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Wamsutta Mill, New Bedford, MA. Photo Credit Greg Galer

Improving Rehabilitation Codes for Historic and Existing Buildings

The Association for Preservation Technology, Inc.

U.S. Department of the Interior

National Center for Preservation Technology and Training

NPS-FY23-IMR NCPTT Grants (15.923)

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1.

EXECUTIVE SUMMARY

This project, *Improving Rehabilitation Codes for Historic and Existing Buildings*, has been funded through a 2023 grant from the U.S. Department of the Interior, National Center for Preservation Technology and Training [NPS-FY23-IMR NCPTT Grants (15.923)].

The proposed outcome of the project was to advance modifications to the model construction codes in the U.S. that can better serve historic and other existing buildings. Specifically, the project:

1. Developed code development proposals for submission to the International Code Council for incorporation into the 2027 and future editions of the *International Existing Building Code.*
2. Created technical and support materials to assist jurisdictions in adapting their building and fire codes to reflect local needs and priorities for historic buildings.
3. Provides educational materials to assist code users in using the Performance Compliance Method, one of four potential compliance paths for existing and historic buildings.

In addition to the primary authors of this report, the APT Technical Committee on Codes and Standards, has helped guide the priorities and content of this report. The Technical Committee's engagement has broadened discussions relative to the needs of historic buildings nationwide, and ongoing enhancements that will encourage the reuse of existing and historic buildings.

The recommendations and support materials provided in this report seek to enhance practitioners' understanding and application of U.S. building codes as applied to existing and historic buildings. Through a more explicit and thorough understanding of these codes and, in particular, one particular code analysis method, this report seeks to guide application of the code in ways that make more existing buildings viable for reuse.

II.

INTRODUCTION

A Background

This project, *Improving Rehabilitation Codes for Historic and Existing Buildings,* has been funded through a 2023 grant from the U.S. Department of the Interior, National Center for Preservation Technology and Training (NPS-FY23-IMR NCPTT Grants (15.923)).

The proposed outcome of the project was to advance modifications to the model construction codes in the U.S. in order to better serve historic and other existing buildings.

B Project Goals

Working with the Association for Preservation Technology, Inc. (APT) Technical Committee on Codes and Standards, the project team has assembled materials intended to encourage the consideration of all compliance methods available in the model *International Existing Building Code* (IEBC) and to support ongoing improvements to this code. The IEBC and other codes published by the national code body, the private International Code Council (ICC), are adopted in every U.S. state, although often with modifications meeting local priorities and not uniformly in timing and content across all states. Although the ICC uses the term "International," the primary application of the ICC codes occurs within the United States.

In additional to background materials providing the context for the effort, this report includes a detailed guide for using the Performance Compliance path of the IEBC; presentation of known code development proposals (for historic buildings) submitted to the ICC for the 2027 edition of the IEBC; and a brief summary of additional code development concepts that can be further developed to meet a jurisdiction's needs. In isolation and in concert, these components are intended to address and resolve some of the technical barriers to building reuse and development.

Significant work on code-related matters associated with building rehabilitation was undertaken and published in the 1980s, culminating in the inaugural, 2003 edition of the IEBC. The 2003 IEBC has subsequently been modified by the ICC at 3-year cycles, and adopted by state, city, county, or town jurisdictions or other agencies as part of the adoption processes each entity defines. Like ICC's other model codes, the IEBC has become more stringent and more comprehensive over time. For the IEBC, it is arguable that a critical goal articulated in 1980s research and reflected in the 2003 IEBC—**the removal of barriers to the reuse of existing buildings**—has been lost, and that the IEBC has been steadily pulled toward meeting requirements for new construction. Evolving such requirements with an existing building can be difficult and expensive, as existing and historic buildings were built with traditional materials and designs and alternate approaches to safety other than those now current. With no evidence that these older structures are inherently less safe, it is incumbent upon those in the preservation community to continue to promote alternate methods to achieving acceptable levels of safety and building performance.

Given that the reuse of existing and historic buildings provides well-documented opportunities to address the nation's housing crises, climate change, and decarbonization goals, this project was undertaken to revive efforts that encourage the rehabilitation of existing buildings. This requires a clearer understanding of the value and functionality of the little-used Performance Compliance Method; and identification of code development enhancements that can be supported and further developed to meet the priorities of individual jurisdictions.

The proposed outcome of the project was to advance modifications to the model construction codes in the U.S. in order to better serve historic and other existing buildings.

C Project Team

This project was led by Marilyn Kaplan (Preservation Architecture, Albany, New York), co-chair of the APT Technical Committee on Codes and Standards. Lesley Gilmore (Gilmore Franzen Consulting LLC, Gallatin Gateway, Montana), was the primary author of Part IV providing guidance to users of the IEBC's Performance Compliance Method. Sean Denniston (Heritage Green Consulting, Vancouver, Washington), co-chair of the APT Technical Committee, authored Part V, discussing current and future code development efforts relative to the 2027 and 2030 IEBC.

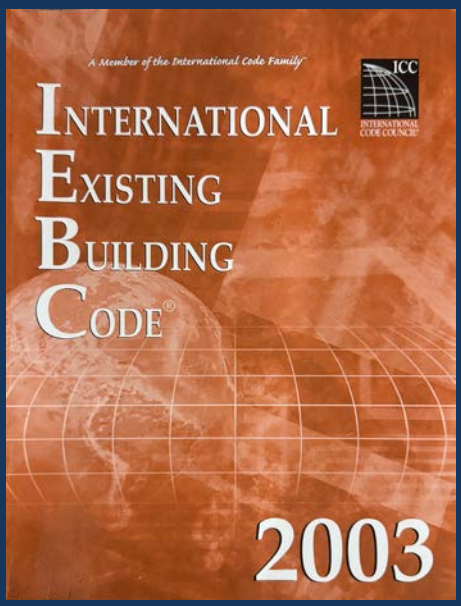
Greg Galer, Executive Director of APT, and APT Fellow Michael Tomlan have been active supporters of the effort, including administrative support and reviews of technical and editorial content.

Special thanks to reviewers of this report: John Curley, AIA, Chief Development Services Officer, Aurora, Illinois; Helen DiFate, AIA, DiFate Group, PC, St. Louis, Missouri; Laura Gagnon, AIA, PERSPECTUS, Cleveland, Ohio; Marie-Therese Giguere, AIA, Atelier Giguere llc, Baltimore, MD; and Justin M. Spivey, Klein & Hoffman, Inc., Philadelphia, Pennsylvania.

The guide presents the authors' best understanding of application of the Performance Compliance Method within the IEBC. Further clarification, confirmation, or questions should be directed to staff at the International Code Council.

III.

THE *INTERNATIONAL EXISTING BUILDING CODE* (IEBC)



A Development of the IEBC

The first national model existing building code for rehabilitation of existing buildings, published in 2003 by the International Code Council (ICC), was primarily based on research of the 1970s and 1980s supported and conducted by the U.S. Department of Housing and Urban Development (HUD) and the National Institute of Building Standards (NIBS). A goal of the IEBC and other early rehabilitation codes was the removal of barriers to rehabilitating historic and other existing buildings, primarily to facilitate the development of housing. These early codes emphasized fire and life safety. Among the considerations was that the rehabilitated building should be no less safe than in its pre-rehabilitation condition. Since then, codes for new construction and existing buildings have expanded with broader and more demanding requirements to address energy conservation, seismic forces, wildfires at the urban interface, and flooding—worthy goals but sometimes conflicting with the intention of the original rehabilitation codes to facilitate the reuse of historic and other existing buildings to meet community needs such as housing.

This study is not intended to suggest that historic buildings should be fully exempt from code. Rather, it explores different approaches to applying the codes including alternative methods to analyze and measure the performance of existing buildings.

A goal of the IEBC and other early rehabilitation codes was the removal of barriers to rehabilitating historic and other existing buildings, primarily to facilitate the development of housing.

Founded in 1994, the ICC assumed the roles previously held by three regional code organizations: the Building Officials and Code Administrators (BOCA), the International Council of Building Code Officials (ICBO), and the Southern Building Code Congress International (SBCCI). The ICC's first model code, the *International Plumbing Code,* was published in 1995. More significant was the publication of the *International Building Code* in 2000. These are called "model codes" because what the ICC creates is only applicable when adopted by the jurisdiction. While the model codes are developed with the intent of addressing the full range of national safety and policy issues, it is not uncommon for jurisdictions to make modifications as part of their adoption process or adopt the most current code(s) on locally determined schedules rather than the 3-year cycle of updates by the ICC.

The inaugural 2003 edition of the *International* ***Existing*** *Building Code (IEBC)* incorporated the varied approaches to rehabilitation than had been published by the then-existing other model code organizations, as well as the HUD-funded document, *Nationally Applicable Recommended Rehabilitation Provisions.* To amalgamate the approaches represented in these different documents into a single code, the IEBC permitted any of four compliance paths to be used: Prescriptive Compliance Method, Performance Compliance Method, Work Area Compliance Method, or the Law in Effect at the

time of construction. It is notable that rehabilitation projects were also permitted to use the codes for new construction, and that compliance with segments of the *International Fire Code* and the *International Energy Conservation Code* may also be required.

In part, acceptance of the 2003 IEBC resulted from the confluence of several factors. These included the growing public appeal of reusing existing buildings, various aligned federal and state policies, historic tax credit programs (both federal and a growing number of states) that incentivized the rehabilitation of qualified ***historic*** structures, and a rediscovered appreciation of walkable communities. Little-known factors that served as impetus for the rehabilitation code(s) included studies commissioned to examine the sources of civil unrest in the 1960s, which identified substandard housing as one of the factors contributing to unacceptable urban conditions. As a result, HUD was created in 1965, and, among the goals at its formation, was directed to improve the code ecosystem, including the creation of model code(s) to encourage the rehabilitation of existing buildings.

Over 25 years, the ICC's publications and programs have expanded to include a family of 15 model codes, jurisdictions' unique codes based on the model codes, numerous related documents, and training and certification of code officials. The codes are updated on 3-year cycles by a complex process of online code development proposal submissions, code action hearings, public hearings, and ultimately voting on specific proposals by code officials. As of the writing of this report, the 2027 codes are in the code development process and scheduled for publication in late 2026, at which time adoption by some jurisdictions will occur. It is not unusual for jurisdictions to adopt only selected codes (from the full family of model codes), to modify those codes, to selectively determine which building or project types the adopted codes will apply to, or to lag a cycle or more behind the most current model codes. Confusion can occur as the titles (and dates) of the codes adopted by jurisdictions may not align with the date of the model code as published.

B Allowable Compliance Paths

The IEBC contains four compliance paths: the Prescriptive Compliance Method, the Work Area Compliance Method, the Performance Compliance Method, and the little-used compliance path based on the Law in Effect at the time of construction. For existing buildings, projects may use either the *International Residential Code* (IRC) for one- and two-family residences (and townhouses) or the *International Building Code* for all other construction. The IEBC explicitly permits the applicant, and her/his registered design professional, to select the compliance method that will be used.

Prescriptive Compliance Method

This traditional approach to the regulation of existing buildings was contained in Chapter 34 of the IBC in its inaugural 2000 edition, appearing in the IEBC in 2003. In 2012 it was removed from the IBC to reduce overlap with the IEBC. This compliance method is often preferred by those most familiar with the IBC due to its similar format and content.

This compliance method includes extensive structural requirements related to earthquake damage, gravity loads, lateral loads (seismic and wind), improvements in flood hazard areas, fire-resistance ratings, fire escapes, and windows and emergency escape openings when an addition is constructed or an alteration or change of occupancy occurs.

For historic buildings, the application of this method is limited to conditions judged by the code official to constitute a "distinct life safety hazard," although this term is not explicitly defined in the code. Special allowances are also available to buildings located in flood hazard areas and in the application of structural provisions.

Work Area Compliance Method

Projects using this method are classified as one of three levels of Alteration, based on the extent of proposed work, as a Change of Occupancy, or as an Addition.

This compliance method establishes code requirements incrementally, based on the scale and type of proposed work. Requirements increase in stringency from the lowest level, Alterations –Level 1, to the highest levels of work, either Alterations–Level 3 (when the work area exceeds 50 percent of the building area) or a Change of Occupancy. Requirements for projects involving a Change of Occupancy also increase or decrease based on the hazard rating associated with the revised occupancy. The hazard ratings of existing and proposed occupancies are compared using three hazard scales (Means of Egress, Heights and Areas, and Exposure of Exterior Walls).

The most restrictive requirements are applied to projects involving a Change of Occupancy, in particular for occupancies the code considers to present the highest hazard. For example, since an Assembly Group A occupancy is considered more hazardous than a Business Group B occupancy in all three hazard scales, requirements for the proposed Business occupancy would typically be less stringent than those for the Assembly space.

Unfortunately, this Work Area Compliance Method is often misunderstood and misapplied. Unlike the other compliance methods, there is no chapter heading entitled Work Area Compliance Method. Instead, the chapter's title "Historic Buildings" (in lieu of what would be more accurately titled "Historic Buildings—Work Area Compliance Method" or, more clearly, an alternative organization of the code as discussed for the 2027 IEBC) leads many users to wrongly deploy specific provisions regardless of which compliance method has been selected. The 2024 IEBC chapter on Historic Buildings, like the similarly named chapter in previous editions of the IEBC, is part of the Work Area Compliance Method, and the provisions included in that chapter are only applicable when this compliance method has been selected. The confusion occurs because it is often assumed that all historic buildings must take this path. In fact, the provisions in this chapter are only available if the Work AreaCompliance Method is selected by the applicant or the design professional.

