPC		
C1563— <del>2008(2017)</del> <u>(2021)</u>	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— <del>08(2013)</del> <u>(2020)</u>	Standard Test Method for Wind Resistance of Concrete and Clay Roof Tiles (Mechanical Uplift Resistance Method)	IBC		
C1600/C1600M— <del>2017</del> <u>19</u>	Standard Specification for Rapid Hardening Hydraulic Cement	IBC		
C1629/C1629M— <del>2018A</del> <u>19</u>	Standard Classification for Abuse-resistant Nondecorated Interior Gypsum Panel Products and Fiber-reinforced Cement Panels	IBC		
C1634— <del>2017</del> <u>20</u>	Standard Specification for Concrete Facing Brick <u>and Other Concrete Masonry Facing Units</u>	IRC®		

C1658/C1658M— <del>2018- 19e1</del>	Standard Specification for Glass Mat Gypsum Panels	IBC		IRC®	
C1668— <del>13a- 20</del>	Standard Specification for Externally Applied Reflective Insulation Systems on Rigid Duct in Heating, Ventilation, and Air Conditioning (HVAC) Systems	IRC®			
C1670/1670M— <del>2018- 2021a</del>	Standard Specification for Adhered Manufactured Stone Masonry Veneer Units	IRC®			
C1670/C1670M— <del>2018- 21a</del>	Standard Specification for Adhered Manufactured Stone Masonry Veneer Units	IBC			
C1766— <del>2015(2019)</del>	Standard Specification for Factory-laminated Gypsum Panel Products	IBC		IRC®	
C1788— <del>14- 20</del>	Standard Specification for Non Metallic Plaster Bases (Lath) Used with Portland Cement Based Plaster in Vertical Wall Applications	IBC			
C208— <del>2012(2017)E4- e2</del>	Specification for Cellulosic Fiber Insulating Board	IBC		IRC®	
C212— <del>2017- 21</del>	Standard Specification for Structural Clay Facing Tile	IRC®			
C216— <del>2017A- 21</del>	Specification for Facing Brick (Solid Masonry Units Made from Clay or Shale)	IBC		IRC®	
C22/C22M— <del>00(2015)- (2021)</del>	Specification for Gypsum	IBC		IRC®	
C270— <del>14A- 19ae1</del>	Specification for Mortar for Unit Masonry	IRC®			
C28/C28M— <del>10(2015)- 2020</del>	Specification for Gypsum Plasters	IBC		IRC®	
C31/C31M— <del>2018B- 21a</del>	Practice for Making and Curing Concrete Test Specimens in the Field	IBC			
C315— <del>2007(2016)- (2021)</del>	Specification for Clay Flue Liners and Chimney Pots	IFGC	IMC	IBC	IRC®

C317/C317M—2000 <del>(2015)</del> (2019)	Specification for Gypsum Concrete	IBC		
C34—2017	<u>Standard Specification for Structural Clay</u> <del>Lead-bearing</del> <u>Loadbearing</u> Wall Tile	IRC®		
C35/C35M— <del>(2014)</del> <u>01(2019)</u>	Specification for Inorganic Aggregates for Use in Gypsum Plaster	IRC®		
C35/C35—01 <del>(2014)</del> <u>(2019)</u>	Specification for Inorganic Aggregates for Use in Gypsum Plaster	IBC		
C411— <del>2017</del> <u>2019</u>	Test Method for Hot-surface Performance of High-temperature Thermal Insulation	IMC	IRC®	
C425— <del>2004(2018)</del> <u>21</u>	Specification for Compression Joints for Vitrified Clay Pipe and Fittings	IPC	IPSDC	IRC
C443— <del>2012(2017)</del> <u>20</u>	Specification for Joints for Concrete Pipe and Manholes, Using Rubber Gaskets	IPC		
C443— <del>2012(2017)</del> <u>20</u>	Specification for Joints for Concrete Pipe and Manholes, Using Rubber Gaskets	IRC®		
C472— <del>99(2014)</del> <u>20</u>	Standard Test Methods for Physical Testing of Gypsum, Gypsum Plasters and Gypsum Concrete	IBC		
C473— <del>2017</del> <u>2019</u>	Test Methods for Physical Testing of Gypsum Panel Products	IBC		
C474— <del>15</del> <u>(2020)</u>	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— <del>2018</del> <u>2020</u>	Specification for Grout for Masonry	IRC®		

C503M/C503M—2015	Standard Specification for Marble Dimension Stone	IRC®	
C514—04(2014) <u>(2020)</u>	Specification for Nails for the Application of Gypsum Board	IBC	IRC®
C516—2008(2014)E1 <u>19</u>	Specifications for Vermiculite Loose Fill Thermal Insulation	IBC	
C547—2017 <u>19</u>	Specification for Mineral Fiber Pipe Insulation	IBC	
C549—06(2012) <u>18</u>	Specification for Perlite Loose Fill Insulation	IBC	
C552—2017E1 <u>21a</u>	Standard Specification for Cellular Glass Thermal Insulation	IBC	IRC®
C564—14 <u>20a</u>	Specification for Rubber Gaskets for Cast-iron Soil Pipe and Fittings	IPC	IRC®
C578—2018 <u>19</u>	Standard Specification for Rigid, Cellular Polystyrene Thermal Insulation	IBC	IRC®
C59/C59M—00(2015) <u>(2020)</u>	Specification for Gypsum Casting Plaster and Molding Plaster	IBC	IRC®
C595/C595M—2018 <u>21</u>	Specification for Blended Hydraulic Cements	IBC	IRC®
C61/C61M—00(2015) <u>(2020)</u>	Specification for Gypsum Keene's Cement	IBC	IRC®
C631—09(2014) <u>2020</u>	Specification for Bonding Compounds for Interior Gypsum Plastering	IBC	IRC®
C636/C636M—13 <u>19</u>	Practice for Installation of Metal Ceiling Suspension Systems for Acoustical Tile and Lay-in Panels	IBC	
C652—2017A <u>21</u>	Specification for Hollow Brick (Hollow Masonry Units Made from Clay or Shale)	IBC	IRC®
C67/C67M—2018 <u>21</u>	Test Methods of Sampling and Testing Brick and Structural Clay Tile	IBC	



C754— <del>2018</del> <u>20</u>	Specification for Installation of Steel Framing Members to Receive Screw-attached Gypsum Panel Products	IBC		
C76— <del>2018A</del> <u>20</u>	Specification for Reinforced Concrete Culvert, Storm Drain and Sewer Pipe	IPC		
C76— <del>2018A</del> <u>20</u>	Specification for Reinforced Concrete Culvert, Storm Drain and Sewer Pipe	IPC	IPSDC	IRC®
C840— <del>2018A</del> <u>20</u>	Specification for Application and Finishing of Gypsum Board	IBC		
C842— <del>05(2015)</del> <u>(2021)</u>	Specification for Application of Interior Gypsum Plaster	IBC	IRC®	
C844— <del>2015</del> <u>(2021)</u>	Specification for Application of Gypsum Base to Receive Gypsum Veneer Plaster	IBC	IRC®	
C847— <del>14a</del> <u>2018</u>	Specification for Metal Lath	IBC		
C887— <del>13</del> <u>20</u>	Specification for Packaged, Dry Combined Materials for Surface Bonding Mortar	IBC	IRC®	
C897— <del>15</del> <u>(2020)</u>	Specification for Aggregate for Job-mixed Portland Cement-based Plaster	IBC	IRC®	
C926— <del>2018B</del> <u>20b</u>	Specification for Application of Portland Cement-based Plaster	IBC	IRC®	
C932— <del>06(2013)</del> <u>(2019)</u>	Specification for Surface-applied Bonding Compounds for Exterior Plastering	IBC		
C94/C94M— <del>17A</del> <u>21b</u>	Specification for Ready-mixed Concrete	IEBC		
C94/C94M— <del>2017A</del> <u>21b</u>	Specification for Ready-mixed Concrete	IBC	IRC®	
C956— <del>04(2015)</del> <u>(2019)</u>	Specification for Installation of Cast-in-place Reinforced Gypsum Concrete	IBC		

D1003— <del>13</del> <u>21</u>	Standard Test Method for Haze and Luminous Transmittance of Transparent Plastics	IECC®		
D1143/D1143M— <del>2007(2013)</del> E1— <u>20</u>	<u>Standard</u> Test Methods for Deep Foundations <del>Elements</del> Under Static Axial Compressive Load	IBC		
D1227—13( <u>2019</u> )e1	Specification for Emulsified Asphalt Used as a Protective Coating for Roofing	IBC	IRC®	
D1557—12e+ ( <u>2021</u> )	Test Methods for Laboratory Compaction Characteristics of Soil Using Modified Effort [56,000 ft-lb/ft <sup>3</sup> (2,700 kN m/m <sup>3</sup> )]	IBC		
D1593— <del>13</del> — <u>19</u>	Standard Specification for Nonrigid Vinyl Chloride Plastic Film and Sheeting	ISPSC		
D1693—15e <u>1</u>	Test Method for Environmental Stress-cracking of Ethylene Plastics	IMC	IRC®	
D1784—41— <u>20</u>	<del>Standard Specification</del> <u>Classification System and Basis</u> for Specification for Rigid Poly (Vinyl Chloride) (PVC) Compounds and Chlorinated Poly (Vinyl Chloride) (CPVC) Compounds	IRC®		
D1785— <del>2015E1</del> — <u>21a</u>	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— <del>16</del> — <u>20</u>	Standard Test Method for Determining Ignition Temperature of Plastics	IBC		
D1970/D1970M— <del>2017A</del> — <u>21</u>	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®				
D2241—45—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—45—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—45—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— <del>2014</del> <u>20</u>	Specification for Poly (Vinyl Chloride) (PVC) Plastic Drain, Waste, and Vent Pipe and Fittings	IPC		
D2672— <del>14</del> <u>20e1</u>	Specification for Joints for IPS PVC Pipe Using Solvent Cement	IPC	ISPSC	IRC®
D2680— <del>04(2014)</del> <u>20</u>	Standard Specification for Acrylonitrile-Butadiene-Styrene (ABS) and Poly(Vinyl Chloride) (PVC) Composite Sewer Piping	IPC		IRC®
D2683— <del>14</del> <u>20</u>	Specification for Socket-type Polyethylene Fittings for Outside Diameter-controlled Polyethylene Pipe and Tubing	IMC	IPC	IRC®
D2737— <del>12a</del> <u>21</u>	Standard Specification for Polyethylene (PE) Plastic Tubing	IMC	IPC	IBC
D2822/D2822M—2005(2011) <u>e1</u>	Specification for Asphalt Roof Cement, Asbestos Containing	IBC		IRC®
D2843— <del>46</del> <u>19</u>	Standard Test Method for Density of Smoke from the Burning or Decomposition of Plastics	IBC		
D2846/D2846M— <del>2017BE1</del> <u>19a</u>	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— <del>2015</del> <u>2020</u>	<del>Standard Practice for Making Solvent-cemented Joints with Poly (Vinyl Chloride) (PVC) Pipe and Fittings</del> <u>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</u>	IPC		
D2859—2016	Standard Test Method for Ignition Characteristics of Finished Textile Floor Covering Materials	IBC		

D2859— <del>16</del> <u>2016(2021)</u>	Standard Test Method for Ignition Characteristics of Finished Textile Floor Covering Materials	IFC		
D2949— <del>10</del> <u>18</u>	Specification for 3.25-in. Outside Diameter Poly (Vinyl Chloride) (PVC) Plastic Drain, Waste, and Vent Pipe and Fittings	IPC		IRC®
D3035— <del>15</del> <u>21</u>	Specification for Polyethylene (PE) Plastic Pipe (DR-PR) Based on Controlled Outside Diameter	IMC	IPC	IRC®
D312/D312M—2016M— <u>a</u>	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— <del>98(2011)</del> — <u>19</u>	Specification for Joints for Plastic Pressure Pipes Using Flexible Elastomeric Seals	IPC		
D3161/D3161M— <del>2016A</del> — <u>20</u>	Test Method for Wind Resistance of Steep Slope Roofing Products (Fan Induced Method)	IBC		IRC®
D3201/D3201M— <del>13</del> — <u>20</u>	Test Method for Hygroscopic Properties of Fire-retardant-treated Wood and Wood-based Products	IBC		IRC®
D3212— <del>07(2013)</del> — <u>20</u>	Specification for Joints for Drain and Sewer Plastic Pipes Using Flexible Elastomeric Seals	IPC		IRC®
D323— <del>15A</del> — <u>20a</u>	Test Method for Vapor Pressure of Petroleum Products (Reid Method)	IFC		
D3278— <del>96(2011)</del> — <u>21</u>	Test Methods for Flash Point of Liquids by Small Scale Closed-cup Apparatus	IMC	IBC	IFC
D3350— <del>14</del> <u>21</u>	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— <del>10A</del> — <u>19</u>	Specification for Asphalt Shingles Made from Glass Felt and Surfaced with Mineral Granules	IRC®	
D3468/D3468M—99( <del>2013</del> )E1 ( <u>2020</u> )	Specification for Liquid-applied Neoprene and Chlorosulfanated Polyethylene Used in Roofing and Waterproofing	IBC	IRC®
D3498—03( <del>2011</del> )— <u>19a</u>	<del>Standard Specification for Adhesives for Field-Gluing Plywood to Lumber Framing for Floor Systems</del> <u>Standard Specification for Adhesives for Field-Gluing Wood Structural Panels (Plywood or Oriented Strand Board) to Wood Based Floor System Framing</u>	IBC	
D3679— <del>2017</del> — <u>21</u>	Specification for Rigid Poly (Vinyl Chloride) (PVC) Siding	IBC	IRC®
D3957—2009( <del>2015</del> )— ( <u>2020</u> )	Standard Practices for Establishing Stress Grades for Structural Members Used in Log Buildings	IBC	
D4434/D4434M— <del>2015</del> — <u>21</u>	Specification for Poly (Vinyl Chloride) Sheet Roofing	IBC	IRC®
D449/D449M—03( <del>2014</del> )E1- <u>2003(2021)</u>	Specification for Asphalt Used in Dampproofing and Waterproofing	IRC®	
D4601/D4601M—04( <del>2012</del> )e1- ( <u>2020</u> )	Specification for Asphalt-coated Glass Fiber Base Sheet Used in Roofing	IBC	IRC®
D4829—11- <u>21</u>	Test Method for Expansion Index of Soils	IBC	IRC®
D4869/D4869M—2016A( <u>2021</u> )	Specification for Asphalt-saturated (Organic Felt) Underlayment Used in Steep Slope Roofing	IBC	IRC®
D4990—1997a( <del>2013</del> )— ( <u>2020</u> )	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— <del>2016</del> — <u>2019e1</u>	Specification for Establishing and Monitoring Structural Capacities of Prefabricated Wood I-joists	IBC	IRC®
D5456— <del>2018</del> — <u>21e1</u>	Specification for Evaluation of Structural Composite Lumber Products	IBC	IRC®
D56—2016A	Test Method for Flash Point by Tag Closed Cup Tester	IMC	IBC
D56— <del>16a</del> — <u>21</u>	Test Method for Flash Point by Tag Closed Cup Tester	IFC	
D5726— <del>98(2013)</del> — <u>(2020)</u>	Specification for Thermoplastic Fabrics Used in Hot-applied Roofing and Waterproofing	IBC	IRC®
D6083/D6083M— <del>2018</del> — <u>21</u>	Specification for Liquid Applied Acrylic Coating Used in Roofing	IBC	IRC®
D6305— <del>08(2015)E1</del> — <u>21</u>	Practice for Calculating Bending Strength Design Adjustment Factors for Fire-retardant-treated Plywood Roof Sheathing	IRC®	
D635— <del>14</del> — <u>18</u>	Test Method for Rate of Burning and/or Extent and Time of Burning of Plastics in a Horizontal Position	IBC	
D6841— <del>2016</del> — <u>21</u>	Standard Practice for Calculating Design Value Treatment Adjustment Factors for Fire-retardant Treated Lumber	IBC	IRC®
D6878/D6878M— <del>2017</del> — <u>19</u>	Standard Specification for Thermoplastic Polyolefin Based Sheet Roofing	IBC	IRC®
D7147— <del>2011(2018)</del> — <u>21</u>	Specification for Testing and Establishing Allowable Loads of Joist Hangers	IBC	
D7158/D7158M— <del>2019</del> — <u>20</u>	Standard Test Method for Wind Resistance of Asphalt Shingles (Uplift Force/Uplift Resistance Method)	IBC	IRC®