Performance Compliance Method

Also originating in Chapter 34 of the 2000 IBC, this method uses a numerical scoring system to determine if a proposed rehabilitation project will meet a pre-established, acceptable level of safety. The method is a "… controlled departure from full compliance with the technical codes without compromising the minimum standards for fire prevention and life safety features of the rehabilitated building."[1]

Values calculated for 21 safety parameters are compiled on a Summary Sheet to determine the total building scores in each of three categories: Fire Safety, Means of Egress, and General Safety. Building scores tallied on the Summary Sheet are compared to required minimum building scores (as provided in IEBC Table 1306.2) using evaluation formulas to determine whether the project will pass or fail. A "pass" indicates that the building can maintain reasonable safety for occupants with the proposed modifications in place.[2] A design that produces a "fail" calculation can be adjusted by compensating for deficiencies in one parameter with higher values in another parameter, thus achieving a higher overall building score. In other words, this method looks at the safety of the building more holistically.

This method can be extremely flexible in responding to the unique conditions presented by different historic and existing buildings. It can benefit smaller rehabilitation projects, including those with business or mixed occupancies, for example, often allowing a building to forgo a new sprinkler system or to maintain an existing system. While not the panacea for all historic or existing buildings, it is a compliance method worth testing on many rehabilitation projects.

Law-in-Effect

A fourth compliance path is identified in Chapter 3 of the IEBC. This path permits alterations complying with the law in existence when the building or affected portion of the building was constructed to be considered in compliance with the IEBC, subject to the approval of the code official. However, new structural members, alterations for accessibility, and alterations constituting substantial improvements in flood hazard areas, must meet the IEBC.

C The Performance Compliance Method (PeCM)

Origins

The Performance Compliance Method, also known as a "point system," "goal-oriented systems approach," "risk system," "scoring system," and other terms, appears to be based in the insurance rating systems, which, as early as the late 17th century following the great fire of London, classified insurance premiums according to the insurer's building classification system. A detailed assessment of early systems is provided in the University of Edinburgh doctoral dissertation of Vasileios Koutsomarkos.[3]

Centuries later, risk systems developed in the 1960s and 1970s included the Gretener Method, which permitted the calculation of property fire risk, serving as the foundation of many of the approaches subsequently developed in Europe and adopted in Switzerland as SIA 81, although subsequent models distinguished between the objectives of property protection and fire safety.

In the U.S., in the late 1960s, concern with fire safety in existing high-rise office buildings in New York City led to the development of a system that evaluated the contributions of individual features to a building's overall fire safety, allocating points relative to the presence, absence and performance of individual fire safety systems (e.g., fire suppression, compartmentation, etc.). Adopted as Local Law 5 of 1973, this system supported the National Fire Protection Association's (NFPA) development of NFPA 550, *Guide to the Fire Safety Concepts Tree*, with early applications used in the design of the Smithsonian Institution's National Air and Space Museum and the Henry M. Jackson Federal Building in Seattle, Washington.

In the 1970s, this methodology was applied to hospitals. NFPA 101A, *Guide on Alternative Approaches to Fire Safety,*[4] provided a means to assess equivalency to the minimum life safety provisions of NFPA 101, *Life Safety Code* (1973). The same methodology was later applied to multi-family housing, board and care facilities, National Park Service overnight accommodations, detention and correctional facilities, and office and laboratory buildings. In 1998, through a project also funded by NCPTT, Marilyn Kaplan and Dr. John Watts developed the Historic Fire Risk Index rating system, taking into account historic and cultural significance as well as fire safety.

When incorporated into the 2003 IEBC, the system now known as the Performance Compliance Method had been in use for existing buildings for almost 20 years, following its development in the state of Ohio. The *Ohio Basic Building Code* and the 1985 Supplement to the BOCA *Basic/National Building Code* included Article 25, "Repair, Alteration, Addition To and Change of Use of Existing Buildings," developed by the Ohio Consultative Council of the National Institute of Building Sciences (OCC/NIBS) as part of their quest to encourage the rehabilitation of Ohio's older buildings via eliminating the code penalty imposed for buildings undergoing a change of use or subject to a major rehabilitation project. Article 25 became Article 32 in the code's 1987 reformatting.

In developing Article 25, OCC/NIBS evaluated other available rehabilitation codes. They recognized that the approaches used in Massachusetts and Chicago addressed the penalty paid by buildings undergoing a change of occupancy by permitting legally constructed buildings to undergo this change without full compliance provided that certain requirements were met, and that the building's fire and life safety was not increased as part of the rehabilitation. This philosophy reflects what is included in the IEBC's Work Area Compliance Method for changes of occupancy, whereby the relative hazards of existing and proposed conditions are compared in three categories (Means of Egress, Height and Area, and Exposure of Exterior Walls) and code requirements assigned accordingly.

OCC/NIBS found that other rehabilitation codes, most notably New York City's Local Law 5 of 1973 and Appendix C of the NFPA's *Life Safety Code,* used a point system to evaluate the fire safety provided by a proposed rehabilitation project based on three categories: Fire Safety, Means of Egress, and General Safety. The scores achieved by the proposed rehabilitation project are compared

1 2024 IEBC Commentary, General Comments, page 13-1.
2 2024 IEBC Commentary, Section 1301.8.
3 Koutsomakros, et al., "Comparative Analysis of Fire Indexing Methodologies," University of Edinburgh, 2019.
4 *Fire Engineering,* July 27, 2011.

to required minimum scores determined by considering what would be required of a newly constructed building as well as those characteristics of the existing building that contribute to its overall safety and performance, even if no longer reflected in the codes for new construction. This system was ultimately used for the development of Article 25, largely based on the content and format of the BOCA code (for new construction) but incorporating some concepts from New York City's Local Law 5 of 1973.

Advantages of Using the PeCM

Many experienced in using this compliance method find it the most flexible method for identifying code solutions appropriate to existing and historic buildings. By allowing the existing building's characteristics to be numerically expressed as safety attributes or deficiencies, its focus on an overall minimum safety score rather than the contribution of individual building components or fire protection features allows the user to develop code-compliant solutions that meet the unique conditions presented by each existing building. While the method is not the optimal compliance method for all rehabilitation projects, its advantages are generally consistent with the goals established in the early adoption of its predecessors: "predictability in lieu of reliance on the opinion of the building or fire code official, and the ability to quantify safety in an objective, codified scoring system."

An important note is that the Performance Compliance Method of the IEBC is not similar to any of the PeCM codes, such as the *International Code Council Performance Code* published by the ICC and is similarly distinct from the general use of the term "performance-based" by the code community.

The PeCM can provide a means to establish the relative safety of an existing building when physical access to every part of an occupied building is unavailable due to the presence of walls, ceilings, or floors, or when original construction drawings and known construction history are not available.

An additional benefit is the user's ability to determine quickly where the greatest deficiencies lie. The user can numerically test out different scenarios that might lead to a passing grade by changing one or more aspects of the proposed rehabilitation project. For example, installation of an automatic sprinkler system might obviate the need to add a fire separation between floors of different occupancies. Trial-and-error exploration can reveal the impact of potentially flexible components of the proposed rehabilitation project (fire barriers, tenant separation, corridor wall construction, fire detection system, HVAC system, means of egress, and dead-end corridors for example). Anecdotally, it appears that many Main Street buildings are short and small enough that the safety category values based on equations comparing the existing building to the IBC's allowable heights, number of stories, and areas result in positive values for these parameters. These values can offset deficiencies identified elsewhere in the analysis.

Finally, the method can be part of a condition assessment or feasibility study to evaluate the existing building with its current or proposed occupancy, as the calculations will identify weaknesses in the level of safety provided by the building. This is especially useful where occupancy levels or uses may have changed organically over time, without formal Change of Occupancy documentation being filed with the jurisdiction.

Limits to Acceptance

Among the factors limiting a broad acceptance of the PeCM are the following, largely based on perception or lack of experience with the method:

- Although in use for more than 20 years in the IEBC alone, its approach and format are different than traditional prescriptive code language.
- That a proposed project would pass or fail based on its overall building score rather than compliance with individual safety features requires a different mindset.
- The method's use of a greater number of tables and formulas than in other codes or compliance methods makes it appear complicated to learn and cumbersome to apply.

IV.

USING THE PERFORMANCE COMPLIANCE METHOD (PeCM)

A Glossary and Notes

Code Commentary - *2024 IEBC Code and Commentary*

IBC - *International Building Code* (2024)

IEBC - *International Existing Building Code* (2024)

IMC - *International Mechanical Code* (2024)

PeCM - *Performance Compliance Method*

Fire Separation
Fire separation refers to the means to inhibit the passage of excessive heat, hot gases, or flames, typically between occupancies, at corridors and exits, and at other specific locations such as mechanical or storage rooms. The degree of fire separation provided is measured in minutes and hours, known as the fire-resistance rating. For the PeCM, a fire separation of 1 or 2 hours may be required (by the IBC) between occupancies, as part of the building's egress system, or at vertical openings.

Occupancy
As used herein, occupancy refers to the formal classification of occupancy included in the IBC, representing the primary purpose of the building, structure, or portion thereof.

Notes:

1. In this document, every referenced code section or table is from the IEBC unless labeled as IBC or other code.
2. The guide presents the authors' best understanding of application of the PeCM within the IEBC. Further clarification, confirmation, or questions should be directed to staff at the ICC.
3. Prior to beginning the PeCM process, all retroactive requirements in Chapter 11 of the *International Fire Code* should be identified. It is also recommended that prior to beginning the architectural Design Development phase for a project. a meeting with code officials be requested to review Schematic Design documents and the PeCM results.
4. The user should engage with the code officials for an architectural Schematic Design meeting, after completion of the PeCM but prior to beginning Design Development.
5. Within this document the following IEBC terms are capitalized for emphasis.

Evaluation Formulas
To determine whether the evaluation process results in a passing or failing final score, Table 1307.1 Mandatory Safety Scores for each of the three Safety Categories are subtracted from the total building scores as calculated for each of the three Safety Categories.

Mandatory Safety Scores
Pre-determined minimum scores for each of the three Safety Categories, varying by occupancy classification, are given in Table 1306.2.

Safety Parameters
21 pre-determined parameters used to numerically evaluate the level of safety provided by a building's existing or proposed conditions.

Building Score
The total score for each of the three Safety Categories using values calculated or pre-determined for each Safety Parameter in Table 1306.1.

Safety Categories
Fire Safety, Means of Egress, and General Safety columns in Tables 1306.1 and 1306.2.

Summary Sheet
In addition to providing basic building data, the Summary Sheet in Table 1306.1 provides total Building Scores for each of three Safety Categories (Fire Safety, Means of Egress, and General Safety) based on calculated or pre-determined values for 21 Safety Parameters.

B Purpose of the Guide

This guide is intended to encourage and facilitate the use of the Performance Compliance Method (PeCM) of the *International Existing Building Code* (IEBC). The PeCM has been shown to be a powerful and successful path that can lead to successful rehabilitation of historic buildings. However there is often hesitation and uncertainty in taking this route, largely due to lack of clarity in the process and how this method is applied. The goal of this document is to prevent common pitfalls, to clarify some of the potentially complicated overlapping requirements of the code, and to encourage creative yet permissible use of the system. It is recommended that the IEBC be open while using this guide.

The PeCM, an IEBC-accepted code compliance alternative since 2003, can also function as a design tool for a proposed rehabilitation project, or as a facility assessment tool for single or multiple buildings. This guide is written as if used as a design tool, whereby an iterative process can be used to explore potential design changes that would boost the values for specific Safety Parameters or identify more desirable building modifications that would result in a passing score for the building.

To successfully use this compliance method, it is essential that the user have experience with building and fire codes.

IEBC—The 2024 Edition

The guide is based on the 2024 edition of the IEBC and the 2024 editions of its companion codes: *International Building Code* (IBC), *International Fire Code* (IFC), *International Mechanical Code* (IMC), etc. The 2024 edition changed the numbering of sections and safety parameters of those included in the 2021 IEBC, although the safety parameters remain the same, as do their constituent parts and formulas, and their numbering sequence of 1 through 21.

All charts and equations included in this section are from the 2024 IEBC, unless noted otherwise.[1]

Scope of this Guide

The PeCM applies to the alteration, addition to, and change of occupancy of existing structures, including historic structures. Selection of this compliance method disallows simultaneous use of the Prescriptive Compliance Method (Chapter 5) or the Work Area Compliance Method (Chapters 6 through 12). While none of the provisions for historic buildings included in these two methods can be applied when using the PeCM, this compliance method is not a stand-alone process. Instead, the user must also:

1. Provide a structural analysis demonstrating that the entire building complies with Chapter 16 of the IBC. This analysis must include live and dead loads, snow loads, wind and seismic loads, etc. (Section 1304).
2. Demonstrate compliance with requirements applicable to all compliance methods, including new materials, accessibility, storm shelters, smoke alarms, addition and replacement of exterior wall coverings, and carbon monoxide detection (Chapter 3).