D7254— <del>2017</del> <u>20</u>	Standard Specification for Polypropylene (PP) Siding	IBC		IRC®		
D7425/D7425M—13( <u>2019</u> )	Standard Specification for Spray Polyurethane Foam Used for Roofing Applications	IBC		IRC®		
D7672— <del>14E+</del> <u>19</u>	Standard Specification for Evaluating Structural Capacities of Rim Board Products and Assemblies	IBC		IRC®		
D86— <del>2017</del> <u>20b</u>	Test Method for Distillation of Petroleum Products and Liquid Fuels at Atmospheric Pressure	IBC				
D93— <del>18</del> <u>20</u>	Test Method for Flash Point by Pensky-Martens Closed Up Tester	IMC		IFC		
D93— <del>2018</del> <u>20</u>	Test Methods for Flash Point by Pensky-Martens Closed Cup Tester	IMC	IBC	IFC		
E1007— <del>16</del> <u>21</u>	Test Method for Field Measurement of Tapping Machine Impact Sound Transmission Through Floor-Ceiling Assemblies and Associated Support Structures	IBC				
E108— <del>17</del> <u>20a</u>	Standard Test Methods for Fire Tests of Roof Coverings	IWUIC	IEBC	IFC	IRC	
E108— <del>2017</del> <u>20a</u>	Standard Test Methods for Fire Tests of Roof Coverings	IWUIC	IBC	IRC®		
E119— <del>2018B</del> <u>20</u>	Standard Test Methods for Fire Tests of Building Construction and Materials	IMC	IWUIC	IBC	IRC®	
E119— <del>2018b</del> <u>20</u>	Standard Test Methods for Fire Tests of Building Construction and Materials	IWUIC				
E136—2019 <u>a</u>	Standard Test Method for Behavior of Materials in a Vertical Tube Furnace at 750°C	IFGC	IMC	IWUIC	IBC	IRC®
E136— <del>16A</del> <u>19a</u>	Test Method for Behavior of Materials in a Vertical Tube Furnace at 750°C	IEBC				



E1677— <del>44</del> — <u>19</u>	Specification for Air Barrier (AB) Material or Systems for Low-rise Framed Building Walls	IECC®		
E1886— <del>2013A</del> — <u>19</u>	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®	
E1918— <del>06(2016)</del> — <u>21</u>	Standard Test Method for Measuring Solar Reflectance of Horizontal or Low-sloped Surfaces in the Field	IECC®		
E1966—15( <u>2019</u> )	Standard Test Method for Fire-resistant Joint Systems	IFC	IBC	
E1980—11( <u>2019</u> )	Standard Practice for Calculating Solar Reflectance Index of Horizontal and Low-sloped Opaque Surfaces	IECC®		
E1996— <del>2017</del> — <u>20</u>	Specification for Performance of Exterior Windows, Curtain Walls, Doors and Impact Protective Systems Impacted by Windborne Debris in Hurricanes	IBC	IRC®	
E2174— <del>2018</del> — <u>20a</u>	Standard Practice for On-site Inspection of Installed Fire Stops	IBC		
E2178— <del>13</del> — <u>21a</u>	Standard Test Method for Air Permeance of Building Materials for <u>Determining Air Leakage Rate and Calculation of Air Permeance of Building Materials</u>	IBC	IRC	IECC®
E2178— <del>2013</del> — <u>21a</u>	Standard Test Method for <u>Determining Air Leakage Rate and Calculation of Air</u> Permanence of Building Materials	IECC®		IRC®
E2231— <del>2018</del> — <u>19</u>	Standard Practice for Specimen Preparation and Mounting of Pipe and Duct Insulation Materials to Assess Surface Burning Characteristics	IMC	IRC®	

E2307— <del>15BE4</del> <u>20</u>	Standard Test Method for Determining Fire Resistance of Perimeter Fire Barriers Using the Intermediate-scale, Multistory Test Apparatus	IBC	
E2336— <del>16</del> <u>20</u>	Standard Test Methods for Fire Resistive Grease Duct Enclosure Systems	IMC	
E2353— <del>2016</del> <u>21</u>	Standard Test Methods for Performance of Glazing in Permanent Railing Systems, Guards and Balustrades	IBC	
E2393— <del>10a(2015)</del> <u>20a</u>	Standard Practice for On-site Inspection of Installed Fire Resistive Joint Systems and Perimeter Fire Barriers	IBC	
E2570/E2570M— <del>07(2014)</del> E4 <u>(2019)</u>	Standard Test Methods for Evaluating Water-resistive Barrier (WRB) Coatings Used Under Exterior Insulation and Finish Systems (EIFS) or EIFS with Drainage	IRC®	
E2573— <del>17</del> <u>19</u>	Standard Practice for Specimen Preparation and Mounting of Site-fabricated Stretch Systems to Assess Surface Burning Characteristics	IFC	
E2579— <del>15</del> <u>21</u>	Standard Practice for Specimen Preparation and Mounting of Wood Products to Assess Surface Burning Characteristics	IFC	IBC
E2652— <del>16</del> <u>18</u>	Standard Test Method for <del>Behavior Assessing</del> <u>Combustibility of Materials Using</u> in a Tube Furnace with a Cone-shaped Airflow Stabilizer at 750°C	IBC	
E283/ <u>E283M</u> — <del>04(2012)</del> <u>19</u>	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- <u>19a</u>	Standard Specification for Manufactured Polymeric Drainage and Ventilation Materials Used to Provide a Rainscreen Function	IBC	IRC®
E3082—17- <u>20</u>	Standard Test Methods for Determining the Effectiveness of Fire-retardant Treatments for Natural Christmas Trees	IFC	
E336—17a- <u>20</u>	Standard Test Method for Measurement of Airborne Sound Attenuation between Rooms in Buildings	IBC	
E408—13( <u>2019</u> )	Test Methods for Total Normal Emittance of Surfaces Using Inspection-meter Techniques	IECC®	
E605/E605M— <del>93(2015)</del> e1- <u>19</u>	Test Method for Thickness and Density of Sprayed Fire-resistive Material (SFRM) Applied to Structural Members	IBC	
E648—17a- <u>19ae1</u>	Standard Test Method for Critical Radiant Flux of Floor-covering Systems Using a Radiant Heat Energy Source	IFC	
E736/E736M— <del>2017</del> - <u>19</u>	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— <del>10(2018)</del> - <u>19</u>	Standard Test Method for Determining Air Leakage Rate by Fan Pressurization	IECC®	
E84— <del>18b</del> - <u>21a</u>	Standard Test Method for Surface Burning Characteristics of Building Materials	IFC	
E903— <del>2012</del> - <u>20</u>	Standard Test Method Solar Absorptance, Reflectance and Transmittance of Materials Using Integrating Spheres ( <del>Withdrawn 2005</del> )	IECC®	

E96/E96M—2016	Standard Test Methods for Water Vapor Transmission of Materials	IBC	IRC®
F1085—14— <u>19</u>	Standard Specification for Mattress and Box Springs for Use in Berths in Marine Vessels	IFC	
F1361— <del>2017</del> — <u>21</u>	Standard Test Method for Performance of Open <del>Deep-Fat</del> <u>Vat Fryers</u>	IECC®	
F1476—07( <del>2013</del> )—( <u>2019</u> )	Specification for Performance of Gasketed Mechanical Couplings for Use in Piping Applications	IMC	IPC
F1488— <del>14E1</del> — <u>14(2019)</u>	Specification for Coextruded Composite Pipe	IRC®	
F1495— <del>2014a</del> — <u>20</u>	Standard Specification for Combination Oven Electric or Gas Fired	IECC®	
F1496— <del>2013</del> — <u>13(2019)</u>	Standard Test Method for Performance of Convection Ovens	IECC®	
F1504— <del>2014</del> — <u>21</u>	Standard Specification for Folded Poly (Vinyl Chloride) (PVC) for Existing Sewer and Conduit Rehabilitation	IRC®	
F1554— <del>2018</del> — <u>20</u>	Specification for Anchor Bolts, Steel, 36, 55 and 105-ksi Yield Strength	IRC®	
F1667— <del>2018</del> — <u>21</u>	Specification for Driven Fasteners: Nails, Spikes and Staples	IBC	IRC®
F1696— <del>2018</del> — <u>20</u>	Standard Test Method for Energy Performance of Stationary-Rack, Door-Type Commercial Dishwashing Machines	IECC®	
F1807— <del>2018</del> — <u>19b</u>	Specification for Metal Insert Fittings Utilizing a Copper Crimp Ring, <u>or Alternate Stainless Steel Clamps,</u> for SDR9 Cross-linked Polyethylene (PEX) Tubing and SDR9 Polyethylene of Raised Temperature (PE-RT) Tubing	IPC	

F1871— <del>2011</del> <u>20</u>	Standard Specification for Folded/Formed Poly (Vinyl Chloride) Pipe Type A for Existing Sewer and Conduit Rehabilitation	IRC®		
F1920— <del>2015</del> <u>20</u>	Standard Test Method for Performance of Rack Conveyor Commercial Dishwashing Machines	IECC®		
F1924— <del>12</del> <u>19</u>	Standard Specification for Plastic Mechanical Fittings for Use on Outside Diameter Controlled Polyethylene Gas Distribution Pipe and Tubing	IMC	IRC®	
F1960— <del>2018</del> <u>21</u>	<del>Standard</del> Specification for Cold Expansion Fittings with PEX Reinforcing Rings for Use with Cross-linked Polyethylene (PEX) <u>and Polyethylene of Raised Temperature (PE-RT) Tubing</u>	IPC		
F1970— <del>2018</del> <u>19</u>	Special Engineered Fittings, Appurtenances or Valves for Use in Poly (Vinyl Chloride) (PVC) OR Chlorinated Poly (Vinyl Chloride) (CPVC) Systems	IPC		
F1974—09( <del>2015</del> )- <u>(2020)</u>	Specification for Metal Insert Fittings for Polyethylene/Aluminum/Polyethylene and Cross-linked Polyethylene/Aluminum/Cross-linked Polyethylene Composite Pressure Pipe	IPC	IRC®	
F2006— <del>17</del> <u>21</u>	Standard/Safety Specification for Window Fall Prevention Devices for Nonemergency Escape (Egress) and Rescue (Ingress) Windows	IBC	IEBC	IFC
F2080— <del>2016</del> <u>2019</u>	<del>Specifications for Cold-expansion Fittings with Metal Compression-sleeves for Cross-linked Polyethylene (PEX) Pipe</del> <u>Standard Specification for Cold-Expansion Fittings with Metal Compression-Sleeves for Crosslinked Polyethylene (PEX) Pipe and SDR9 Polyethylene of Raised Temperature (PE-RT) Pipe</u>	IMC	IPC	IRC

F2090— <del>17</del> — <u>21</u>	Specification for Window Fall Prevention Devices with Emergency Escape (Egress) Release Mechanisms	IBC	IEBC	IFC	IRC®
F2098— <del>2015</del> — <u>2018</u>	Standard Specification for Stainless Steel Clamps for Securing SDR9 Cross-linked Polyethylene (PEX) Tubing and <u>SDR9 Polyethylene of Raised Temperature (PE-RT) to Metal Insert and Plastic Fittings</u>	IPC			
F2098— <del>2015</del> — <u>2018</u>	Standard Specification for Stainless Steel Clamps for Securing SDR9 Cross-linked Polyethylene (PEX) Tubing and <u>SDR9 Polyethylene of Raised Temperature (PE-RT) to Metal Insert and Plastic Insert Fittings</u>	IMC		IRC®	
F2144— <del>2017</del> — <u>21</u>	Standard Test Method for Performance of Large Open Vat Fryers	IECC®			
F2159— <del>2018</del> — <u>21</u>	<u>Standard</u> Specification for Plastic Insert Fittings Utilizing a Copper Crimp Ring, <u>or Alternate Stainless Steel Clamps</u> for SDR9 Cross-linked Polyethylene (PEX) Tubing and SDR9 Polyethylene of Raised Temperature (PE-RT) Tubing	IPC			
F2159— <del>2018</del> — <u>21</u>	Standard Specification for Plastic Insert Fittings Utilizing a Copper Crimp Ring or <u>Alternate Stainless Steel Clamps</u> for SDR9 Cross-linked Polyethylene (PEX) Tubing and SDR9 Polyethylene of Raised Temperature (PE-RT) Tubing	IMC		IRC®	
F2200— <del>17</del> — <u>20</u>	Standard Specification for Automated Vehicular Gate Construction	IFC			
F2306/F2306M— <del>2018</del> — <u>20</u>	12" to 60" Annular Corrugated Profile-wall Polyethylene (PE) Pipe and Fittings for Gravity Flow Storm Sewer and Subsurface Drainage Applications	IPC			
F2389— <del>2017A</del> — <u>21</u>	<u>Standard</u> Specification for Pressure-rated Polypropylene (PP) Piping Systems	IPC			

F2389—2017A	Specification for Pressure-rated Polypropylene Piping Systems	IMC		IRC®
F2434—14- <u>19</u>	Standard Specification for <del>Metal Plastic</del> 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®
F2561—17- <u>20</u>	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- <u>20</u>	Standard Practice for The Sectional Repair of Damaged Pipe by Means of an Inverted Cured-in-Place Liner	IPC		
F2623—14- <u>19</u>	Standard Specification for Polyethylene of Raised Temperature (PE-RT) <u>Systems for Non-Potable Water Applications</u> SDR9 Tubing	IMC	IRC®	
F2648/F2648M— <u>2017—20</u>	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— <u>2009 (2016)—21</u>	Standard Specification for Plastic Insert Fittings for SDR9 Cross-linked Polyethylene (PEX) and Polyethylene of Raised Temperature (PE-RT) Tubing	IPC		
F2764/F2764M— <u>2018—19</u>	<del>Standard Specification for 30 to 60 in. [750 to 1500 mm] Polypropylene (PP) Triple Wall Pipe and Fittings for Non-pressure Sanitary Sewer Applications</del> <u>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</u>	IPC		

F2769— 2018	<u>Standard Specification for Polyethylene or Raised Temperature (PE-RT) Plastic Hot- and Cold-water Tubing and Distribution Systems</u>	IMC	IPC	IRC
F2806— <del>10(2015)</del> <u>20</u>	<u>Standard Specification for Acrylonitrile-Butadiene-Styrene (ABS) Plastic Pipe (Metric SDR-PR)</u>	IMC		IRC®
F2831— <del>2012(2017)</del> <u>19</u>	<u>Standard Practice for Internal Non Structural Epoxy Barrier Coating Material Used in Rehabilitation of Metallic Pressurized Piping Systems</u>		IPC	
F2855— <del>12</del> <u>19</u>	<u>Standard Specification for Chlorinated Poly(Vinyl Chloride)/Aluminum/Chlorinated Poly(Vinyl Chloride) (CPVC-AL-CPVC) Composite Pressure Tubing</u>	IMC	IPC	IRC®
F2861— <del>2017</del> <u>20</u>	<u>Standard Test Method for Enhanced Performance of Combination Oven in Various Modes</u>		IECC®	
F2881 /F2881M— <del>2018</del> <u>21</u>	<u>Standard Specification for 12 to 60 in. [300 to 1500 mm] Polypropylene (PP) Dual Wall Pipe and Fittings for Non-pressure Storm Sewer Applications</u>		IPC	
F2969— <del>12</del> <u>(2020)</u>	<u>Standard Specification for Acrylonitrile-butadiene-styrene (ABS) IPS Dimensioned Pressure Pipe</u>		IRC®	
F3226/F3226M— <del>16</del> <u>19</u>	<u>Standard Specification for Metallic Press-Connect Fittings for Piping and Tubing Systems</u>	IPC		IRC®
F3240— <del>17</del> <u>19e1</u>	<u>Standard Practice for Installation of Seamless Molded Hydrophilic Gaskets (SMHG) for Long Term Watertightness of Cured-in-Place Rehabilitation of Main and Lateral Pipelines</u>		IPC	