The PeCM applies only to the following existing or proposed occupancy groups: A, B, E, F, I-2, M, R, S, and U (when undergoing a change of occupancy). The PeCM does not apply to High-Hazard Group H or Institutional Group I-1, I-3, or I-4 occupancies, and this guide does not address Group I-2 occupancies.

The PeCM has been shown to be a powerful and successful path that can lead to successful rehabilitation of historic buildings.

Coordination with Other Codes

A project using the PeCM is also subject to the general provisions of the following codes:

1. *International Energy Conservation Code*
2. *International Fire Code*
3. *International Fuel Gas Code*
4. *International Mechanical Code*
5. *International Plumbing Code*
6. *International Private Sewage Disposal Code*
7. *International Property Maintenance Code*
8. *International Residential Code*
9. NNFPA 70 *National Electrical Code*

Where requirements in any of the above codes conflict with the IEBC, the IEBC provisions take precedence. Note also that local jurisdictions often adopt codes or other requirements other than those established in the ICC. The user should identify these applicable requirements early on in the code analysis.

C Components of the PeCM

The Safety Parameters

The overall safety of a building is dependent on more than its original construction features. Safety is also dependent on factors such as the ability of the occupants to exit, to receive alarms, and to have adequate time to exit a building. These factors are given numerical values, which in turn are incorporated into total building scores recorded on the Summary Sheet that indicate whether or not proposed building conditions will be code compliant.

1 An International Code Council subscription provides access to the commentary version of the code and the ability to copy text and tables from it.

The building scores are based solely on values assigned for the 21 Safety Parameters. "Although the evaluation process does not specifically evaluate every aspect of a building regulated by the IBC for new construction, these 21 Safety Parameters have been determined to be the most critical factors related to the minimum degree of fire and life safety and property protection needed in an existing building."[2] The parameters are listed below:

1. Building Height and Number of Stories (See Section 1305.2.1).
2. Building Area (See Section 1305.2.2).
3. Compartmentation (See Section 1305.2.3).
4. Tenant and Dwelling Unit Separations (See Section 1305.2.4).
5. Corridor Walls (See Section 1305.2.5).
6. Vertical Openings (See Section 1305.2.6).
7. HVAC (Heating, Ventilating, and Air-Conditioning) Systems (See Section 1305.2.7).
8. Automatic Fire Detection (See Section 1305.2.8).
9. Fire Alarm Systems (See Section 1305.2.9).
10. Smoke Control (See Section 1305.2.10).
11. Means of Egress Capacity and Number of Exits (See Section 1305.2.11).
12. Dead Ends (See Section 1305.2.12).
13. Maximum Exit Access Travel Distance to an Exit (See Section 1305.2.13).
14. Elevator Control (See Section 1305.2.14).
15. Means of Egress Emergency Lighting (See Section 1305.2.15).
16. Mixed Occupancies (See Section 1305.2.16).
17. Automatic Sprinklers (See Section 1305.2.17).
18. Standpipes (See Section 1305.2.18).
19. Incidental Uses (See Section 1305.2.19).
20. Smoke Compartmentation (See Section 1305.2.20).
21. Care Recipient Ability, Concentration, Smoke Compartment Location, and Ratio to Attendant (See Section 1305.2.21).

The last Safety Parameter applies only to Institutional Group I-2 occupancies.

The Building Scores

Each of the above Safety Parameters is assigned a value in each of the three Safety Categories:

- **Fire Safety.** Includes the structural fire resistance, automatic fire detection, fire alarm, automatic sprinkler systems, and fire suppression system features of the facility.
- **Means of Egress**. Includes the configuration, characteristics, and support features for means of egress in the facility.
- **General Safety.** Includes the fire safety parameters and the means of egress parameters.

Each Safety Category has a minimum building score that is attained from totaling individual values for the 21 Safety Parameters. The minimum building scores vary based on occupancy classification and are listed in Table 1306.2.

TABLE 1306.2 - MANDATORY SAFETY SCORES[3]

OCCUPANCY	Safety Categories		
	FIRE SAFETY (MFS)	MEANS OF EGRESS (MME)	GENERAL SAFETY (MGS)
A-1	20	31	31
A-2	21	32	32
A-3	22	33	33
A-4, E	29	40	40
B	30	40	40
F	24	34	34
I-2	19	34	34
M	23	40	40
R	21	38	38
S-1	19	29	29
S-2	29	39	39

The Code Commentary provides valuable context to the application of these values, by stating that:

> "…mandatory safety values are based on the scores considered to provide an overall acceptable level of safety in an existing building on which approval of the alterations, repairs, change of occupancy or addition can be based. This is the zero-based concept. ***The scores have been determined as representing one level of compliance higher than the code's minimum requirements for new construction (emphasis added). The mandatory safety scores are consistent with the idea of establishing an equivalent level of safety, even though the existing building is evaluated only for the 21 safety parameters."***[4]

Thus, a building project that passes the PeCM is considered a safe building to occupy.

2 2024 IEBC Commentary, Section 1305.2. 3 2024 IEBC, page 91. 4 2024 IEBC Commentary, Section 1306.2.

The Rookery, Chicago, IL, Photo Credit: Greg Galer

Several Safety Parameters are associated with large point values, both negative and positive, which can heavily impact the outcome of a project analysis.

One Summary Sheet or Several?

A primary means of increasing building safety is by retaining existing or providing new fire separations between different occupancies in the building.[5] Minimum fire separations are determined by applying IBC Table 508.4 and IEBC Table 1305.2.16, Mixed Occupancy values. While not a factor for buildings with a single occupancy, this will apply to the many buildings having more than one occupancy.

If the different occupancies will be adequately separated per the IBC or IEBC requirements, an individual Summary Sheet will be prepared for each occupancy. If the occupancies are inadequately separated, one Summary Sheet will be prepared for the entire building.

Separate Summary Sheets are not required for areas of the building where occupancies are separated per IBC 508.4 and no alterations or change of occupancy will occur.

Hint: Fire separations and Mixed Occupancy values (Section 1305.2.16) should be calculated at the beginning of the PeCM evaluation, as these establish the number of Summary Sheets that will be required.

Evaluating the Safety Parameters

Several Safety Parameters are associated with large point values, both negative and positive, which can heavily impact the outcome of a project analysis. This could be viewed as a drawback or as an opportunity.

For example, up to four negative points could be assigned in all Safety Categories if a building lacks an elevator—regardless of whether the elevator is required. As clarified in the IEBC, this addresses the needs of fire departments to reach all occupied floors of the building. (One-story buildings, including those with mezzanines served by an elevator, receive zero points.)

Depending on occupancy classification and other factors, compensating for negative points may be necessary to achieve the required minimum Building Score, and would have to be overcome with higher values for other Safety Parameters.

However, the negatives can be overcome, which is the intent of this code compliance process. Several aspects of the building can be modified to accumulate additional positive points sufficient to achieve the mandatory safety score in each of the three evaluation categories. For instance, if an Assembly occupancy lacks the required means of egress capacity or number of exits, the –10 value does not necessarily portend the need to add exits. Instead, that deficiency could be compensated for by modifications to another parameter, such as equipping the building with an automatic sprinkler or fire alarm system or constructing fire barriers.

Greater challenges arise with taller and larger buildings, and those with less fire-resistant construction types. For instance, a project with a four-story vertical opening in a Type IIIB, Residential Group R-2 occupancy building could be assigned–28 points in each safety category per Section 1305.2.6, Vertical Openings.

A Peek at the Summary Sheets

Figure 1 is an example of the top of a Summary Sheet which has been modified to address buildings with more than one story or occupancy. For these buildings, it is recommended that a Summary Sheet modeled on Table 1306.1 be created, providing required information for each floor of the building.

Values for each of the 21 Safety Parameters are established and entered into the Summary Sheet(s). Three Safety Parameters allow for interpolation when the actual conditions fall between the category-based values stipulated in the code: Table 1305.2.3, Compartmentation; Table 1305.2.12, Dead Ends; and Table 1305.2.16, Mixed Occupancies. While extra effort is required to establish interpolated values, these are particularly important in the final calculations if additional points are needed to establish a passing score. Examples of interpolation calculations are included in the Evaluating the Safety Parameters section of this guide.

Hint: Prepare draft Summary Sheets for each non-separated occupancy, then insert the lowest derived values into a final Summary Sheet. Creation of a spreadsheet will facilitate these independent analyses.

5 The hazard of mixed occupancies is greater with higher-density occupancies such as A-1 and A-2, and with residential occupancies where occupants might be sleeping. The required fire separations reduce the spread of fire.

TABLE 1306.1 SUMMARY SHEET EXAMPLE (Top of sheet only)
(Multiple occupancies, 4 floors plus basement)

1

PERFORMANCE COMPLIANCE METHOD					
Existing basement occupancy:	A-3	Proposed basement occupancy:	R-3	Basement – Incidental Use?	No
Existing 1st floor occupancy:	A-3	Proposed 1st floor occupancy:	A-3	1st floor – Incidental Use?	No
Existing 2nd floor occupancy:	N/A	Proposed 2nd floor occupancy:	N/A	2nd floor – Incidental Use?	N/A
Existing 3rd floor occupancy:	N/A	Proposed 3rd floor occupancy:	N/A	3rd floor– Incidental Use?	N/A
Existing 4th floor occupancy:	N/A	Proposed 4th floor occupancy:	N/A	4th floor – Incidental Use?	N/A
Year building was constructed	1903	Number of stories above grade:	1	Height in feet:	35
		Area of basement:	2,639		
Type of construction:	IIIB	Area of 1st floor:	2,825	Area of 3rd floor:	N/A
Percentage of open perimeter increase:	25%	Area of 2nd floor:	N/A	Area of 4th floor:	N/A
Completely suppressed	No	Corridor wall rating - Basement:	1-hr to <2-hr		
		Corridor wall rating – 1st floor:	<1-hr	Corridor wall rating – 3rd floor	N/A
		Corridor wall rating – 2nd floor:	N/A	Corridor wall rating – 4th floor:	N/A
Compartmentation:	Yes	Required door closers:	Yes		
Fire-resistance rating of vertical opening enclosures:	1 hour				
Type of HVAC system:	Boiler, no ducts	, serving number of floors:	2	ANY DEAD ENDS?	
Automatic fire detection:	Yes	Type and location:	SDs throughout	Basement:	No
Fire alarm system:	Yes	Type:	Manual	First floor:	No
Smoke control:	No	Type:	N/A	Second floor:	N/A
Adequate exit routes:	Yes	Elevator controls:	N/A	Third floor:	N/A
Maximum exit access travel distance:	100 feet	Mixed occupancies:	Yes	Fourth floor:	N/A
Means of egress emergency lighting:	Yes				
Standpipes:	No				
Smoke Compartmentation less than 22,500 s.f.	Yes		NOTE: Occupancy I-2 classification is not included above.		

Figure 1: The upper portion of the Summary Sheet catalogues and emphasizes building components that relate to scoring of the building. This example has been modified (where shaded) to document the features of the four floors, plus basement.

TABLE 1306.1 SUMMARY SHEET EXAMPLE (Bottom of sheet only)
(For multiple occupancies that are separated, multiple Summary Sheets are required)

Figures 2, 3, and 4 illustrate the bottom of the Summary Sheets for two scenarios: Figures 2 and 3 are for a mixed-use building where the two different occupancies are separated per the IBC. A Summary Sheet has been prepared for each occupancy. Figure 4 illustrates a mixed use building where the occupancies are not separated: in this instance a single Summary Sheet has been prepared for the entire building. Regardless of the number of Summary Sheets prepared, a passing score of zero or greater must be achieved in all three Safety Categories.

Figure 2: The lower portion of the Summary Sheet for the first floor of a building in which the occupancies (Assembly Group A-3 on the first floor, with Residential Group R-3 in the basement) are separated per the IBC. Note that passing scores are required for each occupancy included in the proposed project.