F3253— <del>2017</del> — <u>19</u>	Standard Specification for Crosslinked Polyethylene (PEX) Tubing with Oxygen Barrier for Hot- and Cold-water Hydronic Distribution Systems	IMC		IRC®	
F437— <del>15</del> — <u>21</u>	Specification for Threaded Chlorinated Poly (Vinyl Chloride) (CPVC) Plastic Pipe Fittings, Schedule 80	IMC	IPC	ISPSC	IRC®
F439— <del>13</del> — <u>19</u>	Specification for Socket Type Chlorinated Poly (Vinyl Chloride) (CPVC) Plastic Pipe Fittings, Schedule 80	IMC	IPC	ISPSC	IRC®
F441/F441M— <del>15</del> — <u>20</u>	Specification for Chlorinated Poly (Vinyl Chloride) (CPVC) Plastic Pipe, Schedules 40 and 80	IMC	IPC	IRC®	
F442/F442M— <del>13E1</del> — <u>20</u>	Specification for Chlorinated Poly (Vinyl Chloride) (CPVC) Plastic Pipe (SDR-PR)	IRC®			
F477— <del>14</del> ( <u>2021</u> )	Specification for Elastomeric Seals (Gaskets) for Joining Plastic Pipe	IPC		IRC®	
F493— <del>14</del> — <u>20</u>	Specification for Solvent Cements for Chlorinated Poly (Vinyl Chloride) (CPVC) Plastic Pipe and Fittings	IMC	IPC	IRC®	
F656— <del>2015</del> — <u>21</u>	Specification for Primers for Use in Solvent Cement Joints of Poly (Vinyl Chloride) (PVC) Plastic Pipe and Fittings	IPC			
F667 /F667M — <del>2016</del> ( <u>2021</u> )	Standard Specification for 3 through 24 in. Corrugated Polyethylene Pipe and Fittings	IPC			
F714— <del>13</del> — <u>21a</u>	Standard Specification for Polyethylene (PE) Plastic Pipe (SDR-PR) Based on Outside Diameter	IMC	IRC®		
F844— <del>07a(2013)</del> — <u>19</u>	Standard Specification for Washers, Steel, Plain (Flat), Unhardened for General Use	IRC®			
F876— <del>2017</del> — <u>20b</u>	Specification for Cross-linked Polyethylene (PEX) Tubing	IPC			

F876—2018A	Specification for Cross-linked Polyethylene (PEX) Tubing	IMC	
F877— <del>2018A</del> — <u>20</u>	Specification for Cross-linked Polyethylene (PEX) Hot- and Cold-water Distribution Systems	IPC	
G152—13( <u>2021</u> )	Practice for Operating Open Flame Carbon Arc Light Apparatus for Exposure of Nonmetallic Materials	IBC	
G154—2016A-	<u>Standard Practice for Operating Fluorescent Ultraviolet (UV) Light Lamp Apparatus for UV Exposure of Nonmetallic Materials</u>	IBC	
G155—13- <u>21</u>	<u>Standard Practice for Operating Xenon Arc Light Lamp Apparatus for Exposure of Nonmetallic Materials</u>	IBC	
AWC		American Wood Council	
Standard Reference Number	Title	Referenced in Code(s):	
ANSI/AWC NDS— <del>2018</del> — <u>2024</u>	National Design Specification (NDS) for Wood Construction— with 2018 NDS Supplement	IBC	IRC®
ANSI/AWC WFCM— <del>2018</del> — <u>2024</u>	Wood Frame Construction Manual for One- and Two-Family Dwellings	IBC	IRC®
AWC STJR— <del>2021</del> — <u>2024</u>	Span Tables for Joists and Rafters	IBC	IRC®
AWPA		American Wood Protection Association	
Standard Reference Number	Title	Referenced in Code(s):	
M4—15- <u>21</u>	<u>Standard for the Handling, Storage, Field Fabrication, and Field Treatment of Care of Preservative-treated Wood Products</u>	IBC	IRC®
U1— <del>20</del> <u>23</u>	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— <del>2011-AMD1</del> : <u>2019</u>	Specifications for Filler Metals for Brazing and Braze Welding	IMC		
A5.8M/A5.8— <del>2011-AMD1</del> : <u>2019</u>	Specifications for Filler Metals for Brazing and Braze Welding	IPC		
A5.8M/A5.8— <del>2011—AMD1</del> : <u>2019</u>	Specifications for Filler Metals for Brazing and Braze Welding	IRC®		
D1.4/D1.4M—2018- <u>AMD1</u>	Structural Welding Code—Steel Reinforcing Bars	IBC		
AWWA		American Water Work Association		
Standard Reference Number	Title	Referenced in Code(s):		
C110/A21.10— <del>12</del> <u>21</u>	<del>Standard for</del> Ductile Iron & Gray Iron Fittings	IMC	IPC	IRC®
C115/A21.15— <del>11</del> <u>20</u>	<del>Standard for</del> Flanged Ductile-iron Pipe with Ductile Iron or Grey-iron Threaded Flanges	IMC	IPC	IRC®
C153/A21.53— <del>11</del> <u>19</u>	Ductile-iron Compact Fittings for Water Service	IMC		IRC®
C500— <del>09</del> <u>19</u>	Standard for Metal-seated Gate Valves for Water Supply Service	IPC		IRC®
C507— <del>15</del> <u>18</u>	Standard for Ball Valves, 6 In. Through 60 in. (150 mm through 1,500 mm).	IPC		IRC®
C510— <del>07</del> <u>17</u>	Double Check Valve Backflow Prevention Assembly	IRC®		
C652— <del>11</del> <u>19</u>	Disinfection of Water-storage Facilities	IPC		
C901— <del>16</del> <u>20</u>	Polyethylene (PE) Pressure Pipe and Tubing, 3/4 in. (19 mm) through 3 in. (76 mm) for Water Service	IMC	IPC	IRC®

C903— <del>16</del> <u>21</u>	Polyethylene-aluminum-polyethylene (PE-AL-PE) Composite Pressure Pipe, 12 mm ( <sup>1</sup> / <sub>2</sub> in.) through 50 mm (2 in.), for Water Service	IRC®
-------------------------------	--	------

CGA	Compressed Gas Association		
-----	----------------------------	--	--

Standard Reference Number	Title	Referenced in Code(s):		
---------------------------	-------	------------------------	--	--

ANSI/CGA P-18— <del>(2013)</del> <u>(2018)</u>	Standard for Bulk Inert Gas Systems	IFC		
--	-------------------------------------	-----	--	--

C-7— <del>(2014)</del> <u>(2020)</u>	Guide to Classification and Labeling of Compressed Gases	IFC		
--------------------------------------	--	-----	--	--

S-1.1— <del>(2011)</del> <u>(2019)</u>	Pressure Relief Device Standards—Part 1—Cylinders for Compressed Gases	IFGC	IFC	
--	--	------	-----	--

S-1.2— <del>(2009)</del> <u>2019</u>	Pressure Relief Device Standards—Part 2—Cargo and Portable Tanks for Compressed Gases	IFGC	IFC	
--------------------------------------	---	------	-----	--

S-1.3— <del>(2008)</del> <u>(2020)</u>	Pressure Relief Device Standards—Part 3—Stationary Storage Containers for Compressed Gases	IFGC	IFC	
--	--	------	-----	--

V-1— <del>(2013)</del> <u>(2021)</u>	Standard for Gas Cylinder Valve Outlet and Inlet Connections	IFC		
--------------------------------------	--	-----	--	--

CISPI	Cast Iron Soil Pipe Institute			
-------	-------------------------------	--	--	--

Standard Reference Number	Title	Referenced in Code(s):		
---------------------------	-------	------------------------	--	--

301— <del>18</del> <u>21</u>	<u>Standard</u> Specification for Hubless Cast-iron Soil Pipe and Fittings for Sanitary and Storm Drain, Waste and Vent Piping Applications	IPC	IPSDC	IRC®
------------------------------	---	-----	-------	------

310— <del>18</del> <u>20</u>	<u>Standard</u> 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			
Standard Reference Number	Title	Referenced in Code(s):		
ANSI A135.4—2012 <u>(R2020)</u>	Basic Hardboard	IBC	IRC®	
ANSI A135.5—2012 <u>(R2020)</u>	Prefinished Hardboard Paneling	IBC	IRC®	
ANSI A135.6— <del>2012</del> <u>(R2020)</u>	Engineered Wood Siding	IBC	IRC®	
ANSI A135.7—2012 <u>(R2020)</u>	Engineered Wood Trim	IRC®		
CRRC	Cool Roof Rating Council			
Standard Reference Number	Title	Referenced in Code(s):		
ANSI/CRRC-S100— <del>2020</del> — <u>2021</u>	Standard Test Methods for Determining Radiative Properties of Materials	IECC®		
CSA	Canadian Standards Association			
Standard Reference Number	Title	Referenced in Code(s):		
<del>ANSI/CSA FC 1—2014</del> <u>CSA/ANSI FC 1:21/CSA C22.2 NO. 62282-2-100:21</u>	Fuel Cell Technologies—Part 3-100; Stationary fuel cell power systems—Safety	IFGC	IMC	IRC®
<del>ANSI/CSA FC 1—2014</del> <u>CSA/ANSI FC 1:21/CSA C22.2 NO. 62282-3-100:21</u>	Fuel Cell Technologies—Part 3-100; Stationary fuel cell power systems-Safety	IFGC	IMC	
<del>ANSI/CSA</del> <u>CSA/ANSI NGV 5.1—2016—:22</u>	Residential Fueling Appliances	IFGC		
<del>CSA/ANSI C22.2 No. 60335-2-40—2012</del> :19	<del>Safety of Household and Similar Electrical Appliances, Part 2-40:</del> Particular Requirements for Electrical Heat Pumps, Air-Conditioners and Dehumidifiers	IMC	ISPSC	IRC®
A257.1— <del>44</del> —:19	Non-reinforced Circular Concrete Culvert, Storm Drain, Sewer Pipe and Fittings	IPC		
A257.2— <del>44</del> —:19	Reinforced Circular Concrete Culvert, Storm Drain, Sewer Pipe and Fittings	IPC	IPSDC	IRC®

A257.3—44: <u>19</u>	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— <u>22</u>	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
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— <del>2017-2022</del> /CSA B45.4— <del>2017-22</del>	Stainless Steel Plumbing Fixtures	IRC®	
ASME A112.19.3— <del>2021-2022</del> /CSA B45.4— <del>2021-22</del>	Stainless Steel Plumbing Fixtures	IPC	
ASME A112.19.5— <del>2021-22</del> /CSA B45.15— <del>24-22</del>	Flush Valves and Spuds for Water Closets, Urinals and Tanks	IPC	
ASME A112.19.7— <del>2020-2021</del> /CSA B45.10 : <del>2012-2012 (R2012)</del>	Hydromassage Bathtub Systems	IPC	
ASME A112.3.4— <del>2013-2018</del> /CSA B45.9—18 ( <u>R2023</u> )	Macerating Toilet Systems and Related Components	IRC®	
ASME A112.3.4— <del>2018-2018</del> /CSA B45.9— <del>2018 18</del> ( <u>R2023</u> )	Macerating Toilet Systems and Waste Pumping Systems for Plumbing Fixtures	IPC	
ASME A112.4.2— <del>2020-2021</del> /CSA B45.16— <del>20-21</del>	Personal Hygiene Devices <u>for</u> Water Closet <u>s</u>	IPC	
ASME A112.4.2— <del>2015-2021</del> /CSA B45.16— <del>15-21</del>	Personal Hygiene Devices <u>for</u> Water-closet <u>s</u>	IRC®	
ASME A17.1/CSA B44— <del>2019-2022</del>	Safety Code for Elevators and Escalators	IRC®	
ASME A17.1— <del>2019-2023</del> /CSA B44— <del>23</del>	Safety Code for Elevators and Escalators	IBC	
ASME A17.7—2007/CSA B44.7— <del>07(R2017)</del> — <u>07(R2021)</u>	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— <del>2017</del> ( <u>R2022</u> )	Performance Requirements for Automatic Compensating Valves for Individual Showers and Tub/Shower Combinations	IPC	IRC®
ASSE 1037— <del>2015-2020</del> /ASME A112.1037— <del>2015-2020</del> /CSA B125.37— <del>15-20</del>	<u>Performance requirements for Pressurized Flushing Devices for Plumbing Fixtures</u>	IPC	
ASSE 1070—2020/ASME A112.1070—2020/CSA B125.4070— <del>20</del>	<u>Performance requirements for Water Temperature Limiting Devices</u>	IPC	

ASSE 1070— <del>2015</del> — <del>2020</del> /ASME A112.1070— <del>2015</del> — <del>2020</del> /CSA B125.70— <del>15</del> — <del>20</del>	Performance Requirements for Water-temperature-limiting Devices	IRC®				
B125.3— <del>18</del> — <del>23</del>	Plumbing Fittings	IPC			IRC®	
B137.10— <del>17</del> — <del>23</del>	Cross-linked Polyethylene/Aluminum/Cross- linked Polyethylene (PEX-AL- PEX) Composite Pressure-pipe Systems	IMC	IPC		IRC®	
B137.11— <del>17</del> — <del>23</del>	Polypropylene (PP-R) Pipe and Fittings for Pressure Applications	IMC	IPC		IRC®	
B137.18— <del>17</del> — <del>23</del>	Polyethylene of Raised Temperature Resistance (PE- RT) Tubing Systems for Pressure Applications	IMC	IPC		IRC®	
B137.1— <del>17</del> — <del>23</del>	Polyethylene (PE) Pipe, Tubing and Fittings for Cold-water Pressure Services	IMC	IPC		IRC®	
B137.2— <del>17</del> — <del>23</del>	Polyvinylchloride (PVC) Injection- moulded Gasketed Fittings for Pressure Applications	IMC	IPC	ISPSC	IRC®	
B137.3— <del>17</del> — <del>23</del>	Rigid <del>Poly (Vinyl Chloride)</del> polyvinylchloride (PVC) Pipe and Fittings for Pressure Applications	IMC	IPC	IPSDC	ISPSC	IRC®
B137.5— <del>17</del> — <del>23</del>	Cross-linked Polyethylene (PEX) Tubing Systems for Pressure Applications	IMC	IPC		IRC®	
B137.6— <del>17</del> — <del>23</del>	Chlorinated Polyvinylchloride (CPVC) Pipe, Tubing and Fittings for Hot- and Cold-water Distribution Systems	IMC	IPC	ISPSC	IRC®	
B137.9— <del>17</del> — <del>23</del>	Polyethylene/Aluminum/Polyethylene (PE-AL-PE) Composite Pressure- pipe Systems	IMC	IPC		IRC®	
B181.1— <del>18</del> — <del>21</del>	Acrylonitrile-Butadiene-Styrene ABS Drain, Waste and Vent Pipe and Pipe Fittings	IPC	IPSDC		IRC®	
B181.2— <del>18</del> — <del>21</del>	Polyvinylchloride PVC and Chlorinated Polyvinylchloride (CPVC) Drain, Waste, and Vent Pipe and Pipe Fittings	IPC	IPSDC		IRC®	