2

SUMMARY SHEET – Figure 2: THE FLOORS (OF DIFFERENT OCCUPANCIES) ARE SEPARATED PER IBC; THIS CHART IS FOR THE FIRST FLOOR ASSEMBLY GROUP A-3 OCCUPANCY ONLY			
SAFETY PARAMETERS	FIRE SAFETY (FS)	MEANS OF EGRESS (ME)	GENERAL SAFETY (GS)
1305.2.1 Building height	1.00	1.00	1.00
1305.2.2 Building area	11.00	11.00	11.00
1305.2.3 Compartmentation	17.48	17.48	17.48
1305.2.4 Tenant and dwelling unit separations	-3.00	-3.00	-3.00
1305.2.5 Corridor walls	-3.00	-3.00	-3.00
1305.2.6 Vertical openings	2.00	2.00	2.00
1305.2.7 HVAC systems	5.00	5.00	5.00
1305.2.8 Automatic fire detection	6.00	6.00	6.00
1305.2.9 Fire alarm system	-5.00	-5.00	-5.00
1305.2.10 Smoke control	n/a	0.00	0.00
1305.2.11 Means of egress	n/a	8.00	8.00
1305.2.12 Dead ends	n/a	2.00	2.00
1305.2.13 Maximum exit access travel distance	n/a	10.60	10.60
1305.2.14 Elevator control	-2.00	-2.00	-2.00
1305.2.15 Means of egress emergency lighting	n/a	0.00	0.00
1305.2.16 Mixed occupancies	-5.00	n/a	-5.00
1305.2.17 Automatic sprinklers	0.00	0.00	0.00
1305.2.18 Standpipes	0.00	0.00	0.00
1305.2.19 Incidental use	0.00	0.00	0.00
1305.2.20 Smoke compartmentation	0.00	0.00	0.00
ACTUAL TOTALS	24.48	50.08	45.08
MANDATORY SAFETY SCORE PER IEBC TABLE 1306.2	22.00	33.00	33.00
ACTUAL - MANDATORY	2.48	17.08	12.08
PASS/FAIL	PASS	PASS	PASS

TABLE 1306.1 SUMMARY SHEET EXAMPLE (Bottom of sheet only)
(Multiple occupancies, Separated; multiple Summary Sheets required)

3

SUMMARY SHEET – Figure 3: THE FLOORS (OF DIFFERENT OCCUPANCIES) ARE SEPARATED PER IBC; THIS CHART IS FOR THE BASEMENT GROUP R-3 OCCUPANCY ONLY			
SAFETY PARAMETERS	FIRE SAFETY (FS)	MEANS OF EGRESS (ME)	GENERAL SAFETY (GS)
1305.2.1 Building height	1.60	1.60	1.60
1305.2.2 Building area	10.50	10.50	10.50
1305.2.3 Compartmentation	21.67	21.67	21.67
1305.2.4 Tenant and dwelling unit separations	0.00	0.00	0.00
1305.2.5 Corridor walls	0.00	0.00	0.00
1305.2.6 Vertical openings	2.00	2.00	2.00
1305.2.7 HVAC systems	5.00	5.00	5.00
1305.2.8 Automatic fire detection	6.00	6.00	6.00
1305.2.9 Fire alarm system	-5.00	-5.00	-5.00
1305.2.10 Smoke control	n/a	0.00	0.00
1305.2.11 Means of egress	n/a	0.00	0.00
1305.2.12 Dead ends	n/a	2.00	2.00
1305.2.13 Maximum exit access travel distance	n/a	12.00	12.00
1305.2.14 Elevator control	-2.00	-2.00	-2.00
1305.2.15 Means of egress emergency lighting	n/a	0.00	0.00
1305.2.16 Mixed occupancies	-10.00	n/a	-10.00
1305.2.17 Automatic sprinklers	-6.00	-3.00	-6.00
1305.2.18 Standpipes	0.00	0.00	0.00
1305.2.19 Incidental use	0.00	0.00	0.00
1305.2.20 Smoke compartmentation	0.00	0.00	0.00
ACTUAL TOTALS	23.37	50.77	37.77
MANDATORY SAFETY SCORE PER IEBC TABLE 1306.2	21.00	38.00	38.00
ACTUAL - MANDATORY	2.77	12.77	-0.23
PASS/FAIL	PASS	PASS	FAIL

Figure 3: The lower portion of the Summary Sheet for the basement level of a building in which the occupancies (Assembly Group A-3 on the first floor, with Residential Group R-3 in the basement) are separated per the IBC. Note that passing scores are required for each occupancy included in the proposed project.

TABLE 1306.1 SUMMARY SHEET EXAMPLE (Bottom of sheet only)
(For multiple occupancies that are not separated, a single Summary Sheet is required)

4

SUMMARY SHEET – Figure 4: THE SUMMARY SHEET REFLECTS THE LOWEST VALUE OF EACH OCCUPANCY IN EACH CATEGORY			
SAFETY PARAMETERS	FIRE SAFETY (FS)	MEANS OF EGRESS (ME)	GENERAL SAFETY (GS)
1305.2.1 Building height	1.60	1.60	1.60
1305.2.2 Building area	11.00	11.00	11.00
1305.2.3 Compartmentation	13.26	13.26	13.26
1305.2.4 Tenant and dwelling unit separations	-3.00	-3.00	-3.00
1305.2.5 Corridor walls	-3.00	-3.00	-3.00
1305.2.6 Vertical openings	2.00	2.00	2.00
1305.2.7 HVAC systems	5.00	5.00	5.00
1305.2.8 Automatic fire detection	6.00	6.00	6.00
1305.2.9 Fire alarm system	-5.00	-5.00	-5.00
1305.2.10 Smoke control	n/a	0.00	0.00
1305.2.11 Means of egress	n/a	0.00	0.00
1305.2.12 Dead ends	n/a	2.00	2.00
1305.2.13 Maximum exit access travel distance	n/a	10.60	10.60
1305.2.14 Elevator control	-2.00	-2.00	-2.00
1305.2.15 Means of egress emergency lighting	n/a	0.00	0.00
1305.2.16 Mixed occupancies	0.00	n/a	0.00
1305.2.17 Automatic sprinklers	-6.00	-3.00	-6.00
1305.2.18 Standpipes	0.00	0.00	0.00
1305.2.19 Incidental use	0.00	0.00	0.00
1305.2.20 Smoke compartmentation	0.00	0.00	0.00
ACTUAL TOTALS	19.26	34.86	31.86
MANDATORY SAFETY SCORE PER IEBC TABLE 1306.2	22.00	33.00	33.00
ACTUAL - MANDATORY	-2.74	1.86	-1.14
PASS/FAIL	FAIL	PASS	FAIL

Figure 4: The lower portion of the Summary Sheet for a building in which the occupancies (Assembly A-3 and Residential R-3) are not separated per the IBC. The actual Safety Category scores shown are the lowest of all the occupancy scores. To pass, the low and negative scores (due to lack of fire separation and lack of an elevator to the second floor) could be compensated for if the building were compartmentalized, an automatic sprinkler system added in the basement residential area, or the corridor wall fire rating increased.

D Background Data Needed

Completing the PeCM analysis entails the evaluation process comprised of the following steps:

Step 1: Document Existing Conditions

Step 2: Gather Information from the IBC

Step 3: Calculate the Building Scores

3A: Determine the value for each Safety Parameter using the tables and/or formulas of the IEBC.

3B: Insert the values from Step 3A into Table 1306.1. Add the values for each Safety Score column to calculate each of the three building scores.

3C: Identify the Mandatory Safety Scores from Table 1306.2.

3D: Using Table 1307.1, subtract each Mandatory Safety Score (Step 3C) from the calculated Building Score (Step 3B) to determine Pass or Fail status for each Safety Category.

Steps 4+: If a zero or positive building score (indicating passing status) is calculated in all three Safety Categories, the building is in compliance and the evaluation is complete. If a negative building score (indicating failing status) is calculated in any of the three Safety Categories, determine whether increasing a positive value, or decreasing a negative value, in any of the individual Safety Parameters is possible to eliminate any negative building scores.

Before Beginning: Document Existing Conditions

While not all features of the building may be visible or accessible, existing condition information should be gathered prior to beginning the PeCM analysis. Original design drawings, as-builts, or drawings from previous rehabilitation projects, sounding of assemblies, and/or discreet removals to view material layers and hidden elements may be required to document existing construction as closely as possible. IEBC Resource A, *"Guidelines on Fire Ratings of Archaic Materials and Assemblies,"* may be a useful resource for establishing fire-resistance ratings of existing materials and assemblies.

Hint: Review the PeCM Safety Parameters (Sections 1305.2.1 through 1305.2.21) to determine a list of specific building characteristics to be documented at the site. Knowledge of these characteristics will be necessary to complete the PeCM. A sample list is shown below.

1. Basic dimensions and building data:
   a. Total building height (above grade); height per story
   b. Number of stories above grade
   c. Total building area; area per floor
   d. Building perimeter dimensions
   e. Distance to street, lot line, or adjacent building on property, noting where walls face open spaces at least 20 feet, and up to 30 feet, in width
   f. Length of exit access travel
   g. Means of egress capacity and number per Section 1305.2.11
   h. Lengths and widths of any dead-end corridors
2. Construction:
   a. Determine materials and thicknesses of existing wall and floor/ceiling assemblies.
   b. Determine materials and thicknesses of vertical opening enclosures: interior exit stairways or ramps, hoistways, escalator openings, and shaft enclosures within the building, and openings between two or more floors.
   c. Determine materials and thicknesses of enclosures of any incidental uses.
3. HVAC:
   a. Confirm existence of an HVAC system and characteristics per Section 1305.2.7.1 Categories a–e.
4. Fire Detection System:
   a. Confirm existence of an automatic fire detection system in accordance with current requirements.
   b. If not in accordance with current requirements, determine locations where smoke detectors exist.
5. Fire Alarm System:
   a. Confirm existence of fire alarm system in accordance with current requirements.
   b. If not in accordance with current requirements, determine locations and attributes of existing equipment, controls or communication system.
6. Smoke Control:
   a. Confirm existence of a smoke control system.
   b. Determine aspects of related systems or conditions per Section 1305.2.10.1 Categories a–f.
7. Elevator:
   a. Confirm existence of an elevator.
   b. Determine which floors the elevator connects.
   c. Determine emergency recall or in-car operation per Section 1305.2.14.1 Categories b–d.
8. Means of Egress Emergency Lighting:
   a. Determine whether means of egress lighting and exit signs have emergency power per Section 1305.2.15.1 Categories a–c.
9. Automatic Sprinklers:
   a. Determine existence and extent of automatic sprinkler systems per Section 1305.2.17.1 Categories a–f.
10. Standpipes:
    a. Determine existence and extent of standpipes per Section 1305.2.18.1 Categories a–d.

Before Beginning: Information from the IBC and IFC

The PeCM requires a methodical approach to a quantitative analysis of the building's ability to be safe. To complete the method's basic compliance equations, information from the IBC is required.

1. IBC Chapter 3: Occupancy classification—existing and proposed—for each floor or floor area.
2. IBC Chapter 5: Allowable building height and number of stories for each proposed (or existing, if retained) occupancy.
3. IBC Chapter 5: Allowable building area:
   a. Use Table 506.2 to determine the values associated with automatic sprinklers (or none).

      Hint: The user will return to this table if the consideration of using automatic sprinklers in the building changes during the course of the PeCM evaluation. It will be beneficial to document values associated with both options: use of a sprinkler system and lack of one.

   b. Calculate the percentage of building perimeter facing 20 to 25 feet of open space, the percentage facing 25 to 30 feet of open space, and the percentage facing 30 feet open space or greater.

   c. Use Table 506.3.3 to calculate the area frontage increase factor.
4. IBC Chapter 6: Construction type.
5. IBC Chapter 9: Sprinkler and standpipe requirements.
6. IBC Chapter 10: Occupancy load, means of egress: number, width(s), travel distances, dead-end corridors, etc.
7. IFC Chapter 11: Evaluate all the applicable retroactive requirements.

Hint: Retain all notes and calculations as backup, either in handwritten form or in a spreadsheet. Use of the latter facilitates making changes while calculating and modifying the Safety Scores.

E Evaluating the Safety Parameters

Hint: To establish the number of Summary Sheets required for the project, start with Section 1305.2.16, Mixed Occupancies.

Section 1305.2.1 Building Height and Number of Stories

Grade Plane Definition

The input data for height and number of stories in this section are relative to IBC allowable limits specifying "above grade plane." Grade plane is defined in Chapter 2 of the IBC as a:

> "…reference plane representing the average of finished ground level adjoining the building at exterior walls. Where the finished ground level slopes away from the exterior walls, the reference plane shall be established by the lowest points within the area between the building and the lot line or, where the lot line is more than 6 feet from the building, between the building and a point 6 feet from the building." [6]

Hint: When documenting the building's number of stories, note that what is referred to as a basement may in fact be considered by code a story above grade if the finished surface of the next floor above is more than 6 feet above grade plane or more than 12 feet above the finished ground level at any point.[7]

Input Data

Starting with IBC Table 504.3 (Allowable Building Height), match the occupancy classification to the construction type, and document the NS (not sprinklered) and S (sprinklered) values. Repeat this process for IBC Table 504.4 (Allowable Number of Stories above grade plane).

Hint: Calculating the values for both NS (no sprinkler system) and S (sprinkler system) may be useful as part of the final assessment of passing or failing status for the non-sprinklered building. It is possible that the addition of a sprinkler system is the most viable means to achieve a passing score.

Calculation

Calculate the values for Equations 13-1 and 13-2 based on the data from IBC Table 504.3 (Allowable Height) and Table 504.4 (Allowable Number of Stories). If the mixed occupancies are separated and separate Summary Sheets will be prepared, use the allowable height value for each separate applicable occupancy. If the occupancies are not separated and only one Summary Sheet will be prepared; select the lowest values, i.e., lowest allowable height, lowest number of stories, and smallest area of the applicable occupancies.

Output to Summary Sheet

In the row for Section 1305.2.1, enter the lesser of the values calculated from Equation 13-1 or 13-2, with a maximum value of 10, regardless of the values calculated from the equations. Most of the occupancies in Type IA construction are allowed an unlimited height (UL); they will be awarded the maximum value of 10. Enter this same value for each of the three Safety Categories: Fire Safety, Means of Egress, and General Safety.

Section 1305.2.2 Building Area

Input Data

Starting with IBC Table 506.2 (Allowable Area Factor), match the occupancy classification to the construction type. Document the value associated with NS (no sprinkler system), S1 (single-story sprinklered building) or SM (multi-storied sprinklered building.) Even if the building will be equipped with a sprinkler system, the NS value will be used in calculating the frontage increase factor, If.