<del>B181.3—18—:21</del>	Polyolefin and Polyvinylidene Fluoride (PVDF) Laboratory Drainage Systems	IPC	IRC®	
<del>B182.13—18—:21</del>	Profile Polypropylene (PP) Sewer Pipe and Fittings for Leak-proof Sewer Applications	IPC		
<del>B182.1—18—:21</del>	Plastic Drain and Sewer Pipe and Pipe Fittings	IPC	IPSDC	IRC®
<del>B182.2—18—:21</del>	PSM Type Polyvinylchloride PVC Sewer Pipe and Fittings	IPC	IPSDC	IRC®
<del>B182.4—18—:21</del>	Profile Polyvinylchloride PVC Sewer Pipe and Fittings	IPC	IPSDC	IRC®
<del>B182.6—18—:21</del>	Profile Polyethylene (PE) Sewer Pipe and Fittings for Leak-proof Sewer Applications	IPC		IRC®
<del>B182.8—18—:21</del>	Profile Polyethylene (PE) Storm Sewer and Drainage Pipe and Fittings	IPC		IRC®
<del>B481.1—12(R2017)</del>	Testing and Rating of Grease Interceptors Using Lard	IPC		
<del>B481.3—12(R2017)</del>	Sizing, Selection, Location and Installation of Grease Interceptors	IPC		
<del>B483.1—07(R2017)—:22</del>	Drinking Water Treatment Systems	IPC		IRC®
<del>B55.1—2015—20</del>	Test Method for Measuring Efficiency and Pressure Loss of Drain Water Heat Recovery Units	IECC®		IRC®
<del>B55.2—2015—:20</del>	Drain Water Heat Recovery Units	IRC®		
<del>B602—16—:20</del>	Mechanical Couplings for Drain, Waste and Vent Pipe and Sewer Pipe	IPC	IPSDC	IRC®

<del>B64.1.1—11(R2016) :21</del>	Atmospheric Type Vacuum Breakers, (AVB)	IPC	IRC®
<del>B64.1.2—11(R2016) :21</del>	Pressure Vacuum Breakers, (PVB)	IPC	IRC®
<del>B64.1.3—11(R2016) :21</del>	Spill-Resistant Pressure Vacuum Breakers (SRPVB)	IPC	IRC®
<del>B64.10—17</del>	<del>Manual for the Selection and Installation of Backflow Prevention Devices—Preventers</del>	IPC	
<del>B64.2.1.1—11(2016) :21</del>	Hose Connection Dual Check Vacuum Breakers (HCDVB)	IPC	IRC®
<del>B64.2.1—11(2016) :21</del>	Hose Connection Vacuum Breakers, (HCVB) with Manual Draining Feature	IPC	
<del>B64.2.1—11(R2016) :21</del>	Hose Connection Vacuum Breakers (HCVB) with Manual Draining Feature	IRC®	
<del>B64.2.2—11(2016) :21</del>	Hose Connection Vacuum Breakers, Type (HCVB) with Automatic Draining Feature	IPC	IRC®
<del>B64.2—11(R2016) :21</del>	Hose Connection Vacuum Breakers, Type (HCVB)	IPC	IRC®
<del>B64.3—11(2016) :21</del>	Dual Check Valve Backflow Preventers with Atmospheric Port (DCAP)	IRC®	
<del>B64.3—11(R2016) :21</del>	Backflow Preventers, Dual Check Valve Type with Atmospheric Port (DCAP)	IPC	
<del>B64.4.1—11(2016) :21</del>	Reduced Pressure Principle <u>backflow preventers</u> for Fire Sprinklers (RPF) <u>protection systems (RPF)</u>	IPC	IRC®
<del>B64.4.1—11(R2016) :21</del>	Reduced Pressure Principle for Fire Sprinklers (RPF)	IPC	
<del>B64.4—11(2016) :21</del>	Reduced Pressure Principle Type (RP) Backflow Preventers,-	IRC®	

B64.4— <del>11(R2016)</del> : <u>21</u>	Backflow Preventers, Reduced Pressure Principle Type (RP)	IPC		
B64.5.1— <del>11(R2016)</del> : <u>21</u>	Double Check Valve Backflow Preventers for Fire Protection Systems (DCVAF)	IPC		
B64.5.1— <del>11(2016)</del> : <u>21</u>	Double Check Valve Backflow Preventers, Type for Fire Systems (DCVAF)	IRC®		
B64.5— <del>11(R2016)</del> : <u>21</u>	Double Check Valve Backflow Preventers (DCVA)	IPC		
B64.5— <del>11(2016)</del> : <u>21</u>	Double Check Valve Backflow Preventers (DCVA)	IRC®		
B64.6— <del>11(2016)</del> : <u>21</u>	Dual Check Valve Backflow Preventers (DuC)	IRC®		
B64.6— <del>11(R2016)</del> : <u>21</u>	Dual Check Valve (DuC) Backflow Preventers	IPC		
B64.7— <del>11(2016)</del> : <u>21</u>	Laboratory Faucet Vacuum Breakers (LFVB)	IRC®		
B64.7— <del>11(R2016)</del> : <u>21</u>	Laboratory Faucet Vacuum Breakers (LFVB)	IPC		
B79—08(R2018)	Commercial and Residential Drains and Cleanouts	IPC		
C22.2 No. 108— <del>14(R2019)</del>	Liquid Pumps	ISPSC		
C22.2 No. 236—15	Heating and Cooling Equipment	IMC	ISPSC	IRC®
CSA B45.5— <del>17—22</del> /APMO Z124— <del>2017 with errata dated August 2017—2022</del>	Plastic Plumbing Fixtures	IPC		
CSA B45.5— <del>2017—22</del> /APMO Z124— <del>2017 with Errata dated August 2017—2022</del>	Plastic Plumbing Fixtures	IRC®		
CSA B55.1— <del>2015—20</del>	Test Method for Measuring Efficiency and Pressure Loss of Drain Water Heat Recovery Units	IECC®		
CSA B55.2— <del>2015—20</del>	Drain Water Heat Recovery Units	IECC®	IRC®	

CSA B805-48—17/ICC 805-2018 (R2023)	Rainwater Harvesting Systems	IPC	
CSA O325—46—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— <del>19</del> <u>22</u>	Structural Plywood	IBC	IRC®
PS 20— <del>05</del> <u>20</u>	American Softwood Lumber Standard	IBC	IRC®
PS 2—18	Performance Standard for Wood-based Structural-use Panels	IBC	IRC®
FEMA		Federal Emergency Management Agency	
Standard Reference Number	Title	Referenced in Code(s):	
FEMA TB-11— <del>01</del> <u>23</u>	Crawlspace Construction for Buildings Located in Special Flood Hazard Area	IRC®	
FEMA TB-2— <del>08</del> <u>23</u>	Flood Damage-resistant Materials Requirements	IRC®	
FEMA-TB-11— <del>01</del> <u>23</u>	Crawlspace Construction for Buildings Located in Special Flood Hazard Areas	IBC	
FGIA		Fenestration & Glazing Alliance (formerly AAMA)	
Standard Reference Number	Title	Referenced in Code(s):	
711— <del>20</del> <u>23</u>	Voluntary Specification for Self Adhering Flashing Used for Installation of Exterior Wall Fenestration Products	IBC	IRC®
712— <del>44</del> <u>23</u>	Voluntary Specification for Mechanically Attached Flexible Flashing	IRC®	
714— <del>20</del> <u>23</u>	Voluntary Specification for Liquid Applied Flashing Used to Create a Water-resistive Seal around Exterior Wall Openings in Buildings	IBC	IRC®
AAMA/NSA 2100— <del>20</del> <u>22</u>	Specifications for Sunrooms	IRC®	

AAMA/WDMA/CSA 101/I.S.2/A C440— <del>17–22</del>	North American Fenestration Standard/Specifications for Windows, Doors and Unit Skylights	IECC®
---	--	-------

FM	FM Approvals	
----	--------------	--

Standard Reference Number	Title	Referenced in Code(s):
---------------------------	-------	------------------------

4474— <del>2011–</del> <u>2020</u>	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	
----	--------------------	--

Standard Reference Number	Title	Referenced in Code(s):
---------------------------	-------	------------------------

GA 216— <del>2018–</del> <u>2021</u>	Application and Finishing of Gypsum Panel Products	IBC
--------------------------------------	---	-----

GA 600— <del>2018–</del> <u>2021</u>	Fire-resistance and Sound Control Design Manual, <del>22nd</del> <u>23rd Edition</u>	IBC
--------------------------------------	--	-----

GA-253— <del>2018–</del> <u>2021</u>	Application of Gypsum Sheathing	IRC®
--------------------------------------	---------------------------------	------

IAPMO	IAPMO Group	
-------	-------------	--

Standard Reference Number	Title	Referenced in Code(s):
---------------------------	-------	------------------------

<u>ANSI/CAN/IAPMO Z1001—2016</u> <u>2021</u>	Prefabricated Gravity Grease Interceptors	IPC
---	--	-----

ASPE/IAPMO Z1034- 2015( <u>R2020</u> )	Test Method for Evaluating Roof Drain Performance	IPC
---	--	-----

CSA B45.5— <del>17–;22</del> /IAPMO Z124— <del>2017–2022 with errata</del> <del>dated August 2017</del>	Plastic Plumbing Fixtures	IPC
---	---------------------------	-----

IAPMO Z124.7—2013( <u>R2018</u> )	Prefabricated Plastic Spa Shells	ISPSC
-----------------------------------	----------------------------------	-------

IAPMO/ANSI Z1157— 2014e1( <u>R2019</u> )	Ball Valves	IPC
---	-------------	-----

IES	Illuminating Engineering Society	
-----	----------------------------------	--

Standard Reference Number	Title	Referenced in Code(s):		
ANSI/ASHRAE/IESNA-90.1 — <del>2019</del> <u>2022</u>	Energy Standard for Buildings, Except Low-rise Residential Buildings	IECC®		
<b>IIAR</b>		<b>International Institute of Ammonia Refrigeration</b>		
Standard Reference Number	Title	Referenced in Code(s):		
ANSI/IIAR 2— <del>2014</del> , including <u>Addendum A-2021</u>	Design of Safe Closed-circuit Ammonia Refrigeration Systems	IFC		
ANSI/IIAR 9— <del>2018</del> — <u>2020</u>	<del>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</del>	IFC		
<b>IKECA</b>		<b>International Kitchen Exhaust Cleaning Association</b>		
Standard Reference Number	Title	Referenced in Code(s):		
ANSI/IKECA C10— <del>2016</del> — <u>2021</u>	Standard for the Methodology for Cleaning of Commercial Kitchen Exhaust Systems	IFC		
<b>MHI</b>		<b>Material Handling Institute</b>		
Standard Reference Number	Title	Referenced in Code(s):		
ANSI MH29.1— <del>08</del> — <u>2020</u>	Safety Requirements for Industrial Scissors Lifts	IBC		
ANSI/MH16.1— <del>12</del> — <u>2021</u>	Design, Testing and Utilization of Industrial Steel Storage Racks	IBC		
<b>MSS</b>		<b>Manufacturers Standardization Society of the Valve and Fittings Industry</b>		
Standard Reference Number	Title	Referenced in Code(s):		
ANSI SP 58— <del>2018</del> — <u>2023</u>	Pipe Hangers and Supports— Materials, Design and Manufacture, <u>Selection,</u> <u>Application and Installation</u>	IFGC	IMC	IRC®

SP-110— <del>2010</del> <u>2023</u>	Ball Valves, Threaded, Socket Welding, Solder Joint, Grooved and Flared Ends (incl. a 2010 Errata Sheet)	IPC	IRC®
SP-122— <del>2017</del> <u>2023</u>	Plastic Industrial Ball Valves	IPC	IRC®
SP-139— <del>2014</del> <u>2022</u>	Copper Alloy Gate, Globe, Angle and Check Valves for Low Pressure/Low Temperature Plumbing Applications	IPC	IRC®
SP-42— <del>2013</del> <u>2022</u>	Corrosion Resistant Gate, Globe, Angle and Check Valves with Flanged and Butt Weld Ends (Classes 150, 300 & 600)	IRC®	
SP-67— <del>2011</del> <u>2022</u>	Butterfly Valves	IPC	IRC
SP-70— <del>2011</del> <u>2023</u>	Gray Iron Gate Valves, Flanged and Threaded Ends	IPC	IRC®
SP-70— <del>2013</del> <u>2023</u>	Gray Iron Gate Valves, Flanged and Threaded Ends	IPC	
SP-72— <del>2010a</del> <u>2023</u>	Ball Valves with Flanged or Butt-welding Ends for General Service	IPC	IRC®
SP-78— <del>2011</del> <u>2023</u>	Cast Iron Plug Valves, Flanged and Threaded Ends	IPC	
SP-78— <del>2011</del> <u>2023</u>	Cast Iron Plug Valves, Flanged and Threaded Ends	IRC®	
SP-80— <del>2013</del> <u>2019</u>	Bronze Gate, Globe, Angle and Check Valves	IPC	IRC®

NBBI		National Board of Boiler and Pressure Vessel Inspectors	
Standard Reference Number	Title	Referenced in Code(s):	

NBIC— <del>2017</del> <u>2023</u>	National Board Inspection Code, Part 3 ( <u>ANSI/NB23</u> )	IMC	
-----------------------------------	---	-----	--

NCMA		National Concrete Masonry Association	
Standard Reference Number	Title	Referenced in Code(s):	



TEK 5—84 <del>B</del> (2005)	<del>Details</del> <u>Detailing for Concrete Masonry Fire Walls</u>	IBC			
NEMA		National Electrical Manufacturers Association			
Standard Reference Number		Title		Referenced in Code(s):	
250— <del>2018</del> <u>2020</u>		Enclosures for Electrical Equipment (1,000 Volt Maximum)		IFC	
<del>NEMA</del> <u>ANSI Z535 .1</u> —2017		<del>ANSI/NEMA Color Chart</del> <u>American National Standard for Safety Colors</u>		ISPSC	
<u>NEMA</u> MG1—2016		Motors and Generators		IECC®	
NFPA		National Fire Protection Association			
Standard Reference Number		Title		Referenced in Code(s):	
02— <del>19</del> <u>23</u>		Hydrogen Technologies Code		IFC	
04— <del>21</del> <u>24</u>		Standard for Integrated Fire Protection and Life Safety System Testing		IBC	IFC
105— <del>19</del> <u>22</u>		Standard for Smoke Door Assemblies and Other Opening Protectives		IMC	IPMC
				IBC	IFC
10— <del>21</del> <u>22</u>		Standard for Portable Fire Extinguishers		IPMC	IBC
				IFC	
110— <del>19</del> <u>22</u>		Standard for Emergency and Standby Power Systems		IBC	IFC
111— <del>19</del> <u>22</u>		Standard on Stored Electrical Energy Emergency and Standby Power Systems		IBC	IFC
1123— <del>18</del> <u>22</u>		Code for Fireworks Display		IFC	
1124— <del>06</del> <u>22</u>		Code for the Manufacture, Transportation, Storage and Retail Sales of Fireworks and Pyrotechnic Articles		IFC	