Calculation

1. Calculate the frontage increase factor, If, per IBC Table 506.3. This is where the building perimeter and open space figures will be used.
2. Calculate the Allowable Area value, Equation 13-3, using At for the Tabular Allowable Area factor relating to the proposed sprinkler status of the building, and using NS for the Tabular Allowable Area factor for a non-sprinklered building. Note that this equation may change in the future, depending on the final decision related to the inclusion of an automatic sprinkler system.

6 2024 IBC, Chapter 2, Section 202 Definitions.

7 2024 IBC, Chapter 2, Section 202 Definitions.

3. Use the Allowable Area value to calculate the values for row 1305.2.2 of the Summary Sheet, based on:

   a. Equation 13-4 for a single occupancy building.

   b. Equation 13-5 for a multiple occupancy building with more than one occupancy or different occupancies per floor. See IBC Section 506 for treatment of buildings with more than three stories. Select the lowest value from all the occupancies for use below.

   c. Calculate the maximum allowable positive value at 50 percent of the Fire Safety Score given in Table 1306.2 for the occupancy classification.

   d. Compare the value from Equation 13-4 or 13-5 with the maximum allowable based on 50 percent of the Fire Safety Score. Occupancies of unlimited area (UL) will be assigned the maximum value of 10. Select the lowest value.

Output to Summary Sheet

In the row for Section 1305.2.2, use the lower value (from 3.d. above), even if negative, for all three Safety Categories.

Section 1305.2.3 Compartmentation

The Code Commentary explains this Safety Parameter as follows:

> "This section establishes and evaluates the compartments contained in an existing building by the effectiveness of the enclosing fire barrier walls and fire-resistant floor/ceiling assemblies. Larger compartments are considered to be a greater safety risk than smaller compartments because the entire compartment is assumed to be involved when a fire incident occurs in the compartment; therefore, a single fire incident affects a greater portion of the building at one time."[8]

Hint: Three Safety Parameters address separate aspects of building separations: Compartmentation (Section 1305.2.3), Tenant and Dwelling Unit Separations (Section 1305.2.4), and Corridor Walls (Section 1305.2.5). The values associated with each Safety Parameter are calculated and entered separately in Table 1306.1. Features evaluated in one Safety Parameter cannot be included in the calculation of the other two Safety Parameters. The compartment size ranges in Section 1305.2.3 are based on net area (excluding shafts, chases, stairways, walls, and columns).

Input Data

Starting with Table 1305.2.3, match the occupancy classification to the building's largest compartment size range and document the Compartmentation Value (CV). Linear interpolation, using intermediate values with up to two decimal points between whole integers, is acceptable and may gain a point or more for buildings with small compartments. (See example interpolation below.)

The Code Commentary provides a concise explanation of this approach:

> "The evaluation of the compartments contained in an existing building is a linear function allowing interpolation between the various categories. This approach allows the compartmentation value to increase or decrease consistent with the actual changes in compartment sizes. Such an adjustment removes the previously built-in bias against smaller-sized buildings. Higher compartmentation values are assigned to buildings with smaller compartments."[9]

Automatic Fire Shutter. Photo Credit: Marilyn Kaplan

Calculation

No calculation is required; however, interpolation (up to the maximum value of 22) is allowed for compartment areas that fall between the categories. In the following example, CV is the Compartmentation Value and CS is the Compartment Size.

Example of Interpolation: Mercantile Group M occupancy with a net floor plate of 3,500 square feet in a single compartment.

Interpolation Ratio = Point spread/CS spread = 6 / 2500 = 0.0024

- Point spread = 22 – 16 = 6
- CS spread = 5000 – 2500 = 2500 (between Categories d & e per Table 1305.2.3)

Interpolated CV Increase = Area Decrease x Interpolation Ratio = 1500 x 0.0024 = 3.6

- Area Decrease = 5000 – 3500 = 1500
- Interpolation Ratio, from above = 0.0024

Interpolated CV = CV (value per table) + Interpolated CV Increase = 16 + 3.6 = 19.6

Hint: To validate the interpolated CV calculated above, calculate starting with the Area Increase (vs. Area Decrease used above).

- Area Increase = 3500 – 2500 = 1000
- Interpolated CV Decrease = Area Increase x Ratio = 1000 x 0.0024 = 2.4
- Interpolated CV = 22 – 2.4 = 19.6

The 3.6 increase in CV from interpolation over the 16 determined

8 2024 IEBC Commentary, Section 1305.2.3.

9 2024 IEBC Commentary, Section 1305.2.3.

from a straight extraction from Table 1305.2.3 can have a substantial impact on the overall building score. Note that the calculation allows for two digits after the decimal point and does not accept the inaccuracy associated with rounding up or down to whole integers.[10]

Output to Summary Sheet
In the row for Section 1305.2.3, enter the value selected from Table 1305.2.3 or the interpolated CV number in all three Safety Categories. This value cannot exceed 22.

Section 1305.2.4 Tenant and Dwelling Unit Separations

Hint: See Section 1305.2.3.

Input Data
Starting with Table 1305.2.4, match the occupancy classification to the fire partition category and document the Separation Value (SV). Single tenant buildings, those with only one tenant within the floor area, and those without dwelling units receive a value of zero.

Calculation
No calculations are required.

Output to Summary Sheet
In the row for Section 1305.2.4, enter the SV from the table in each of the three Safety Categories.

Section 1305.2.5 Corridor Walls

Hint: See Section 1305.2.3.

Corridor walls are of specific concern in a fire event because corridors provide a narrow and confined exit path. Walls may be required to have minimum fire-resistance ratings in order to restrict the spread of fire into the corridor. IBC Section 1020 and Table 1020.2 (Corridor Fire-Resistance Rating) demonstrate the importance of these walls in the overall safety provided by the building. For occupancy groups A, B, E, F, M, S, and U with occupancy loads greater than 30, a minimum of a one-hour fire-resistance rating is required for the corridors if the building is not sprinklered: no rating is required if the building is sprinklered.

Residential Group R occupancies with greater than 10 occupants are required to be sprinklered and have corridor fire-resistance ratings of 0.5 or 1 hour, depending on the Group R occupancy subgroup and the type of automatic sprinkler system. For other occupancy classifications (except Institutional Group I-4) with greater than 30 occupants, corridors must be sprinklered.[11] If the Group A, B, E, F, M, S, or U occupant load is less than or equal to 30, or the Group R occupant load is less than or equal to 10, corridors are not required to be fire-separated.

Input Data
Starting with Table 1305.2.5, for Corridor Wall values not included in Section 1305.2.3 or 1305.2.4, match the occupancy classification with the fire-resistance category, and enter the value for this Safety Parameter. If a corridor wall is a component of a compartment, do not include it here. If the building has no corridor walls and the exits are accessed directly from the main tenant space, the Category c condition applies and the value is zero.

Calculation
No calculations are required.

Output to Summary Sheet
In the row for Section 1305.2.5, enter the value from the table in each of the three Safety Categories.

Section 1305.2.6 Vertical Openings

A prior publication which addressed this compliance method explained the issue associated with vertical openings as follows: "Stairs and other shafts act as chimneys that convey smoke upward and into corridors through the buildings. … Enclosed stairways control smoke movement."[12]

The Code Commentary stresses the importance of protected openings between floors and the point value associated with a building complying more closely with IBC:

> "Table 1305.2.6(1) assigns relative protection values based on the fire-resistance ratings of the vertical openings in a building. The lower the fire-resistance rating, the greater the hazard to the rest of the building. The table also reflects the varying levels of impact to an existing building based on the number of stories that are connected by unprotected openings. The greater the number of floors that are interconnected by unprotected openings, the greater the number of negative points assessed in the existing building's evaluation scores. The closer the building comes to meeting new construction requirements for shaft protection, the greater the number of positive points that can be accrued. Noncomplying, unenclosed vertical openings consistently show up as contributing factors in more extensive fire spread. Consequently, a ***substantial number of points are at risk in this parameter,*** which is intended to be an incentive to bring noncomplying situations into compliance with new construction requirements."[13]

In addition to the number of stories connected by a vertical opening with little protection, the value of this Safety Parameter is negatively impacted by the building's construction type by a factor ranging from 1.2 (Type I-A) to 7 (Type V-B).

When vertical openings are filled with stairs that are historic, character-defining features, it may be determined acceptable to sacrifice points and retain the open stair(s). Alternatively, this section provides the opportunity to limit the stair opening to just two floors.

Hint: IBC Section 712.1.9 lists six exceptions to the requirements for enclosure of two-story vertical openings, allowing for unprotected openings. Since this Safety Parameter has the potential of receiving –28 points, use of these exceptions can greatly increase this value.

10 IEBC Section 1305.2.1.
11 This summary excludes the occupancies not addressed in the PeCM and I-2.
12 Mel Green, *Building Codes for Existing and Historic Buildings* (Hoboken, New Jersey: John Wiley & Sons, Inc., 2012), page 158.
13 2024 IEBC Commentary, Section 1305.2.6. Bold and italics have been added.

Input Data
Starting with Table 1305.2.6 (1), find the protection category that represents the vertical opening in the building and select the associated value. If the building has two vertical openings that individually result in different values, the lower value must be used.

Table 1305.2.6 (1) provides the following Protection Values (PV), for use in the vertical opening formula below:

1. If the building has no protected openings, PV = –2 x number of floors connected. (This is a negative number.)

Table 1305.2.6 (2) below is used in combination with the above PV. Select the construction-type factor (CF) for the building.

TABLE 1305.2.6(2)—CONSTRUCTION-TYPE FACTOR

FACTOR	TYPE OF CONSTRUCTION								
	IA	IB	IIA	IIB	IIIA	IIIB	IV	VA	VB
	1.2	1.5	2.2	3.5	2.5	3.5	2.3	3.3	7

2. If the building's openings have less than 1 hour protection, PV = –1 x number of floors connected. (This is a negative number.)
3. For 1 hour to less than 2 hours of opening protection, PV = 1
4. For 2 hours or more of opening protection, PV = 2

Calculation
Compute the vertical opening value (VO) as follows:

VO = PV x CF

Output to Summary Sheet
In the row for Section 1305.2.6, enter the VO as calculated above, in each of the three Safety Categories. If the structure is a one-story building or if all the unenclosed vertical openings within the building conform to the requirements of IBC Section 712, enter a value of 2 in each of the three Safety Categories. Note that the maximum positive VO is 2.

Section 1305.2.7 HVAC Systems

The ability of the building's ducted mechanical system to resist delivering smoke and fire beyond the point of origin through ductwork or plenums can limit the fire hazard.

Input Data
The numerical values for Section 1305.2.7 are not provided in a table. Instead, the list of categories and values are summarized below. Note that these are generally organized in ascending order of compliance, and that the first three values are negative and will have a significant impact on the total building score.

1. Category a—Plenums not in accordance with Section 602 of the International Mechanical Code (IMC): –10 points.
2. Category b—Air movement in egress elements not in accordance with Section 1020.6 of the IBC: –5 points.
3. Category c—Both Categories a and b are applicable: –15 points.
4. Category d—Compliance of the HVAC system with IBC Section 1020.6 and IMC Section 602:[14] 0 points.
5. Category e—Systems serving one story; or a central boiler/chiller system without ductwork connecting two or more stories or where systems have no ductwork: +5 points.

The Code Commentary notes that these values are not occupancy-sensitive, since the spread of fire is dependent on the HVAC system present, and not on occupancy classification.

The following example from the Code Commentary is descriptive:

> "A Group R-2 apartment building is six stories in height. Each apartment has its own HVAC equipment located in the dwelling unit. Bathrooms are ventilated by fans connected to a central exhaust shaft; kitchen exhaust hoods connect to a central exhaust shaft serving all floors. Corridors have a direct outside-supply air system on each floor with no exhaust. The HVAC systems are classified as Category b because the corridors are being used as the makeup air source for the bathroom and kitchen exhausts. A score of –5 is, therefore, entered in Table 1306.1 for Safety Parameters, 1305.2.7 HVAC systems."

If the building has no mechanical system, a value of +5 will be entered, in compliance with Category e.

Calculation
No calculations are required.

Output to Summary Sheet
In the row for Section 1305.2.7, enter the applicable value from 1305.2.7.1 in each of the three Safety Categories.

14 IMC Section 602 requires all plenums (and materials in them) to be non-combustible, in compliance with IBC Section 703.3, or have flame-spread ratings no more than 25 or smoke-developed indexes no more than 50, with few exceptions.

Lighting of exits, fire detection and alarm, adequate egress capacity, and smoke control are among the key Safety Parameters considered in the Performance Compliance Method.

Historic theater exit signage. Photo Credit: Marilyn Kaplan

Section 1305.2.8 Automatic Fire Detection

An automatic fire detection system using smoke detectors is a critical fire safety feature. The large negative values applied to occupancies without such a system are evidence of the importance of this protection. For example, without automatic fire detection an Assembly Group A-2 occupancy would receive –25 points, while with full coverage, this occupancy would receive 9 points.

Input Data

Starting with Table 1305.2.8, match the occupancy classification to the Fire Detection category, and document the Automatic Fire Detection value.

Calculation

No calculations are required.

Output to Summary Sheet

In the row for Section 1305.2.8, enter the Automatic Fire Detection value in each of the three Safety Categories.

Section 1305.2.9 Fire Alarm Systems

As stated in the Code Commentary:

> "This section evaluates the capabilities of building fire alarm systems that are separate from the automatic fire detection system evaluated in Section 1305.2.8. A fire alarm system that is manually operated or automatically activated by smoke detectors or sprinkler water-flow devices, alerts the occupants to a fire condition. The fire alarm system will notify the occupants with visible or audible alarms so that they may begin to take appropriate action. These systems are of particular importance in assembly, business, educational or residential occupancies, which can have large numbers of occupants in rooms with concentrated seating or people who are sleeping."[15]

15 2024 IEBC Commentary, Section 1305.2.9.

Input Data

Starting with Table 1305.2.9, match the occupancy classification to the Fire Alarm System category, and document the Fire Alarm System value.

Calculation

No calculations are required.

Output to Summary Sheet

In the row for Section 1305.2.9, enter the fire alarm system value in each of the three safety categories. For Category b, if the building is equipped throughout with an automatic sprinkler system with an alarm system activated by a sprinkler water-flow device (which detects when water is flowing through the sprinkler system and notifies the fire department), add 2 points.

Section 1305.2.10 Smoke Control

This parameter evaluates the building's systems ability to evacuate, and control movement of, smoke from a fire.

Input Data

Starting with Table 1305.2.10, match the occupancy classification to the Smoke Control category and document the Smoke Control value.

Calculation

No calculations are required.

Output to Summary Sheet

In the row for Section 1305.2.10, enter the smoke control value from the table in only the Means of Egress and General Safety categories. Note a in Table 1305.2.10 may apply, indicating that even if the building has some level of smoke control, it will receive no credit if it lacks an automatic fire detection system complying with Category d or e in Section 1305.2.8.1. Category f addresses smoke management in stairways, in which one of the compliance measures is the use of operable exterior windows (typical of Main Street buildings across the U.S.).

Section 1305.2.11 Means of Egress Capacity and Number

This parameter evaluates the building's means of egress capacity and the number of exits available. It is necessary to check the following IBC sections for applicability: 1003.7, 1004, 1005, 1006, 1007, 1016.2, 1026.1, 1028.3, 1028.5, 1030.2, 1030.4, and 1031. IBC Section 1031 is for emergency escape and rescue openings (EERO), for which full compliance is required by the PeCM. IEBC variances from the full 5.7-square-foot minimum EERO size requirement are allowed for existing openings in the Prescriptive Compliance Method in Section 506.4 and in the Change of Occupancy (of the Work Area Compliance Method) in Section 1011.5.6. [16]

Input Data

Starting with Table 1305.2.11, match the occupancy classification to the Means of Egress category, and document the Means of Egress value.

Calculation

Calculate the minimum required means of egress capacity and number of exits, per IBC Section 1005, which provides the equation for exit width based on occupancy, taking into consideration whether the building is sprinklered (S) or not sprinklered (NS).

Note that positive point values are only achievable in Categories c, d, and e.

Output to Summary Sheet

In the row for Section 1305.2.11, enter the Means of Egress value in only the Means of Egress and General Safety categories. Note a in Table 1305.2.11 applies to Category a, where part of the building's exiting is provided by a fire escape; buildings in this category that are seven or more stories above grade plane will be penalized by 10 points.

Section 1305.2.12 Dead Ends

Dead-end access conditions are a concern in passageways and corridors where occupants may not realize that the corridor terminates and they may have to retrace their steps to reach an exit. This applies to spaces required to be served by more than one means of egress.

Input Data

Starting with Table 1305.2.12, match the occupancy classification to the Dead-End category. Document the Dead-End value.

Hint: Widening a corridor to achieve the length-to-width ratio of 2.5:1 effectively removes the dead-end status and gains 2 points based on compliance with Category c.

Calculation

In spaces required to be served by more than one means of egress, calculate the length of the exit access travel path in which the building occupants are confined to a single path of travel. Interpolation is allowed for dead-end corridor lengths that fall between the values provided in the table.

16 IEBC Section 506.4 and Section 1011.5.6 allow for reuse, in a change of occupancy, of an existing operable window of minimum net clear opening of 4 square feet, with a minimum net clear opening height of 22 inches and minimum net clear opening width of 20 inches.

Improper locking of emergency egress. Photo Credit: Marilyn Kaplan

Example of interpolation for a Mercantile Group M occupancy with a 10-foot-long dead-end corridor:

Interpolation Ratio = Point spread/Distance spread (between Category b and c) = 2/20 = 0.1

- Point spread: 2 – 0 = 2
- Dead-end distance spread: 20 – 0 = 20

Interpolated Dead-end value = Interpolation Ratio x Actual Distance = 0.1 x 10 = 1

- Interpolation Ratio = 0.1
- Actual Distance (AD): 10

Final Dead-end value (for Summary Sheet) = Interpolated Dead-end Value (between Categories b and c) plus tabulated value for Category b = 1 + 0 = 1

Output to Summary Sheet

In the row for Section 1305.2.12, enter the dead-end value or the final (interpolated) dead-end value in the Means of Egress and General Safety Categories.

Section 1305.2.13 Maximum Exit Access Travel Distance to an Exit

Input Data

The exit travel distance, as calculated in IBC Section 1017, is measured from the most remote point in the building to the nearest entrance to an exit. Total exit access travel distance in IBC Table 1017.2 includes travel within a room or space plus any exit access corridor travel to the exit. Some modifications to the requirements of IBC Table 1017.2 are provided for certain occupancy classifications and buildings.

Note that smaller buildings with shorter travel distances score well in this Safety Parameter.

Calculation

Equation 13-7 compares the actual travel distance to the maximum allowable travel distance (TD) per IBC Section 1017.

Example of a Mercantile Group M occupancy, non-sprinklered building, with actual maximum travel distance of 100 feet:

$$\text{Points} = \frac{20 \times (\text{Maximum allowable TD} - \text{Maximum actual TD})}{\text{Maximum allowable TD}}$$

Maximum allowable TD per IBC is 200 feet

$$\text{Points} = \frac{20 \times (200-100)}{200} = 10 \text{ points}$$

Output to Summary Sheet
In the row for Section 1305.2.13, enter the total point value from Equation 13-7 in the Means of Egress and General Safety Categories. There is no limit placed on this value.

Section 1305.2.14 Elevator Control

This section prioritizes firefighters' access to the upper levels of the building for firefighting and rescue operations, regardless of whether an elevator is required by the IBC.[17] Elevators with independently operated controls "… permit firefighters to access different floors other than the fire floor to attack a fire."[18] The Code Commentary adds that: "Freight elevators cannot be considered, since they may be in locations that do not provide ready access for fire department use. Emergency elevator operation must comply with the IFC for Phase I emergency recall and Phase II emergency in-car operation."[19] Single-story buildings receive a value of zero.

Input Data
In Table 1305.2.14, match the applicable Elevator Travel distance to the Elevator Control category, and document the Elevator Control value. If the building does not have an elevator, the distance from the primary elevator access level up to the highest occupied floor level (or down to the lowest) is used as the elevator travel distance. The highest values are given when the elevators comply with either Category c or d and at least one elevator complies with all the requirements for new construction and serves all occupied floor levels.

Based on the controls provided, or the lack of elevators, the appropriate category is determined.

Calculation
No calculations are required.

Output to Summary Sheet
In the row for Section 1305.2.14, enter the Elevator Control value in each of the three Safety Categories. Single-story buildings, including those with mezzanines served by an elevator, receive a value of zero.

Section 1305.2.15 Means of Egress Emergency Lighting

Proper lighting of the means of egress is essential for safe and effective evacuation of a building. If two or more exits are required, Category a (means of egress lighting and exit sign illumination are not provided with emergency power) is not permitted. Back-up batteries that provide at least 90 minutes of emergency power are allowed per IBC Section 2702 and included in Category b.

17 2024 IEBC Commentary, Section 1305.2.14.
18 Green, page 159.
19 2024 IEBC Commentary, Section 1305.2.14.

Proper lighting of the means of egress is essential for safe and effective evacuation of a building.

Input Data
Starting with Table 1305.2.15, match the applicable number of required exits to the Means of Egress Emergency Lighting category, and document the Means of Egress Emergency Lighting value.

The Code Commentary clarifies that Category c:

> "… is applicable when emergency power is provided for means-of-egress lighting and exit signs in excess of the minimum requirements for new construction. The emergency power requirements for new construction assume a power failure occurs in the building or somewhere in the building site. It does not assume that the power failure occurs at the source of power to the site (in other words, from the provider). If the emergency power provides full protection to the site or building during power failure, Category c is applicable."[20]

If the building is only required to have one exit, the maximum value is 1.

Calculation
No calculations are required.

Output to Summary Sheet
In the row for Section 1305.2.15, enter the Means of Egress Emergency Lighting value from the table in only the Means of Egress and General Safety Categories.

20 2024 IEBC Commentary, Section 1305.2.15.

Mixed use buildings on Main Street. Photo Credit: Marilyn Kaplan

Section 1305.2.16 Mixed Occupancy

Table 1305.2.16 requires matching of occupancy classification with the value provided in Categories a–c based on the level of fire separation provided. These categories demonstrate the severity of risk with a low separation rating. Occupancies separated by one-hour fire ratings (unless this is the maximum required by IBC Table 508.4) can be penalized by –10 points for occupancy groups A-1, A-2, or R; or –5 points for occupancy groups A-3, A-4, B, E, F, M, or S. Buildings without mixed occupancies, or complying with the separation requirements of IBC Section 508, receive a value of zero.

Hint: Valuable points may be available by providing at least twice the required fire separation value (per IBC Section 508.4): 10 points for A-1, A-2, or R; and 5 points for A-3, A-4, B, E, F, M, or S.

Input Data

The Code Commentary states:

> "… the relative risk of a building in or close to compliance with the provisions for separated mixed occupancies. Where mixed occupancies are not separated from each other, the risk from hazards is greater in high-density occupancies, such as Groups A-1 and A-2. This risk is also greater in residential occupancies because occupants may be sleeping and may not be fully alert. For this reason, inadequate separation is given greater negative values. In buildings with lower occupant loads and where the occupants are alert, the risks are relatively lower." [21]

21 2024 IEBC Commentary, Section 1305.2.16.

TABLE 1305.2.16—MIXED OCCUPANCY VALUES*

OCCUPANCY	CATEGORIES		
	a	b	c
A-1, A-2, R	-10	0	10
A-3, A-4, B, E, F, M, S	-5	0	5
I-2	NP	0	5

NP = Not Permitted.
a. For fire-resistance ratings between categories, the value shall be obtained by linear interpolation.

* For fire-resistance ratings between categories, the value shall be obtained by linear interpolation.

The categories for mixed occupancies are included here to explain the interpolation example below:

1. Category a—Occupancies separated by minimum 1-hour fire barriers or minimum 1-hour horizontal assemblies, or both.
2. Category b—Separations between occupancies in accordance with IBC Section 508.4.
3. Category c—Separations between occupancies having a fire-resistance rating of not less than twice that required by IBC Section 508.4.

Starting with Table 1305.2.16, match the applicable occupancy classification to the Mixed Occupancy category and document the Mixed Occupancy value.

Calculation

For existing or proposed fire separations between occupancies that fall between the above categories a through c, the footnote to Table 1305.2.16 allows for interpolation.

Example of interpolation for separation between Mercantile Group M and Residential Group R occupancies, non-sprinklered building:

- IBC Table 508.4: 2-hour required separation
- Existing Building: 3-hour actual separation

Interpolation for Mercantile Group M Occupancy

- Between Categories b and c (Table 1305.2.16); between values 0 and 5 (lesser value for Group M)
- Category b fire-resistance rating (per IBC): 2 hours
- Category c fire-resistance rating (twice that required by IBC): 4 hours

Interpolation Ratio = point spread/rating spread = 5 / 2 = 2.5

- Point spread = 5 – 0 = 5
- Rating spread = 4 – 2 = 2

Separation Spread = Actual – required separation = 3 – 2 = 1

- Actual separation = 3
- Required separation = 2

Interpolated Value = Interpolation Ratio x Separation Spread = 2.5 x 1

Interpolated Mixed Occupancy Value (Group M) = tabulated value (Category b) + Interpolated Value = 0 + 2.5 = 2.5

Interpolation for Residential Group R Occupancy

- Between Categories b and c (Table 1305.2.16); between values 0 and 10 (greater value for Group R)

Interpolation Ratio = point spread/rating spread = 10 / 2 = 5

- Point spread = 10
- Rating spread = 4 – 2 = 2

Separation Spread = Actual – required separation = 3 – 2 = 1

- Actual separation = 3
- Required separation = 2

Interpolated Value – Interpolation Ratio x Separation Spread = 5 x 1

Interpolated Mixed Occupancy value (Group R) = 0 + 5 = 5

Because the above occupancies are separated, a separate Summary Sheet will be completed for each use, with each sheet receiving its own value as calculated above.

Output to Summary Sheet
In the row for Section 1305.2.16, enter the Mixed Occupancy value from the table, or the calculated interpolated value, in only the Fire Safety and General Safety categories. If the occupancies are not adequately separated, a single Summary Sheet will be completed, using a Mixed Occupancy value of zero.