1124—17 <u>22</u>	Code for the Manufacture, Transportation and Storage of Fireworks and Pyrotechnic Articles	IBC	IFC		
1125—17 <u>22</u>	Code for the Manufacture of Model Rocket and High-power Rocket Motors	IFC			
1142—17 <u>22</u>	Standard on Water Supplies for Suburban and Rural Fire Fighting	IFC			
11—16 <u>21</u>	Standard for Low-, Medium, and High Expansion Foam	IBC	IFC		
12A—18 <u>22</u>	Standard on Halon 1301 Fire Extinguishing Systems	IPMC	IBC	IFC	
12—15 <u>22</u>	Standard on Carbon Dioxide Extinguishing Systems	IBC			
12—18 <u>22</u>	Standard on Carbon Dioxide Extinguishing Systems	IPMC	IFC		
13D—19 <u>22</u>	Standard for the Installation of Sprinkler Systems in One- and Two-family Dwellings and Manufactured Homes	IBC	IFC	IRC®	
13R—19 <u>22</u>	Standard for the Installation of Sprinkler Systems in Low-rise Residential Occupancies	IBC	IFC	IRC®	
13—19 <u>22</u>	Standard for Installation of Sprinkler Systems, <u>2022 and 2019 editions</u>	IBC	IFC		
14—19 <u>22</u>	Standard for the Installation of Standpipe and Hose System	IBC	IFC		
15—17 <u>22</u>	Standard for Water Spray Fixed Systems for Fire Protection	IFC			
170—18 <u>21</u>	Standard for Fire Safety and Emergency Symbols	IBC	IFC		
2001—18 <u>22</u>	Standard on Clean Agent Fire Extinguishing Systems	IPMC	IBC	IFC	
204—18 <u>21</u>	Standard for Smoke and Heat Venting	IPMC	IFC		

20—19— <u>22</u>	Standard for the Installation of Stationary Pumps for Fire Protection	IBC		IFC	
211—19— <u>22</u>	Standard for Chimneys, Fireplaces, Vents and Solid Fuel-burning Appliances	IFGC	IMC	IBC	IRC®
221—21— <u>24</u>	Standard for High Challenge Fire Walls, Fire Walls and Fire Barrier Walls	IBC			
22—18— <u>23</u>	Standard for Water Tanks for Private Fire Protection	IFC			
232—17— <u>22</u>	Standard for the Protection of Records	IFC			
241—19— <u>22</u>	Standard for Safeguarding Construction, Alteration and Demolition Operations	IFC			
24—19— <u>22</u>	Standard for Installation of Private Fire Service Mains and Their Appurtenances	IFC			
252—17— <u>22</u>	Standard Methods of Fire Tests of Door Assemblies	IBC			
253—19— <u>23</u>	Standard Method of Test for Critical Radiant Flux of Floor Covering Systems Using a Radiant Heat Energy Source	IBC		IFC	
257—17— <u>22</u>	Standard for Fire Test for Window and Glass Block Assemblies	IBC			
259—18— <u>23</u>	Standard Test Method for Potential Heat of Building Materials	IBC		IRC®	
25—20— <u>23</u>	Standard for the Inspection, Testing and Maintenance of Water-based Fire Protection Systems	IPMC		IFC	
260—19— <u>23</u>	Methods of Tests and Classification System for Cigarette Ignition Resistance of Components of Upholstered Furniture	IFC			

261— <del>18</del> <u>23</u>	Standard Method of Test for Determining Resistance of Mock-up Upholstered Furniture Material Assemblies to Ignition by Smoldering Cigarettes	IFC	
262— <del>19</del> <u>23</u>	Standard Method of Test for Flame Travel and Smoke of Wires and Cables for Use in Air-handling Spaces	IMC	
265— <del>19</del> <u>23</u>	Standard Methods of Fire Tests for Evaluating Room Fire Growth Contribution of Textile or Expanded Vinyl Wall Coverings on Full Height Panels and Walls	IBC	IFC
268— <del>19</del> <u>22</u>	Standard Test Method for Determining Ignitability of Exterior Wall Assemblies Using a Radiant Heat Energy Source	IBC	
275— <del>17</del> <u>22</u>	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— <del>15</del> <u>23</u>	Standard Method of Fire Tests for Determining the Heat Release Rate of Roofing Assemblies with Combustible Above-Deck Roofing Components	IRC®	
285— <del>19</del> <u>22</u>	Standard Fire Test Method for the Evaluation of Fire Propagation Characteristics of Exterior <del>Nonload-bearing Wall Assemblies Containing Combustible Components</del>	IBC	
286— <del>15</del> <u>23</u>	Standard Methods of Fire Test for Evaluating Contribution of Wall and Ceiling Interior Finish to Room Fire Growth	IBC	

288—17- <u>22</u>	Standard Methods of Fire Tests of Horizontal Fire Door Assemblies Installed in Horizontal in Fire-resistance-related floor Systems- <del>Rated Assemblies</del>	IBC			
289—19- <u>23</u>	Standard Method of Fire Test for Individual Fuel Packages	IBC		IFC	
2—19	Hydrogen Technologies Code	IFGC		IMC	
30A—24- <u>24</u>	Code for Motor Fuel Dispensing Facilities and Repair Garages	IFGC	IMC	IBC	IFC
30B—19- <u>23</u>	Code for the Manufacture and Storage of Aerosol Products	IFC			
30—24- <u>24</u>	Flammable and Combustible Liquids Code	IBC		IFC	
318—18- <u>22</u>	Standard for the Protection of Semiconductor Fabrication Facilities	IFC			
32—16- <u>21</u>	Standard for Dry Cleaning Facilities	IBC		IFC	
33—18- <u>21</u>	Standard for Spray Application Using Flammable or Combustible Materials	IFC			
34—18- <u>21</u>	Standard for Dipping, Coating and Printing Processes Using Flammable or Combustible Liquids	IFC			
35—16- <u>21</u>	Standard for the Manufacture of Organic Coatings	IFC			
37—18- <u>21</u>	Standard for the Installation and Use of Stationary Combustion Engines and Gas Turbines	IFGC		IMC	
385—17- <u>22</u>	Standard for Tank Vehicles for Flammable and Combustible Liquids	IFC			
400—19- <u>22</u>	Hazardous Materials Code	IFC			

407—17- <u>22</u>	Standard for Aircraft Fuel Servicing	IFC			
409—16- <u>22</u>	Standard for <del>on</del> Aircraft Hangars	IFGC	IBC	IFC	
40—19- <u>22</u>	Standard for the Storage and Handling of Cellulose Nitrate Film	IBC		IFC	
418—16- <u>21</u>	Standard for Heliports	IBC			
45—19- <u>23</u>	Standard on Fire Protection Laboratories Using Chemicals (2015 Edition)	IBC		IFC	
484—19- <u>22</u>	Standard for Combustible Metals	IBC		IFC	
495—18- <u>23</u>	Explosive Materials Code	IFC			
498—18- <u>23</u>	Standard for Safe Havens and Interchange Lots for Vehicles Transporting Explosives	IFC			
501—17- <u>22</u>	Standard on Manufactured Housing	IRC®			
505—18- <u>23</u>	Fire Safety Standard for Powered Industrial Trucks, Including Type Designations, Areas of Use, Maintenance and Operation	IFC			
51—18- <u>23</u>	Design and Installation of Oxygen-fuel Gas Systems for Welding, Cutting and Allied Processes	IFGC	IPC	IFC	
52—19- <u>22</u>	Vehicular Gaseous Fuel System Code	IFC			
55—19- <u>23</u>	Compressed Gases and Cryogenic Fluids Code	IPC		IFC	
56—20- <u>23</u>	Standard for Fire and Explosion Prevention during Cleaning and Purging of Flammable Gas Piping Systems	IFC			
58—17- <u>23</u>	Liquefied Petroleum Gas Code	IFGC			
58—20- <u>23</u>	Liquefied Petroleum Gas Code	IMC	IBC	IFC	IRC®

59A—19 <u>22</u>	Standard for the Production, Storage and Handling of Liquefied Natural Gas (LNG)	IFC				
655—17 <u>19</u>	Standard for the Prevention of Sulfur Fires and Explosions	IBC		IFC		
68—13 <u>23</u>	Standard on Explosion Protection by Deflagration Venting	IFC				
701—19 <u>23</u>	Standard Methods of Fire Tests for Flame Propagation of Textiles and Films	IBC		IFC		
703—21 <u>24</u>	Standard for Fire Retardant-treated Wood and Fire-retardant Coatings for Building Materials	IFC				
704—17 <u>22</u>	Standard System for the Identification of the Hazards of Materials for Emergency Response	IMC	IBC	IFC		
72—19 <u>22</u>	National Fire Alarm and Signaling Code	IMC				
750—19 <u>23</u>	Standard on Water Mist Fire Protection Systems	IPMC	IBC	IFC		
76—16 <u>20</u>	Standard for the Fire Protection of Telecommunications Facilities	IFC				
77—14 <u>24</u>	Recommended Practice on Static Electricity	IFC				
780—17 <u>23</u>	Standard for the Installation of Lightning Protection Systems	IFC				
80—19 <u>22</u>	Standard for Fire Doors and Other Opening Protectives	IMC	IPMC	IBC	IFC	
85—19 <u>23</u>	Boiler and Combustion System Hazards Code	IFGC	IMC	IBC	IFC	IRC®
86—19 <u>23</u>	Standard for Ovens and Furnaces	IFC				
88A—19 <u>23</u>	Standard for Parking Structures	IFGC				

914—19 <u>23</u>	Code for Fire Protection of Historic Structures	IFC			
92—18 <u>21</u>	Standard for Smoke Control Systems	IMC	IBC	IFC	
96—20 <u>24</u>	Standard for Ventilation Control and Fire Protection of Commercial Cooking Operations	IMC		IFC	
99—21 <u>24</u>	Health Care Facilities Code	IMC	IPC	IBC	IFC
<del>1221</del> <u>1225—19 2022</u>	Standard for the Installation, Maintenance and Use of Emergency Services Communications Systems	IFC			
NFPA 101—21 <u>24</u>	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			
NFPA 99—21	Health Care Facilities Code	IEBC			
NFRC		National Fenestration Rating Council, Inc.			
Standard Reference Number	Title	Referenced in Code(s):			
100—2020 <u>2023</u>	Procedure for Determining Fenestration Products <i>U</i> -factors	IECC®		IRC®	
200—2020 <u>2023</u>	Procedure for Determining Fenestration Product Solar Heat Gain Coefficients and Visible Transmittance at Normal Incidence	IECC®		IRC®	
203—2017 <u>2023</u>	<del>Procedure for Determining Translucent Fenestration Product Visible Transmittance at Normal Incidence</del> <u>Procedure for Determining Visible Transmittance of Tubular Daylighting Devices</u>	IECC®			
400—2020 <u>2023</u>	Procedure for Determining Fenestration Product Air Leakage	IECC®		IRC®	



NSF	NSF International		
Standard Reference Number	Title	Referenced in Code(s):	
<del>14—2017—2020</del>	Plastic Piping System Components and Related Materials	IMC	IRC®
<del>14—2018—2020</del>	Plastic Piping System Components and Related Materials	IPC	
<del>184—2014—2019</del>	Residential Dishwashers	IPC	
<del>18—2016—2020</del>	Manual Food and Beverage Dispensing Equipment	IPC	
<del>350—2017a—2020</del>	Onsite Residential and Commercial Water Reuse Treatment Systems	IPC	IRC®
<del>358-1—2017—2021</del>	Polyethylene Pipe and Fittings for Water-based Ground-source “Geothermal” Heat Pump Systems	IMC	IRC®
<del>358-3—2016—2021</del>	Cross-linked Polyethylene (PEX) Pipe and Fittings for Water-based Ground-source (Geothermal) Heat Pump Systems	IMC	IRC®
<del>358-4—2017—2018</del>	Polyethylene of Raised Temperature (PE-RT) Pipe and Fittings for Water-based Ground-source (Geothermal) Heat Pump Systems	IMC	IRC®
<del>359—2011(R2016)—2018</del>	Valves for Crosslinked Polyethylene (PEX) Water Distribution Tubing Systems	IPC	IRC®
<del>372—2016—2020</del>	Drinking Water Systems Components—Lead Content	IPC	IRC®
<del>3—2017—2019</del>	Commercial Warewashing Equipment	IPC	
<del>40—2018—2020</del>	Residential Wastewater Treatment Systems	IPSDC	

41— <del>2016</del> <u>2018</u>	Nonliquid Saturated Treatment Systems (Composing Toilets)	IPSDC	IRC®
42— <del>2017</del> <u>2021</u>	Drinking Water Treatment Units—Aesthetic Effects	IRC®	
50— <del>2017</del> <u>2020</u>	Equipment for Swimming Pools, Spas, Hot Tubs and Other Recreational <u>Water</u> Facilities	IPC	IRC®
53— <del>2017</del> <u>2020</u>	Drinking Water Treatment Units—Health Effects	IPC	IRC®
58— <del>2017</del> <u>2020</u>	Reverse Osmosis Drinking Water Treatment Systems	IPC	IRC®
61— <del>2018</del> <u>2020</u>	Drinking Water System Components—Health Effects	IPC	IRC®
62— <del>2017</del> <u>2021</u>	Drinking Water Distillation Systems	IPC	IRC®

PDI		Plumbing and Drainage Institute	
Standard Reference Number	Title	Referenced in Code(s):	
PDI G101 <del>(2012)</del> <u>(2017)</u>	Testing and Rating Procedure for <u>Hydro Mechanical Grease Interceptors with Appendix of Sizing and Installation Data and Maintenance</u>	IPC	

PHTA		Pool & Hot Tub Alliance (formerly APSP)	
Standard Reference Number	Title	Referenced in Code(s):	
ANSI/APSP/ICC 15— <del>2011</del> <u>2021</u>	American National Standard for Residential Swimming Pool and Spa <u>Energy Efficiency Includes Addenda A Approved January 9, 2013</u>	ISPSC	
ANSI/APSP/ICC 16— <del>2017</del> <u>2022</u>	American National Standard for Suction Outlet Fittings (SOFA) for Use in Pools, Spas, and Hot Tubs	ISPSC	
ANSI/APSP/ICC 4— <del>2012</del> <u>2022</u>	American National Standard for Aboveground/Onground Residential Swimming Pools— <u>Includes Addenda A Approved April 4, 2013</u>	ISPSC	

<b>ANSI/APSP/ICC/NPC 12 - 2016 <u>2023</u></b>	<b>American National Standard for the Plastering of Swimming Pools</b>	<b>ISPSC</b>
--	--	--------------

<b>PLIB</b>	<b>Pacific Lumber Inspection Bureau (formerly WCLIB)</b>	
Standard Reference Number	Title	Referenced in Code(s):

<b>AITC 200—09—20</b>	<b>Manufacturing Quality Control Systems Manual for Structural Glued Laminated Timber</b>	<b>IBC</b>
-----------------------	---	------------

<b>PSAI</b>	<b>Portable Sanitation Association International</b>	
Standard Reference Number	Title	Referenced in Code(s):

<b><del>PSA/ANSI</del> <u>ANSI/PSAI Z4.3— 2016</u></b>	<b><del>American National Standard: for Sanitation: for Non-sewered Waste-disposal Systems ; Minimum Requirements</del></b>	<b>IPC</b>
--	---	------------

<b>RESNET</b>	<b>Residential Energy Services Network, Inc.</b>	
Standard Reference Number	Title	Referenced in Code(s):

<b>ANSI/RESNET/ICC 301—2019 <u>2022</u></b>	<b>Standard for the Calculation and Labeling of the Energy Performance of Dwelling and Sleeping Units using an Energy Rating Index</b>	<b>IECC®</b>
---	--	--------------

<b>ANSI/RESNET/ICC 380—2019 <u>2022</u></b>	<b>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</b>	<b>IECC®</b>
---	---	--------------

<b>RMI</b>	<b>Rack Manufacturers Institute</b>	
Standard Reference Number	Title	Referenced in Code(s):

<b>ANSI/MH16.1—12—21</b>	<b><del>Specification for Design, Testing and Utilization of Industrial Steel Storage Racks</del></b>	<b>IBC</b>
--------------------------	---	------------

<b>SDI</b>	<b>Steel Deck Institute</b>	
Standard Reference Number	Title	Referenced in Code(s):

SDI-QA/QC-SD—2017–2022	<del>Standard for Quality Control and Quality Assurance for Installation of Steel Deck</del> <u>Standard for Steel Deck</u>	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):

<del>SMACNA/ANSI</del> <del>ANSI/SMACNA</del> 4th Edition— 2016 <u>2020</u>	HVAC Duct Construction Standards—Metal and Flexible, <del>4th Edition (ANSI)</del> <u>(ANSI/SMACNA 006-2020)</u>	IFGC	IMC	IRC®
---	---	------	-----	------

<del>SMACNA/ANSI</del> <del>ANSI/SMACNA</del> — <u>2nd edition</u> 2013	Round Industrial Duct Construction Standards, <del>3rd Edition (ANSI/SMACNA 005-2013)</del>	IMC		
---	---	-----	--	--

<del>SMACNA/ANSI-ANSI/SMACNA</del> <del>—2011</del> <u>2nd Edition 2004</u>	Rectangular Industrial Duct Construction Standards, <del>2nd Edition (ANSI/SMACNA 002-2004)</del>	IMC		
--	---	-----	--	--

SMACNA— <u>1st edition</u> 2015	<del>SMACNA</del> Phenolic Duct Construction Standards, <del>1st Edition (ANSI)</del> <u>(ANSI/SMACNA 022-2015)</u>	IMC		
---------------------------------	---	-----	--	--

SMACNA— <del>1st</del> <u>2021</u>	Fibrous Glass Duct Construction Standards <del>7th</del> <u>8th edition</u>	IRC®		
------------------------------------	---	------	--	--

SMACNA— <del>2010</del> <u>2021</u>	Fibrous Glass Duct Construction Standards, <del>7th Edition</del> <u>8th edition</u>	IMC		
-------------------------------------	--	-----	--	--

SMACNA— <u>2nd edition</u> 2012	HVAC Air Duct Leakage Test Manual <del>Second Edition</del> <u>(ANSI/SMACNA 016-2012)</u>	IECC®		
---------------------------------	--	-------	--	--

SPRI		Single-Ply Roofing Institute	
Standard Reference Number	Title	Referenced in Code(s):	
ANSI/SPRI GT-1— <del>2016</del> — <u>21</u>	Test Standard for Gutter Systems	IBC	
ANSI/SPRI VF-1— <del>17</del> — <u>21</u>	External Fire Design Standard for Vegetative Roofs	IBC	
ANSI/SPRI/FM 4435-ES-1— <del>17</del> — <u>21</u>	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— <del>2017</del> — <u>I-2023</u>	Structural Standard for Antenna Supporting Structures, Antennas and Small Wind Turbine Support Structures	IBC	
TMS		The Masonry Society	
Standard Reference Number	Title	Referenced in Code(s):	
<del>216—2013</del> — <u>14 (19)</u>	<del>Standard Method Code Requirements</del> for Determining Fire Resistance of Concrete and Masonry Construction Assemblies	IBC	
302—2018	Standard Method for Determining the Sound Transmission Class Ratings <del>for Masonry Walls</del> <u>Assemblies</u>	IBC	
<del>402—2016</del> — <u>2022</u>	Building Code <u>Requirements</u> for Masonry Structures	IBC	IRC®
<del>404—2016</del> — <u>2023</u>	Standard for the Design of Architectural Cast Stone	IBC	IRC®
<del>504—2016</del> — <u>2023</u>	Standard for the Fabrication of Architectural Cast Stone	IBC	
<del>602—2016</del> — <u>2022</u>	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 <del>revisions through August 2018</del> — <u>November 2020</u>	ISPSC			
1026—2012	Electric Household Cooking and Food Serving Appliances—with revisions through <del>July 2018</del> <u>March 2021</u>	IRC®			
103—2010	Factory-built Chimneys, for Residential Type and Building Heating Appliances—with Revisions through <del>March 2017</del> <u>September 2021</u>	IFGC	IMC	IBC	IRC®
1042—2009	Electric Baseboard Heating Equipment—with revisions through <del>December 2016</del> <u>February 2021</u>	IRC®			
1081—2016	Swimming Pool Pumps, Filters and Chlorinators—with revisions through <del>October 2017</del> — <u>July 2020</u>	ISPSC			
109—97	Tube Fittings for Flammable and Combustible Fluids, Refrigeration Service and Marine Use <u>with revisions through May 2020</u>	IMC			
10A—2009	Tin Clad Fire Doors—with Revisions through July <u>20</u> , 2018	IBC			
10B—2008	Fire Tests of Door Assemblies— with Revisions through <del>February 2015</del> — <u>May 2020</u>	IBC			

10C—2016	Positive Pressure Fire Tests of Door Assemblies - <u>with revisions through May 2021</u>	IBC		IFC		
10D—2017	<del>Standard for</del> Fire Tests of Fire Protective Curtain Assemblies	IBC				
1240—2005	Electric Commercial Clothes-Drying Equipment—with revisions through <del>March 2018</del> <u>September 2021</u>	IMC				
1261— <u>2001</u>	Electric Water Heaters for Pools and Tubs—with revisions through September 2017	IMC				
1275— <del>2014</del> — <u>2021</u>	Flammable Liquid Storage Cabinets—with revisions through <del>February 2018</del>	IFC				
127—2011	Factory-built Fireplaces—with Revisions through <del>July 2016</del> <u>February 2020</u>	IFGC	IMC	IBC	IECC®	IRC®
1316— <del>1994</del> — <u>2018</u>	<del>Glass-Fiber Reinforced Plastic Underground Storage Tanks for Petroleum Products, Alcohols and Alcohol-gasoline Mixtures</del> <u>Flammable and Combustible Liquids—with revisions through May 2006—March 2019</u>	IFC				
1369—18	<del>Standard for</del> Aboveground Piping for Flammable and Combustible Liquids <u>-with revisions through August 2020</u>	IMC				
1370—11	Unvented Alcohol Fuel Burning Decorative Appliances—with revisions through March <del>25</del> , 2016	IMC				
1389— <del>2017</del> — <u>19</u>	Plant <u>Oil</u> 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 <del>August 2014</del> <u>January 2021</u>	IFC				

1479—2015	Fire Tests of Penetration Firestops <u>with revisions through May 2021</u>	IMC	IBC	IRC®
1482—2011	Solid-fuel Type Room Heaters— with Revisions through <del>August 2015</del> <u>February 2020</u>	IMC	IBC	IRC®
1489—2016	<del>Fire Tests of</del> Fire Resistant Pipe Protection Systems Carrying Combustible Liquids <del>-with</del> <u>revisions through October 2021</u>	IBC	IFC	
14B—2008	Sliding Hardware for Standard Horizontally Mounted Tin Clad Fire Doors—with Revisions through <del>July 2017</del> <u>September 2021</u>	IBC		
14C—2006	Swinging Hardware for Standard Tin Clad Fire Doors Mounted Singly and in Pairs—with Revisions through <del>July 2017</del> <u>October 2021</u>	IBC		
1563—2009	Standard for Electric Spas, Hot Tubs and Associated Equipment —with revisions through <del>October 2017</del> <u>September 2020</u>	IMC	ISPSC	IRC®
1703—2002	Flat-plate Photovoltaic Modules and Panels—with Revisions through <del>September 2018</del> <u>November 2019</u>	IBC	IRC®	
1738—2010	Venting Systems for Gas Burning Appliances, Categories II, III and IV <del>with revisions through November 2014</del> <u>August 2021</u>	IFGC	IRC®	
1741—2010	Inverters, Converters, Controllers and Interconnection System Equipment for Use with Distributed Energy Resources— with Revisions through <del>February 2018</del> <u>June 2021</u>	IBC	IFC	IRC®
174—04	Household Electric Storage Tank Water Heaters—with revisions through <del>December 2016</del> <u>October 2021</u>	IMC		
1777— <del>2007</del> <u>2015</u>	Chimney Liners—with Revisions through April <del>2014</del> <u>2019</u>	IFGC	IMC	IBC



1784—2015	Air Leakage Tests of Door Assemblies—with <u>revisions through February 2020</u>	IBC	
180— <del>2012</del> — <u>2019</u>	Liquid-level Indicating Gauges for Oil Burner Fuels and Other Combustible Liquids—with revisions through <u>May 2017 August 2021</u>	IMC	IRC®
1812—2013	Ducted Heat Recovery Ventilators—with revisions through <u>July 2018 April 2021</u>	IMC	
1815—2012	Nonducted Heat Recovery Ventilators—with revisions through <u>July 2018 April 2021</u>	IMC	
181— <del>05</del> — <u>13</u>	Factory-made Air Ducts and Air Connectors—with <u>revisions through April 2017</u>	IMC	
1887—04	Fire Tests of Plastic Sprinkler Pipe for Visible Flame and Smoke Characteristics—with revisions through <u>July 2017 October 2021</u>	IMC	
1897—2015	Uplift Tests for Roof Covering Systems—with <u>revisions through September 2020</u>	IBC	IRC®
1974— <del>2017</del> — <u>2018</u>	<del>Standard for</del> Evaluation for Repurposing Batteries	IFC	
1978—2010	Grease Ducts—with revisions through <u>April 2017 October 2021</u>	IMC	
1994—2015	Luminous Egress Path Marking Systems <u>with revisions through July 2020</u>	IBC	IFC
1996—2009	Electric Duct Heaters—with revisions through <u>July 2016 September 2021</u>	IMC	IRC®
2011—2019	Outline for <u>investigation for Machinery with revisions through October 2020</u>	IFC	
2017—2008	General-purpose Signaling Devices and Systems—with revisions through <u>January 2016 December 2016</u>	IFC	ISPSC

2024—2014	<del>Safety Optical-fiber Cable Routing Assemblies and Communications Cable Raceway</del> —with revisions through August 2015	IMC			
2075—2013	<del>Standard for</del> Gas and Vapor Detectors and Sensors-with Revisions through <del>December 2017</del> <u>August 2021</u>	IMC	IBC	IFC	IRC®
2079—2015	Tests for Fire Resistance of Building Joint Systems - <u>with revisions through July 2020</u>	IBC		IFC	
207—2009	Refrigerant-containing Components and Accessories, Nonelectrical—with revisions through <del>June 2014</del> <u>January 2020</u>	IMC			
2152— <del>2016</del> <u>2021</u>	Outline of Investigation for Special Purpose Nonmetallic Containers and Tanks for Specific Combustible or Noncombustible Liquids	IFC			
2158A—2013	<del>Outline of Investigation for</del> Clothes Dryer Transition Duct—with revisions through <del>April 2017</del> <u>October 2021</u>	IFGC	IMC		IRC®
<del>2158—2018</del> <u>2021</u>	Electric Clothes Dryers	IMC			
2162—2014	<del>Outline of Investigation for</del> Commercial Wood-fired Baking Ovens—Refractory Type - <u>with revisions through August 2019</u>	IMC			
217—2015	Single and Multiple Station Smoke Alarms—with Revisions through <del>November 2016</del> <u>April 2021</u>	IBC	IFC		IRC®
2196—2017	<del>Standard for</del> Fire Test for Circuit Integrity of Fire-Resistive Power, Instrumentation, Control and Data Cables - <u>with revisions through December 2020</u>	IBC		IFC	

2200— <del>2012</del> —2020	Stationary Engine Generator Assemblies—with Revisions through <del>October 2015</del>	IFGC	IMC	IBC	IFC	IRC®
2208—2010	Solvent Distillation Units—with revisions through <u>June 2020</u>	IFC				
2518—2016	Air Dispersion Systems - <u>with revisions June 2021</u>	IMC				
2524—2019	<del>Standard for</del> In-building 2-way Emergency Radio Communication Enhancement Systems - <u>revisions through February 2019</u>	IFC				
263—11	Fire Tests of Building Construction and Materials—with Revisions through <del>March 2018</del> <u>August 2021</u>	IBC				
268A—2008	Smoke Detectors for Duct Application—with revisions through August <del>2016</del> <u>2020</u>	IMC				
268—2016	Smoke Detectors for Fire Alarm Systems-with revisions through <del>July 2016</del> <u>October 2019</u>	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 <del>December 2019</del> <u>March 2021</u>	IBC		IRC®		
2846—2014	Fire Test of Plastic Water Distribution Plumbing Pipe for Visible Flame and Smoke Characteristics—with revisions through <del>December 2016</del> <u>January 2021</u>	IMC				
300— <del>2005</del> —2019	Fire Testing of Fire Extinguishing Systems for Protection of Commercial Cooking Equipment—with revisions through <del>December 2014</del>	IFC				
30—1995	Metal Safety Cans—with revisions through <del>June 2014</del> <u>September 2019</u>	IFC				

325—2017	Door, Drapery, Gate, Louver and Window Operations and Systems <u>with revisions through February 2020</u>	IBC	IFC	IRC®
343— <del>2017</del> — <u>2008</u>	Pumps for Oil-burning Appliances <u>with revisions through December 2017</u>	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 <del>July 2012</del> — <u>June 2012</u>	ISPSC		
391—2010	Solid-fuel and Combination-fuel Central and Supplementary Furnaces—with revisions through <del>June 2014</del> — <u>August 2019</u>	IMC		
399—2017	Drinking-Water Coolers—with revisions through <del>August 2018</del> <u>July 2020</u>	IPC		
427—11	Standard for Refrigerating Units <u>with revisions through February 2014</u>	IMC		
430—2015	Waste Disposers—with revisions through <del>February 2018</del> <u>September 2021</u>	IPC		
441—16	Gas Vents—with revisions through <del>July 2016</del> — <u>August 2019</u>	IRC®		
471—2010	Commercial Refrigerators and Freezers—with revisions through <del>November 2018</del> — <u>September 2019</u>	IMC		
484—14	<del>Standard for</del> Room Air Conditioners <u>with revisions through May 2019</u>	IMC		
507—2017	Electric Fans—with revisions through <del>August 2018</del> — <u>May 2020</u>	IMC	IRC®	
508—2018	Industrial Control Equipment <u>with revisions through July 2021</u>	IMC	IPC	IRC®
515—2015	<del>Standard for</del> Electrical Resistance Trace Heating for Commercial Applications	IECC®		

536— <del>2014</del> — <u>2021</u>	Flexible Metallic Hose	IMC	IRC®
555C—2014	Ceiling Dampers—with Revisions through <del>May 2017</del> <u>January 2021</u>	IMC	IBC
555S—2014	Smoke Dampers—with Revisions through October <del>2016</del> <u>2020</u>	IMC	IBC
555—2006	Fire Dampers—with Revisions through October <del>2016</del> <u>2020</u>	IBC	
55A—2004	Materials for Built-up Roof Coverings	IBC	IRC®
580—2006	Test for Uplift Resistance of Roof Assemblies—with Revisions through <del>October 2018</del> <u>March 2019</u>	IBC	IRC®
60335-2-1000- <u>17</u>	<del>Standard for Household and Similar Electrical Appliances: Particular Requirements for Electrically Powered Pool Lifts, - with revisions through September 29, 2017</del>	ISPSC	
60601-1—2003	Medical Electrical Equipment, Part I: General Requirements for Safety - <u>with revisions through April 2006</u>	IFC	
60950-1— <del>2014</del> — <u>2007</u>	Information Technology Equipment—Safety Requirements <u>with revisions through May 2019</u>	IFC	
61730-1—2017	Photovoltaic (PV) Module Safety Qualification - Part 1: Requirements for Construction - <u>with revisions through April 2020</u>	IBC	IRC®
61730-2—2017	Photovoltaic (PV) Module Safety Qualification - Part 2: Requirements for Testing - <u>with revisions through April 2020</u>	IBC	IRC®