1305.2.17 Automatic Sprinklers

Automatic fire-extinguishing systems can suppress a fire before it spreads, reducing the threat to life and property. Modern codes permit greater exit distances for buildings outfitted with automatic extinguishing systems.[22]

Sprinkler systems can usually be successfully designed and installed without damaging the character-defining features and spaces of a building. The unique conditions of the building, the historic integrity of individual spaces, and the proposed changes to the building will determine if a system should be visible or completely concealed.

In this compliance method, providing an automatic sprinkler system can garner valuable points for a project while the lack of a system can cost many points. In a full rehabilitation project where finishes will be removed and the building's structure exposed, the economic feasibility of installing a sprinkler system is high. If not the case, either an exposed system may be appropriate or the expense of selective demolition and patching to install a concealed system justifiable. Ongoing savings on insurance premiums may also be factored in when weighing the installation and construction costs. Alternatively, acceptance of a lower score for this Safety Parameter might be balanced by higher scores in other Safety Parameters, such as fire separations, travel distances, etc.

Note: For the Sprinkler System value, Categories a and b cannot be selected if Category a of Section 1305.2.18 Standpipes is used. If both a sprinkler system and a standpipe system are required by IBC, at least one of these systems must be provided.

Input Data
Starting with Table 1305.2.17, match the occupancy classification to the Sprinkler System category, and document the Sprinkler System value. Since the evaluation of this parameter considers whether or not a sprinkler system is both required and provided, the Sprinkler System category requires use of IBC Section 903 to determine when a system is required (for new construction) based on occupancy, fire area size, and proximity to level of exit discharge. See also IFC Section 1103.5.

Hint: While some jurisdictions might exempt occupancies such as small-scale residential from the sprinkler system requirement, this section of the PeCM does not account for such an exemption.

Calculation
No calculations required.

22 Green, page 159.

Modern codes permit greater exit distances for buildings outfitted with automatic extinguishing systems.

Output to Summary Sheet
In the row for Section 1305.2.17, enter the full Sprinkler System value in the Fire Safety and General Safety Categories. Enter half the Sprinkler System value from the table in the Means of Egress Safety Category. (The IEBC Commentary justifies the half credit for egress "… because some credits for sprinklers are incorporated into the parameters for means-of-egress capacity, dead ends, and maximum travel distance to an exit." [23])

1305.2.18 Standpipes

Standpipe systems—typically located in stairwells—provide the means for the fire service to connect directly to the building's water supply. The current threshold requiring a standpipe system is high, with Class III systems required for buildings four stories or greater, buildings where the highest story is more than 30 feet above the lowest vehicle level access, or where the lowest story is more than 30 feet below the highest vehicle level access. Class I standpipes are also required for large assembly spaces with an occupant load of more than 1,000 persons. See also IFC Section 1103.6.

23 2024 IEBC Commentary, Section 1305.2.17.

Carefully located sprinkler head. Photo Credit: Marilyn Kaplan

Note: For Standpipe System value: Category a cannot be selected if either Category a or b of Section 1305.2.17 Automatic Sprinklers is used. If both a sprinkler system and a standpipe system are required by IBC, at least one of these systems must be provided.

Input Data
Starting with Table 1305.2.18, match the applicable occupancy classification to the Standpipe category and document the Standpipe System value. The evaluation of standpipes considers whether or not a standpipe system is both required and will be provided, per IBC Section 905, based on the occupancy classification and proximity to level of vehicle access.

Calculation
No calculations are required.

Output to Summary Sheet
In the row for Section 1305.2.18, enter the Standpipe System value in each of the three Safety Categories.

1305.2.19 Incidental Uses

IBC Section 509.1 defines Incidental Uses as "ancillary functions associated with a given occupancy that generally pose a greater level of risk to that occupancy and are limited to those uses specified in Table 509.1." These uses are limited to 10 percent of the building or floor area in which they are located. There is no minimum area, except for laundry rooms at 100 square feet. Furnace and boiler rooms (depending on size and output of equipment), refrigerant machinery rooms, paint shops, labs, and the like are considered Incidental Uses.

Incidental Use is distinguished from "accessory" use, which is ancillary to the primary occupancy, does not occupy more than 10 percent of the story on which it is located, and is not considered hazardous. Accessory uses are included with the main occupancy of the floor and typically not required to be separated from the main occupancy. Exceptions for occupancy groups H, I, and R apply.

Input Data
Starting with Table 1305.2.19, match the applicable Protection Requirement to the Protection Provided, and document the Incidental Use Area value. This compares the protection provided to the protection required. If there is more than one Incidental Use, the lowest associated score from the table is to be used.

Calculation
No calculations are required.

Output to Summary Sheet
In the row for Section 1305.2.19, enter the lowest Incidental Use Area value from the table in each of the three Safety Categories. If there are no specific Incidental Uses in the building or floor area being evaluated, the value is zero.

1305.2.20 Smoke Compartmentation

Note: This value is zero for all the occupancies addressed in this guide. Institutional Group I-2 occupancies are outside the scope of this document.

Input Data
Starting with Table 1305.2.20, match the occupancy classification to the Smoke Compartmentation category, and document a zero for the Smoke Compartmentation value in all instances.

Calculation
No calculations are required.

Output to Summary Sheet
In the row for Section 1305.2.20, enter the Smoke Compartmentation value of zero in each of the three Safety Categories.

1305.2.21 Care Recipient Ability, Concentration, Smoke Compartment Location, and Ratio to Attendant

Note: These values are for Institutional Group I-2 occupancies, outside the scope of this guide.

Output to Summary Sheet
In the rows for Sections 1305.2.21.1, 1305.2.21.2, and 1305.2.21.3, enter the value of zero in each of the three Safety Categories.

F Pass or Fail - Completing and Using the Summary Sheet(s)

Number of Summary Sheets

Depending on the separations required by the IBC, one or more Summary Sheet(s) is required:

1. One Summary Sheet will be prepared, regardless of the number of stories, if there is only one occupancy.
2. One Summary Sheet will be prepared if there are multiple occupancies which are not adequately separated. The lowest value established for each of the applicable occupancies for each Safety Category will be used in the final Summary Sheet.
3. Multiple Summary Sheets (one for each occupancy) will be prepared if there are multiple occupancies which are adequately separated.

The Mandatory Safety Scores

The minimum, Mandatory Safety Scores, based on occupancy classification, are included in Table 1306.2 for each of the three Safety Categories.

Completing the PeCM

The process is completed using evaluation formulas in Table 1307.1. The total building scores from the Summary Sheet and the Mandatory Safety Scores are entered for each of the three categories, and each Mandatory Safety Score is subtracted from the corresponding Summary Sheet building score. If the difference is zero or positive in all three Safety Categories, the project passes and the analysis is complete. If the difference is negative in one or more Safety Categories, the project fails.

If Failure is Encountered

As a design tool, the following steps may help in converting a failing project into one that passes.

1. Check the math.
2. Interpolate values, where allowed, if this has not already been done.
3. Identify opportunities to gain points based on the specifics of the building and project, including:
   a. Create small compartments with two-hour fire-resistance-rated separations.
   b. Provide an automatic fire sprinkler, or a standpipe, system.
   c. Upgrade or improve the automatic fire detection system beyond the required minimum.
   d. Upgrade or improve the fire alarm system beyond the required minimum.
   e. Provide required fire separations.
   f. Relocate or provide new exits to limit travel distance to an exit.
   g. Enclose the stairway(s), which will also reduce the travel distance.
   h. Widen exit access travel paths to reduce the length-to-width ratio to less than 2.5:1, eliminating dead ends.

For historic buildings, selection of the most appropriate and viable means to achieve a passing score will vary based on the unique aspects of the building, balanced with the goal of retaining character-defining features and spaces, and other factors such as budget, water availability, etc.

Meeting with Your Local Code Official

The user is encouraged to meet with the local code official once schematic design and related PeCM have been completed. At this early stage, code compliance challenges can be more easily conveyed, understood, and resolved. This is also a prime opportunity to confirm whether local jurisdiction code amendments or other requirements apply.

V.

CODE ENHANCEMENTS FOR HISTORIC BUILDINGS

This section of the report reflects the project's goal of advancing building codes to better support the continued use, reuse and adapted use of historic buildings.

- **A** The ICC Code Development Process (2027 I-Codes)
- **B** Proposal Development (2027 IEBC)
- **C** Beyond the 2027 Codes: Local Jurisdictions and the 2030 IEBC

In the United States, the authority to adopt building codes rests with the individual states, which exercise this authority differently. Some adopt statewide codes that are mandatory statewide. Some delegate the authority to local jurisdictions like cities and counties. Others have a hybrid approach, where some requirements are set at the state level while others, often more stringent, are adopted locally.

Most states and local jurisdictions do not develop their own codes, instead adopting and adapting national model codes such as those produced by the International Code Council (ICC). These model codes are updated on a three-year cycle through a lengthy public participation and hearing process (See graphics included in the Appendix to this report). Model codes have no authority until adopted by a state or local jurisdiction.

Jurisdictions vary in how closely their adopted codes adhere to the model codes. Some make significant modifications to respond to specific local conditions, while others make few or no modifications. Jurisdictions also vary on how quickly they move to adopt new model codes after they are published by the ICC. It is common practice for a jurisdiction's adoptions to lag by several code editions, or for the adopted code's title and year to reflect the date of the jurisdiction's adoption, rather than the year of the model code edition on which it is based. For example, the 2025 *Existing Building Code of New York State* is derived from the 2024 *International Existing Building Code.*

> **Jurisdictions vary in how closely their adopted codes adhere to the model codes.**

This regulatory landscape provides two opportunities for individuals and organizations to impact building codes and other construction:

Engage in the **model code development** process by bringing proposals for modification to the model code to the ICC. Since the model code is the basis for the adopted codes of most jurisdictions, this opportunity has the potential to impact the greatest number of buildings. However, since local adoption can lag by many years, this option has a lower potential for immediate impact.

Engage in **local code adoption** by providing resources or advocacy for the inclusion of modifications to the model code during the process of local adoptions. While local adoption has a much more limited impact in terms of number of buildings, it provides the opportunity for more immediate and localized impact.

In 2025, representatives of the APT Technical Committee on Codes and Standards (TC-Codes) worked on both opportunities simultaneously, balancing the potential for both broad and immediate impact. There is also a synergy between local and model code development. One of the best strategies for improving a code development proposal's chance for success in the model code development process is to get the proposal adopted at a local jurisdiction first.

A The ICC Code Development Process (2027 I-Codes)

Most of the ICC codes are developed in a public participation and hearing process with multiple phases. This process provides multiple opportunities for individuals and organizations to engage in the code development process as well as opportunities to correct errors or weaknesses of code proposals as identified in the public participation and hearing process.

For the 2027 edition of the codes, these phases were:

- **Committee Action Hearing 1 (CAH-1), April–May 2025:** Interested parties submitted code change proposals to the ICC in January 2025. Proposals included specific changes to the code language, a reason statement to support the change, and other supporting documentation. These proposals were heard at a public hearing where a Code Development Committee voted (based on simple majority) whether to approve or disapprove the proposal. In-person testimony was heard both in support and in opposition to the proposal. Approval was either "as submitted" in the proposal, or "as modified" by committee members or public floor modification during the hearing. See Appendix A: Summary of Proposed Code Changes through Code Action Hearing 2.

- **Committee Action Hearing 2 (CAH-2), October 2025**: Interested parties submitted comments on the proposals heard at CAH-1. Comments were limited to the proposals from the CAH-1 and related code sections. These comments were permitted to request a reversal from CAH-1—typically based on additional information—or modify proposals to improve them. In the case of proposals that had been disapproved at CAH-1, the comment could address the objections or problems identified at CAH-1. CAH-2 followed the format used for CAH-1, with public testimony followed by the Committee voting on the comments. See Appendix A.

- **Public Comment Hearing, April 2026:** Interested parties will be provided a final chance to submit a comment to modify the proposals and/or change their outcome from the first two hearings. The final hearing does not have a committee. Instead, ICC's voting members—government member representatives and honorary members—vote on submitted comments. Overturning a decision made by the Committee in CAH-1 or CAH-2 required a two-thirds majority of the voting members. For the current code cycle, 15,362 governmental member voting representatives, typically code officials at the 8,574 government agency members, are eligible to vote: voting rights do not extend to the 55,549 private sector members of the ICC, with the exception of the few individuals granted the rare designation as an honorary (voting) member.

B Proposal Development (2027 IEBC)

The APT Technical Committee had previously been engaged in code development activities and historical code research. Based on this advance work and discussion, the committee assembled a list of code proposal concepts, and a subset of this list was selected for development into full proposals for the 2027 IEBC development process. Code concepts were chosen based on how developed the concept was, the level of controversy that might be encountered, and the experience, skill, and ability of individual APT Technical Committee members to work on the proposal.

Simultaneously, two members of the APT Technical Committee, Marilyn Kaplan and Chris Rute, were invited to join a working group of the ICC's Building Code Action Committee (BCAC) given their previous engagement noted above (and their extensive code experience).[1] BCAC had formed the working group to explore a reorganization of the IEBC that would streamline and simplify the IEBC's multiple compliance paths. With additional support from Technical Committee member Sean Denniston, several APT proposals were adopted as new proposals from BCAC itself or incorporated into existing BCAC proposals.