62368-1— <del>2014-19</del>	Audio/video, Information and Communication Technology Equipment—Safety Requirements - <u>with revisions through October 2021</u>	IFC		
651—2011	Schedule 40 <u>and Schedule 80</u> , - <del>Type EB and A</del> -Rigid PVC Conduit and Fittings—with Revisions through <del>June 2016</del> <u>March 2020</u>	IFGC	IRC®	
705—2017	Power Ventilators—with revisions through <del>October 2018</del> <u>August 2021</u>	IFGC	IMC	IRC®
710B—2011	Recirculating Systems—with Revisions through <del>August 2014</del> <u>February 2019</u>	IMC	IBC	IFC
710—12	Exhaust Hoods for Commercial Cooking Equipment—with Revisions through <del>November 2013</del> <u>February 2021</u>	IECC®		
791—2006	<del>Standard for</del> Residential Incinerators—with revisions through <del>November 2014</del> <u>February 2021</u>	IMC	IFC	
795—2016	Commercial-Industrial Gas Heating Equipment <u>with revisions through 2020</u>	IFGC	IRC®	
80—2007	Steel Tanks for Oil-burner Fuels and Other Combustible Liquids—with revisions through <del>January 2014</del> <u>April 2019</u>	IFC	IRC®	
817—2015	<del>Standard for</del> Cord Sets and Power-supply Cords—with revisions through <del>August 2018</del> <u>September 2021</u>	IFC		
834—04	Heating, Water Supply and Power Boilers Electric—with revisions through <del>September 2018</del> <u>July 2019</u>	IMC		
834—2004	Heating, Water Supply and Power Boilers—Electric—with revisions through <del>September 2018</del> <u>July 2019</u>	IRC®		

842— <del>2015</del> <u>2019</u>	Valves for Flammable Fluids— <del>with revisions through May 2015</del>	IMC		IRC®
858—2014	Household Electric Ranges—with revisions through <del>June 2018</del> <u>September 2019</u>	IMC		IRC®
864—2014	Control Units and Accessories for Fire Alarm Systems—with Revisions through <del>March 2018</del> <u>May 2020</u>	IMC	IBC	IFC
867—2011	Electrostatic Air Cleaners—with revisions through August <del>2018</del> <u>2021</u>	IMC		
875—09	Electric Dry-bath Heaters—with revisions through <del>September 2017</del> <u>January 2021</u>	IRC®		
87A—2015	Power-operated Dispensing Devices for Gasoline and Gasoline/Ethanol Blends with Nominal Ethanol Concentrations up to 85 Percent—with revisions through <del>June 2017</del> <u>September 2019</u>	IFC		
923—2013	Microwave Cooking Appliances— with revisions through <del>July 2017</del> <u>August 2020</u>	IMC	IRC®	
924—2016	<del>Standard for</del> Safety Emergency Lighting and Power Equipment— with Revisions through May <del>2018</del> <u>2020</u>	IBC	IFC	
9540A— <del>2017</del> <u>2019</u>	Standard for Safety Test Method for Evaluating Thermal Runaway Fire Propagation in Battery Energy Storage Systems	IFC		
9540— <del>2016</del> <u>2020</u>	Energy Storage Systems and Equipment - with revisions through <u>April 2021</u>	IFC	IRC®	
959—2010	Medium Heat Appliance Factory- built Chimneys—with Revisions through <del>June 2014</del> <u>August 2019</u>	IFGC	IMC	IRC®
9—2009	Fire Tests of Window Assemblies —with Revisions through <del>February 2015</del> <u>March 2020</u>	IBC		

UL/CSA 60335-2-40— <del>17</del> — <u>2019</u>	Household and Similar Electrical Appliances—Safety—Part 2-40: Particular Requirements for <del>Electrical Heat Pumps, Air-Conditioners and Dehumidifiers</del> <u>Motor-Compressors</u>	IMC
--	---	-----

UL/CSA 60335-2-89— <del>17</del> — <u>21</u>	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— <del>17</del> — <u>22</u>	Specifications for Windows, Doors and Unit Skylights	IBC	IECC®	IRC®
---	--	-----	-------	------

I.S. 11— <del>16</del> — <u>23</u>	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— <del>2018</del> — <u>2023</u>	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.

ADM52-22



## **Public Hearing Results**

This proposal includes published errata

[https://cdn-www-v2.iccsafe.org/wp-content/uploads/2022-GROUP-B-CONSOLIDATED-MONOGRAPH-UPDATES-](https://cdn-www-v2.iccsafe.org/wp-content/uploads/2022-GROUP-B-CONSOLIDATED-MONOGRAPH-UPDATES-3-14-22.pdf)

[3-14-22.pdf](#)

**Committee Action:**

**As Modified**

**Committee Modification:**

AMCA		Air Movement and Control Association International	
Standard Reference Number	Title	Referenced in Code(s):	
<del>ANSI/AMCA 550—09 (Rev. 09/18)</del> <u>22</u>		Test Method for High Velocity Wind Driven Rain Resistant Louvers	IMC
ANSI/AMCA 210- <u>23</u> /ANSI/ASHRAE 51—23		Laboratory Methods of Testing Fans for Aerodynamic Performance Rating	IRC®
ANSI/AMCA 210— <del>16-23</del> /ANSI/ASHRAE 51— <del>16</del> <u>23</u>		Laboratory Methods of Testing Fans for Aerodynamic Performance Rating	IMC

**ASTM****ASTM International**

Standard Reference Number Title Referenced in Code(s):

B209—~~44~~ 21a Specification for Aluminum and Aluminum-alloy Sheet and Plate IBC IRC IRC®

D3462/D3462M—~~1999~~ 16 Specification for Asphalt Shingles Made from Glass Felt and Surfaced with Mineral Granules IBC

E96/E96M—~~21~~ 2016 Standard Test Methods for Gravimetric Determination of Water Vapor Transmission Rate of Materials IBC IRC®

A6/A6M—~~2017A~~ 21 Standard Specification for General Requirements for Rolled Structural Steel Bars, Plates, Shapes and Sheet Piling IBC

B695 —~~04(2000)~~ 2021 Standard Specification for Coating of Zinc Mechanically Deposited on Iron and Steel IEBC

B695—~~2004(2016)~~ 2021 Standard Specification for Coatings of Zinc Mechanically Deposited on Iron and Steel IBC IRC IRC®

C1289—~~2016~~ 22 Standard Specification for Faced Rigid Cellular Polyisocyanurate Thermal Insulation Board IBC IRC IRC®

C140/C140M —~~45~~ 22a Standard Test Methods for Sampling and Testing Concrete Masonry Units and Related Units IEBC

C140/C140M—~~2016~~ 22a Test Method Sampling and Testing Concrete Masonry Units and Related Units IBC

C1670/1670M—~~2016~~ 21b Standard Specification for Adhered Manufactured Stone Masonry Veneer Units IRC IRC®

C1670/C1670M—~~2016~~ 21b Standard Specification for Adhered Manufactured Stone Masonry Veneer Units IBC

C1691—~~2011(2017)~~ 2021 Standard Specification for Unreinforced Autoclaved Aerated Concrete (AAC) Masonry Units IRC IRC®

C199—~~1984(2016)~~ 2022 Test Method for Pier Test for Refractory Mortar IBC IRC IRC®

C208—~~2012(2017)~~ E+ 2022 Specification for Cellulosic Fiber Insulating Board IBC IRC IRC®

C443—~~2012(2017)~~ 2021 Specification for Joints for Concrete Pipe and Manholes, Using Rubber Gaskets IPC

C443—~~2012(2017)~~ 2021 Specification for Joints for Concrete Pipe and Manholes, Using Rubber Gaskets IPSDC IRC IRC®

C552—~~2017E+~~ 2022 Standard Specification for Cellular Glass Thermal Insulation IBC IRC IRC®

C744—~~2016~~ 2021 Standard Specification for Prefaced Concrete and Calcium Silicate Masonry Units IBC IRC IRC®

C76—~~2016A~~ 2022 Specification for Reinforced Concrete Culvert, Storm Drain and Sewer Pipe IPC

C76—~~2016A~~ 2022 Specification for Reinforced Concrete Culvert, Storm Drain and Sewer Pipe IPSDC IRC IRC®

C836/C836M— Specification for High Solids Content, Cold Liquid-applied Elastomeric Waterproofing Membrane for Use with Separate Wearing Course IBC IRC IRC®  
2018(2022)

C90—~~2016A~~ 2021 Specification for Load-bearing Concrete Masonry Units IBC IRC IECC® IRC®

C926—~~15B~~ 21 Standard Specification for Application of Portland Cement Based Plaster IRC IRC®

C926—~~2018B~~ 2021 Specification for Application of Portland Cement-based Plaster IBC IRC IRC®

D1253—14(2021)e1 Standard Test Method For Residual Chlorine in Water IPC

D1693—15.21 Test Method for Environmental Stress-cracking of Ethylene Plastics IMC IRC IRC®

D2235—2004(2016) 2021 Specification for Solvent Cement for Acrylonitrile-Butadiene-Styrene (ABS) Plastic Pipe and Fittings IPC

D2235—2004(2016) 2021 Specifications for Solvent Cement for Acrylonitrile-Butadiene-Styrene (ABS) Plastic Pipe and Fittings IMC IPSDC IRC IRC®

D2661—14E+21 Specification for Acrylonitrile-Butadiene-Styrene (ABS) Schedule 40 Plastic Drain, Waste, and Vent Pipe and Fittings IPC

D2661—14E+21 Specification for Acrylonitrile-butadiene-styrene (ABS) Schedule 40 Plastic Drain, Waste, and Vent Pipe and Fittings IPSDC IRC IRC®

D2729—2017 2021 Specification for Poly (Vinyl Chloride) (PVC) Sewer Pipe and Fittings IPC

D2729—17.21 Specification for Poly (Vinyl Chloride) (PVC) Sewer Pipe and Fittings IRC IRC®

D2729—2017 2021 Specification for Poly (Vinyl Chloride) (PVC) Sewer Pipe and Fittings IPSDC IRC IRC®

D2843—16.22 Standard Test Method for Density of Smoke from the Burning or Decomposition of Plastics IBC

D3034—2016 2021 Specification for Type PSM Poly (Vinyl Chloride) (PVC) Sewer Pipe and Fittings IPC

D3034—2016 2021 Specification for Type PSM Poly (Vinyl Chloride) (PVC) Sewer Pipe and Fittings IPSDC IRC IRC®

D3138 Standard Specification for Solvent Cements for Transition Joints Between Acrylonitrile-Butadiene-Styrene (ABS) and Poly (Vinyl Chloride) (PVC) Non-pressure Piping Components IPC

D3138 Standard Specification for Solvent Cements for Transition Joints Between Acrylonitrile-Butadiene-Styrene (ABS) and Poly (Vinyl Chloride) (PVC) Non-Pressure Piping Components IRC IRC®

D3212—07(2013) 2021 Specification for Joints for Drain and Sewer Plastic Pipes Using Flexible Elastomeric Seals IPC IPSDC IRC IRC®

D3311—2017(2021) Specification for Drain, Waste and Vent (DWV) Plastic Fittings Patterns IPC

D3311—2017(2021) Specification for Drain, Waste and Vent (DWV) Plastic Fittings Patterns IRC IRC®

D3689/D3698M—07(2019)e+2022 Test Methods for Deep Foundations under Static Axial Tensile Load IBC

D3909/D3909M—14(2021) Standard Specification for Asphalt Roll Roofing (Glass Felt) Surfaced With Mineral Granules IWUIC IBC IRC IRC®

D4068—2017(2022) Specification for Chlorinated Polyethylene (CPE) Sheeting for Concealed Water-containment Membrane IPC

D4068—2017(2022) Specification for Chlorinated Polyethylene (CPE) Sheeting for Concealed Water Containment Membrane IRC IRC®

D4637/D4637M—2015(2021) Specification for EPDM Sheet Used in Single-ply Roof Membrane IBC IRC IRC®

D5665/D5665M—99a(2014)e+ (2021) Specification for Thermoplastic Fabrics Used in Cold-applied Roofing and Waterproofing IRC IRC®

D5665/D5665M—99a(2014)e+ (2021) Specification for Thermoplastic Fabrics Used in Cold-applied Roofing and Waterproofing IBC

D56—16a.21a Test Method for Flash Point by Tag Closed Cup Tester IFC

D56— <del>2016A</del> <u>2021a</u>	Test Method for Flash Point by Tag Closed Cup Tester	IMC IBC
D6162/D6162M— <del>2016</del> <u>2021</u>	Specification for Styrene Butadiene Styrene (SBS) Modified Bituminous Sheet Materials Using a Combination of Polyester and Glass Fiber Reinforcements	IBC IRC IRC®
D6163/D6163M— <del>2016</del> <u>2021</u>	Specification for Styrene Butadiene Styrene (SBS) Modified Bituminous Sheet Materials Using Glass Fiber Reinforcements	IBC IRC IRC®
D6164/D6164M— <del>2016</del> <u>2021</u>	Specification for Styrene Butadiene Styrene (SBS) Modified Bituminous Sheet Materials Using Polyester Reinforcements	IBC IRC IRC®
D6223/D6223M— <del>2016</del> <u>2021</u>	Specification for Atactic Polypropylene (APP) Modified Bituminous Sheet Materials Using a Combination of Polyester and Glass Fiber Reinforcement	IBC IRC IRC®
D6878/D6878M— <del>2017</del> <u>2021</u>	Standard Specification for Thermoplastic-polyolefin-based Sheet Roofing	IBC IRC IRC®
D7032— <del>2017</del> <u>2021</u>	Standard Specification for Establishing Performance Ratings for Wood-Plastic Composite and Plastic Lumber Deck Boards, Stair Treads, Guards, and Handrails	IWUIC IBC IRC IRC®
D7254— <del>2017</del> <u>2021</u>	Standard Specification for Polypropylene (PP) siding	IBC IRC IRC®
E1590— <del>17</del> <u>2022</u>	Test Method for Fire Testing of Mattresses	IFC
E2751/E2751M— <del>2017A</del> <u>2021</u>	Practice for Design and Performance of Supported Laminated Glass Walkways	IBC
E330/E330M— <del>14</del> <u>(2021)</u>	Test Method for Structural Performance of Exterior Windows, Curtain Walls and Doors by Uniform Static Air Pressure Difference	IBC IRC IRC®
E96/E96M— <del>2016</del> <u>2021</u>	Test Method for Water Vapor Transmission of Materials	IBC IRC IRC®
F1281— <del>2017</del> <u>(2021)e1</u>	Specification for Cross-linked Polyethylene/Aluminum/ Cross-linked Polyethylene (PEX-AL-PEX) Pressure Pipe	IPC
F1281— <del>2017</del> <u>(2021)</u>	Specification for Cross-linked Polyethylene/Aluminum/Crosslinked Polyethylene (PEX-AL-PEX) Pressure Pipe	IMC IRC IECC® IRC®
F1667/F1667M— <del>2016</del> <u>2021a</u>	Specification for Driven Fasteners, Nails, Spikes and Staples	IBC IRC IRC®
F1673— <del>2010</del> <u>(2016) (2021)e1</u>	Standard Specification for Polyvinylidene Fluoride (PVDF) Corrosive Waste Drainage Systems	IPC
F1973— <del>2010</del> <u>(2016) 2021</u>	Standard Specification for Factory Assembled Anodeless Risers and Transition Fittings in Polyethylene (PE) and Polyamide 11 (PA11) and Polyamide 12 (PA12) Fuel Gas Distribution Systems	IFGC IRC IRC®
F2306/ F2306M— <del>2016</del> <u>2021</u>	Standard Specification for 12" to 60" Annular Corrugated Profile-wall Polyethylene (PE) Pipe and Fittings for Gravity Flow Storm Sewer and Sub-surface Drainage Applications	IRC IRC®
F2306/F2306M— <del>2016</del> <u>2021</u>	12" to 60" Annular Corrugated Profile-wall Polyethylene (PE) Pipe and Fittings for Gravity Flow Storm Sewer and Subsurface Drainage Applications	IPC
F2623— <del>14</del> <u>22</u>	Standard Specification for Polyethylene of Raised Temperature (PE-RT) SDR9 Tubing	IMC IRC IRC®
F2881 /F2881M— <del>2016</del> <u>2021e1</u>	Standard Specification for 12 to 60 in. [300 to 1500 mm] Polypropylene (PP) Dual Wall Pipe and Fittings for Non-pressure Storm Sewer Applications	IPC

D6662—~~2022~~ ~~2017~~ Standard Specification for Polyolefin-Based Plastic Lumber Decking Boards IWUIC

**FGIA Fenestration & Glazing Alliance (formerly AAMA)**

Standard Reference Number Title Referenced in Code(s):

711—~~2022~~ ~~Voluntary~~ Specification for Self Adhering Flashing Used for Installation of Exterior Wall Fenestration Products IBC IRC®

AAMA/WDMA/CSA 101/I.S.2/A440— 22 North American Fenestration Standard/Specifications for Windows, Doors and Unit Skylights IECC®

**UL UL LLC**

Standard Reference Number Title Referenced in Code(s):

1563— ~~Standard for Electric Spas, Hot Tubs, Equipment Assemblies~~ and Associated Equipment—with revisions IMC ISPS IRC®  
2009 through ~~October 2017~~ September 2020

2011—2019 Outline ~~for~~ of investigation for Machinery — with revisions through October 2020 IFC

2152 ~~Outline of Investigation for~~ Special Purpose Nonmetallic Containers and Tanks for Specific Combustible or Noncombustible IFC  
— 2021 Liquids

427—11 ~~Standard for~~ Refrigerating Units — with revisions through February 2014 IMC

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

UL/CSA 60335-2-40— ~~2019~~ Household and Similar Electrical Appliances—Safety—Part 2: Particular Requirements for Motor- IMC  
2022 Compressors

**Committee Reason:** The committee stated that the reasons for the approval of the modifications by number were as follows:

- 1: To reference the 2019 edition rather than the 2016 edition of the ASTM standard.
- 2: It coordinates with the ASTM standard on the 21 edition and corrects the title change.
- 4: It recognizes a more recent edition of the ASTM standard.
- 6: It moves to the 2022 edition of the UL CSA standard that was not referenced yet in the proposal.
- 21: It recognizes more recent editions of ASTM standards.
- 22: The clarification of the title and referencing the 18 edition or rather than the 23 edition of the WDMA standards.
- 25: It recognizes a more recent edition of the ASTM standard.
- 26: To change the 711 standard from the 23 to 22 edition because it was published early.
- 29: To update to the AMCA standard and to coordinate between the reference in the IRC and the IMC which was overlooked with the reference of the IMC to make sure they both referenced the 23 edition.
- 31: The clarification of the titles of the standards and to make sure UL 427 includes the changes up to February of 2014.

The committee stated that the reason for approval of the proposal was to update the codes to the most recent standards to recognize new materials and methods. (Vote: 13-0)

Committee Reason: The committee stated that the reasons for the approval of the modifications by number were as follows:

- 1: To reference the 2019 edition rather than the 2016 edition of the ASTM standard.
- 2: It coordinates with the ASTM standard on the 21 edition and corrects the title change.
- 4: It recognizes a more recent edition of the ASTM standard.
- 6: It moves to the 2022 edition of the UL CSA standard that was not referenced yet in the proposal.
- 21: It recognizes more recent editions of ASTM standards.
- 22: The clarification of the title and referencing the 18 edition or rather than the 23 edition of the WDMA standards.
- 25: It recognizes a more recent edition of the ASTM standard.
- 26: To change the 711 standard from the 23 to 22 edition because it was published early.
- 29: To update to the AMCA standard and to coordinate between the reference in the IRC and the IMC which was overlooked with the reference of the IMC to make sure they both referenced the 23 edition.
- 31: The clarification of the titles of the standards and to make sure UL 427 includes the changes up to February of 2014.

The committee stated that the reason for approval of the proposal was to update the codes to the most recent standards to recognize new materials and methods. (Vote: 13-0)

ADM52-22

**Individual Consideration Agenda**

**Public Comment 1:**

**Proponents:** Amanda Hickman, representing Single-Ply Roofing Industry (SPRI) (amanda@thehickmangroup.com) requests As Modified by Public Comment

Further modify as follows:

SPRI	Single-Ply Roofing Institute	
Standard Reference Number	Title	Referenced in Code(s):
ANSI/SPRI GT-1— 24 22	Test Standard for Gutter Systems	IBC
ANSI/SPRI VF-1— 24 17	External Fire Design Standard for Vegetative Roofs	IBC
ANSI/SPRI/FM 4435-ES-1— 24 17	Wind Test Design Standard for Edge Systems Used with Low Slope Roofing Systems	IBC

**Commenter’s Reason:** Since it is possible that some of the standards updates will not be finalized in time for the 2024 code publication, we are recommending only the proposed standard edition be updated at this time.

**Cost Impact:** The net effect of the public comment and code change proposal will not increase or decrease the cost of construction. Revisions made in proposed updated standards will not result in any cost increase.

Public Comment 2:

Proponents: Amanda Hickman, representing Air Movement and Control Association International, Inc. (AMCA) (amanda@thehickmangroup.com) requests As Modified by Public Comment

Further modify as follows:

AMCA	Air Movement and Control Association International		
Standard Reference Number	Title	Referenced in Code(s):	
ANSI/AMCA 210-23 16- ANSI/ASHRAE 51— 23 16	Laboratory Methods of Testing Fans for Aerodynamic Performance Rating	IRC®	
ANSI/AMCA 210— <del>23 16-</del> 16/ANSI/ASHRAE 51— <del>23 16</del>	Laboratory Methods of Testing Fans for Aerodynamic Performance Rating	IMC	
ANSI/AMCA 230— <del>23-22</del>	Laboratory Methods of Testing Air Circulating Fans for Rating and Certification	IMC	IECC®
ANSI/AMCA 540— <del>23 13</del>	Test Method for Louvers Impacted by Wind Borne Debris	IBC	
<u>ANSI/AMCA 550— 22</u>	Test Method for High Velocity Wind Driven Rain Resistant Louvers	IMC	

**Commenter's Reason:** Since it is possible that some of the standards updates will not be finalized in time for the 2024 code publication, we are recommending only the proposed standard edition be updated at this time.

**Cost Impact:** The net effect of the public comment and code change proposal will not increase or decrease the cost of construction. Revisions made in proposed updated standards will not result in any cost increase.

### Public Comment 3:

Proponents: Marcelo Hirschler, representing GBH International (mmh@gbhint.com) requests As Modified by Public Comment

Further modify as follows:

ASTM		ASTM International					
Standard Reference Number	Title	Referenced in Code(s):					
E136— <del>19A</del> <u>2022</u>	<u>Standard Test Method for Assessing Combustibility of Materials Using a Vertical Tube Furnace at 750°C</u>	IEBC					
E136— <del>2019</del> — <u>2022</u>	<u>Standard Test Method for Assessing Combustibility Behavior of Materials Using in a Vertical Tube Furnace at 750°C</u>	IFGC	IMC	IWUIC	IBC	IRC	IRC®
E1354— <u>22</u> <del>17</del>	<u>Standard Test Method for Heat and Visible Smoke Release Rates for Materials and Products Using an Oxygen Consumption Calorimeter</u>	IFC					
E1537— <del>16</del> <u>22</u>	<u>Standard Test Method for Fire Testing of Upholstered Furniture</u>	IFC					
E2231— <u>21</u> <del>2018</del>	<u>Standard Practice for Specimen Preparation and Mounting of Pipe and Duct Insulation Materials to Assess Surface Burning Characteristics</u>	IMC		IRC		IRC®	
E2652— <del>16</del> <u>18</u>	<u>Standard Test Method for Assessing Combustibility Behavior of Materials Using in a Tube Furnace with a Cone-shaped Airflow Stabilizer at 750°C</u>	IBC					

**Commenter's Reason:** Update on dates and titles as follows:

*The title of ASTM E136 has changed from Standard Test Method for Behavior of Materials in a Vertical Tube Furnace at 750°C to Standard Test Method for Assessing Combustibility of Materials Using a Vertical Tube Furnace at 750°C – The latest edition is dated 2022.*

*The title of ASTM E2652 has changed from Standard Test Method for Behavior of Materials in a Tube Furnace with a Cone-shaped Airflow Stabilizer, at 750°C to Standard Test Method for Assessing Combustibility of Materials Using a Tube Furnace with a Cone-shaped Airflow Stabilizer, at 750°C – The latest edition is dated 2018.*

*The latest edition of ASTM E1354 is dated 2022 – the latest edition of ASTM E1537 is dated 2022 and the latest edition of ASTM E2231 is dated 2021.*

**Cost Impact:** The net effect of the public comment and code change proposal will not increase or decrease the cost of construction. This simply updates dates and titles.



**Public Comment 4:**

ASSE		ASSE International	
Standard Reference Number	Title	Referenced in Code(s):	
1003— 2020	Performance Requirements for Water Pressure Reducing Valves for Domestic Water Distribution Systems	IPC	
1018— <u>2001 (R2021)</u>	Performance Requirements for Trap Seal Primer Valves; Potable Water Supplied	IPC	IRC®
1019— <u>2011 (R2016)</u>	Performance Requirements for Freeze-resistant, Wall Hydrants, Vacuum Breaker, Draining Types	IPC	IRC®
1044— <u>2015 (R2020)</u>	Performance Requirements for Trap Seal Primer Devices— Drainage Types and Electronic Design Types	IPC	IRC®
1047— 2021	Performance Requirements for Reduced Pressure Detector Fire Protection Backflow Prevention Assemblies	IPC	IRC®
1048— 2021	Performance Requirements for Double Check Detector Fire Protection Backflow Prevention Assemblies	IPC	IRC®
1056— <u>2013 (R2021)</u>	Performance Requirements for Spill-Resistant Vacuum Breaker	IPC	IRC®
1060— <u>2020-2017 (R2021)</u>	Performance Requirements for Outdoor Enclosures for Fluid-conveying Components	IRC®	
1060— <u>2020-2017 (R2021)</u>	Performance Requirements for Outdoor Enclosures for Fluid Conveying Components	IPC	
1071— <u>2021 (R2021)</u>	Temperature Actuated Mixing Valves for Plumbed Emergency Equipment	IPC	

1079— <u>2012</u> (R2021)	Performance Requirements for Dielectric Pipe Unions	IMC	IPC
1081— <u>2014</u> (R2020)	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®

**Commenter's Reason:** The revisions submitted are editorial corrections.

**Cost Impact:** The net effect of the public comment and code change proposal will not increase or decrease the cost of construction

Public Comment#3305

### Public Comment 5:

**Proponents:** William Koffel, representing American Pyrotechnics Association (wkoffel@koffel.com) requests As Modified by Public Comment

**Further modify as follows:**

NFPA	National Fire Protection Association	
Standard Reference Number	Title	Referenced in Code(s):
1124— <del>22</del> <u>06</u>	Code for the Manufacture, Transportation, Storage and Retail Sales of Fireworks and Pyrotechnic Articles	IFC

**Commenter's Reason:** Exception No 4 to Section 5601.1.3 specifically references the 2006 Edition of NFPA 1124. Subsequent editions of NFPA 1124 do not address the retail sales and associated storage of consumer fireworks. The reference to the 2006 Edition was specifically added starting with the 2021 Edition of the IFC to address this issue. As such, the reference to the 2006 Edition of NFPA 1124 should remain for this section only. Other references to NFPA 1124 should be updated as already included in ADM52-22.

**Cost Impact:** The net effect of the public comment and code change proposal will not increase or decrease the cost of construction  
The Public Comment does not increase or decrease the cost of construction. The change is an editorial change to be consistent with the IFC requirements.

**Staff Analysis:** The 2006 edition of NFPA 1124 is being proposed to apply to IFC Section 5601.1.3 only.

Public Comment#3061

### Public Comment 6:

**Proponents:** John Woestman, representing Builders Hardware Manufacturers Association (BHMA) (jwoestman@kellencompany.com) requests As Modified by Public Comment

**Further modify as follows:**

BHMA	Builders Hardware Manufacturers' Association	
Standard Reference Number	Title	Referenced in Code(s):

<b>A 156.10—<del>2017</del> 2022</b>	<b>Power Operated Pedestrian Doors</b>	<b>IBC</b>
--------------------------------------	--	------------

<b>A156.10—<del>2017</del> 2022</b>	<b>Power-operated Pedestrian Doors</b>	<b>IFC</b>
-------------------------------------	--	------------

**Commenter's Reason:** The 2022 edition of BHMA A156.10 is expected to be approved and published by the end of 2022.

**Cost Impact:** The net effect of the public comment and code change proposal will not increase or decrease the cost of construction. The revisions being finalized in A156.10 for Power Operated Pedestrian Doors are not expected to change the cost of construction.

Public Comment#3175

### Public Comment 7:

**Proponents:** Jay Peters, representing Honeywell (peters.jay@me.com) requests As Modified by Public Comment

**Further modify as follows:**

<b>CSA</b>	<b>Canadian Standards Association</b>			
<b>Standard Reference Number</b>	<b>Title</b>	<b>Referenced in Code(s):</b>		

<b>CSA C22.2 No. 60335-2-40 — : <del>2022</del> 2019</b>	<b>Household and Similar Electrical Appliances, Part 2-40: Particular Requirements for Electrical Heat Pumps, Air-Conditioners and Dehumidifiers</b>	<b>IMC</b>	<b>ISPSC</b>	<b>IRC®</b>
--	--	------------	--------------	-------------

<b>UL</b>	<b>UL LLC</b>			
<b>Standard Reference Number</b>	<b>Title</b>	<b>Referenced in Code(s):</b>		

<b>UL/CSA 60335-2-40— <del>2022</del> 2019</b>	<b>Household and Similar Electrical Appliances—Safety—Part 2: Particular Requirements for Motor-Compressors</b>	<b>IMC</b>		
--	---	------------	--	--

**Commenter's Reason:** The proponent's reasoning statement provided to the committee for this modification was completely inaccurate. The original proposal for the inclusion of edition of UL 60335-2-40 should be upheld. The 2022 edition of the standard was not complete when the proponent incorrectly testified that it was complete. There is no debate as to the technical aspects or merits of the standard. ICC Procedures do not allow for a standard to be approved unless completed by the deadline. UL 60335-2-40 2022 Edition was not, and is still not complete today. This proposal should be disapproved for procedural and policy issues and not updated until the next cycle. If this standard edition is approved as modified, there will be technical and safety conflicts between this standard and the ASHRAE 15 as the code adopts the 2019 edition of ASHRAE 15 and there are conflicting provisions between the new 2-40 and the adopted 15 standard. It makes no practical sense to adopt a more recent listing

standard for flammable refrigerant containing equipment than the installation standard that correlates with it. Other codes have, thus far, also voted to NOT include the 2022 edition of UL 60335-2-40 in the 2024 codes. Moreover the CANENA WG14 agreed unanimously to require an external discharge safety valve as part of the installation standard. This also is not complete yet and one further example this is not ready to be adopted yet.

**Cost Impact:** The net effect of the public comment and code change proposal will not increase or decrease the cost of construction. No change to code.

Public Comment#3041