Other APT Technical Committee code development proposals that were not accepted by BCAC were submitted as joint proposals between APT and the National Trust for Historic Preservation (NTHP). While these have a lower chance of success than those developed by BCAC, they do serve important long-term goals. Submitting a concept into the code development process socializes the idea and begins the process of getting participants familiar with the concept. It also provides an opportunity to learn about weaknesses and points of concern with the proposal, enabling these issues to be addressed later in the code development process or in future code development cycles or local adoption processes. Ultimately, the APT Technical Committee submitted or contributed to 23 proposals, four of which were submitted by APT with the NTHP. The outcomes of the two hearings, and full proposals, are included in Appendix A. The final outcome of all code proposals will be determined at the Public Comment Hearings in April 2026.

1 Code Action Committees (CACs) are standing internal ICC committees dedicated to an individual code and composed of technical and code development experts tasked with developing proposals for each code update cycle. While CAC proposals must follow the same code development and hearing process as proposals submitted by members of the public, those submitted by the CACs generally have a higher likelihood of success due to the breadth and level of expertise involved, and the CAC members' experience in the code development process.

C Beyond the 2027 Codes: Local Jurisdictions and the 2030 IEBC

Whether or not APT's code development proposals are successfully incorporated into the 2027 or future model codes, materials provided in the Appendix to this report are a valuable resource to jurisdictions considering local enhancements representing code concepts that the ICC was not yet willing to adopt into the model code. Also, since many jurisdictions will lag in their adoption of the 2027 IEBC in their adoption of the 2027 IEBC, these materials can support local efforts to integrate preservation-friendly enhancements into older editions of the IEBC.

The ICC code development process is methodical and runs over a long timeline. The APT Technical Committee will continue to research and develop additional code advancement opportunities for historic buildings, anticipating submission of additional code development proposals in 2028 for the 2030 code development cycle. The following are the APT Technical Committee's current priorities, which will continue to be discussed and refined.

1. **Provisional Code for Reuse of Vacant Buildings:** Over 9 cycles of code development, the increases in code stringency and complexity of application have introduced new barriers to the reuse of buildings. There is a large gap between absolute minimum provisions for occupancy included in the *International Property Maintenance Code* (IPMC) and the requirements of the IEBC. Moreover, the IPMC neither addresses rehabilitation projects nor is commonly used by jurisdictions.

   Given the nation's housing crisis, this gap merits evaluation and consideration of alternate approaches built on an evaluation of life and property loss data to determine which fire safety and other features are truly most significant. Data included in the National Fire Incident Reporting System (NFIRS) is a good starting point for evaluation.

2. **Update Historic Fire Risk Index System (HFRIS):** An alternate Performance Compliance Method for historic buildings was prepared in 1996 as part of an NCPTT grant.[2] The HFRIS ranked and averaged the Safety Parameters then in BOCA and in NFPA 101, and added parameters associated with historic significance. The approach embodied in the HFRIS should be re-evaluated and updated as appropriate, possibly as an alternative to the IEBC's current Performance Compliance Method for historic museums: note that this compliance method has largely been untouched since its first publication in 2003.

3. **Testing/Performance-Based Compliance:** Beyond the historic building provisions included in Chapter 3 that are applicable to all compliance paths, no historic building provisions are provided in the Performance Compliance Method. This appears to contrast with the recognition granted to historic buildings in the other two predominant compliance paths. Further study is recommended, possibly using as a starting point recently proposed changes developed in Aurora, Illinois, for their adoption of the 2024 IEBC.

4. **Building Performance Standards:** Many jurisdictions now realize that they cannot reach their climate goals by only regulating construction events through their energy conservation codes. In order to have a greater impact on the larger stock of existing buildings, some jurisdictions are considering adoption of Building Performance Standards (BPS). This policy mechanism regulates the actual performance of buildings, regardless of whether the building is going through regulated construction events. This new approach to the regulation of buildings raises questions about how these policies will impact historic buildings. APT Technical Committee co-chair Sean Denniston has been awarded a James Marston Fitch Fellowship to explore this issue, and the APT Technical Committee will support this project and review its outcomes.

5. **Embodied Carbon:** Embodied carbon is emerging as the next critical issue for sustainability building policy. It also presents an opportunity for historic preservation since the reuse of historic and other existing buildings provides a powerful opportunity to reduce embodied carbon emissions from the building sector. This topic has been identified as an area for focus by the APT Technical Committee and is a key opportunity for collaboration with the APT Technical Committee on Sustainable Preservation.

2 J. M. Watts and M.E. Kaplan, "Fire Risk Index for Historic Buildings," *Fire Technology,* vol. 38, no. 2, pp. 167-180, April 2001, doi: 10.1023/A:1011649802894.

Baltimore lofts, before and after. Photo Credit: Marie-Therese Giguere.

APT is effectively the singular organization working to reduce the burden of codes relative to the reuse of existing buildings while simultaneously not negatively impacting safety.

Future Engagement with the ICC Code Development Process

Experience gained from participating as proponents of code development proposals for the 2024 and 2027 model codes underscores the need for APT to become more active in ICC committees and as proponents of future code development proposals. APT is effectively the singular organization working to reduce the burden of codes relative to the reuse of existing buildings while simultaneously not negatively impacting safety. Having APT Technical Committee members serve on the Working Group of the Building Code Action Committee has enabled an earlier and more effective engagement in the code development process. Additionally, APT Technical Committee members Marilyn Kaplan's and Chris Rute's appointments as voting members of the IEBC Code Development Committee provided a more substantive role in decision-making relative to code development proposals. Through these activities, APT's building a reputation as a trusted resource on issues involving historic buildings will enable APT to be more effective with proposals in the future.

While, to date, APT's focus has been on the IEBC, engagement in other codes such as the *International Energy Conservation Code, International Fire Code,* and *International Property Maintenance Code* also has the potential to more broadly improve application of building codes to historic buildings. Moreover, given numerous IEBC references to the *International Building Code* (IBC) for structural and other provisions, engagement with the IBC may similarly be beneficial to historic structures.

At the beginning of each code cycle, announcements are made on the ICC website asking for applications for committee membership. As the 2030 code development process will begin shortly after the 2027 edition is published, this opportunity should be broadcast to all APT members.

Support from NCPTT for production of this report has provided an important opportunity for APT to consolidate its progress and understanding of the code development process and ways in which the codes can be more effectively applied to historic structures. Additionally, this report's detailed guidance on using the Performance Compliance Method will likely expand APT's future opportunities to engage in modifications to this analysis system that can further reduce barriers to the rehabilitation of existing and other historic buildings.

Bibliography

Green, Mel. *Building Codes for Existing and Historic Buildings.* Hoboken, New Jersey: John Wiley & Sons, Inc., 2012.

Kaplan, Marilyn. Preservation Brief 51: *Building Codes for Historic and Existing Buildings: Planning and Maximizing their Application.* Washington, D.C.: Technical Preservation Services, National Park Service, June 2024.

International Code Council, *International Existing Building Code and Commentary*), International Code Council, 2024.

International Code Council, *International Building Code and Commentary,* International Code Council, 2024.

APPENDIX A

Summary of Historic Preservation-related Proposed Code Changes to the 2027 *International Existing Building Code* through Code Action Hearings 1 and 2

APPENDIX A: SUMMARY OF PROPSED CODE CHANGES (10/31/25)
2027 INTERNATIONAL EXISTING BUILDING CODE

Appendix A presents historic preservation-related code development proposals submitted to the International Code Council's (ICC) Code Action Hearings (CAH) 1 and 2 for the 2027 *International Existing Building Code (IEBC)*. *Final action on these proposals is not included, as will be voted on in April 2026.*

In addition to documenting APT's activities in the development cycle for the 2027 IEBC, the full text and supporting materials are provided to assist jurisdictions seeking to modify or adapt the model code as part of its adoption process or in the creation of preservation-supporting local ordinances. *The content provided is in its original form, and has not been reformatted or edited.*

Notes:

1. For the historic preservation-related code development proposals, a summary of the outcome of Code Action Hearings 1 and 2 is provided. The final outcome will be as voted on by ICC eligible governmental agency voting members at the April 2026 Public Comment Hearing (PCH).

2. APT served as primary proponent for some of the historic-preservation related code development proposals: for others, APT representatives collaborated with the ICC's Building Code Action Committee (BCAC) Working Group for the IEBC. Working with BCAC, APT's participation influenced code development proposals accepted at CAH-1 and/or resubmitted at CAH-2. This appendix only represents proposals and comments that APT contributed to in a substantial way. Other relevant proposals and comments are not included in this appendix.

   APT will continue to engage in the code development process through the conclusion of the code development cycle in 2026.

3. Proposals that were Approved as Submitted (AS) or Approved as Modified (AM) at CAH-1, and that received no further action at CAH-2, are part of a larger 'Consent Agenda" to be voted on at the PCH.

4. Proposals (including those that had been Disapproved at CAH-1 or further modified) that were reheard at CAH-2 were either Disapproved, Approved as Modified, or received a vote of 'No Action,' leaving the opportunity for these to be addressed through Public Comment at the PCH.

5. Proposals approved at the April 2026 PCH will be incorporated into the 2027 model codes. Note that some section numbers and minor editing may occur as part of ICC staff coordination processes.

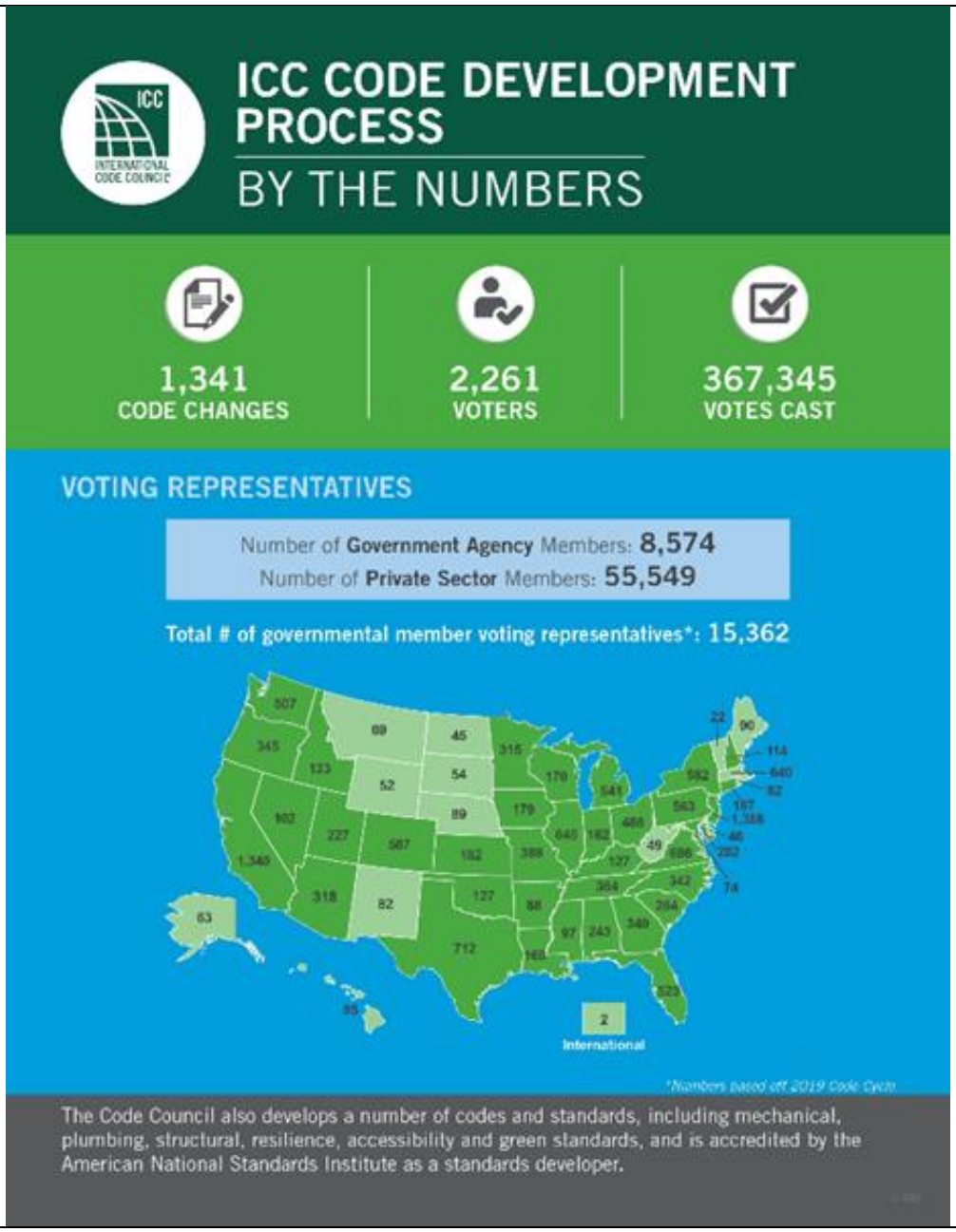
6. The full text of proposed historic preservation-related code development proposals as submitted is provided in this Appendix. The sole change is where the 'Summary' has been added directly below the code change proposal title.

7. The most significant proposed changes affecting historic buildings include:

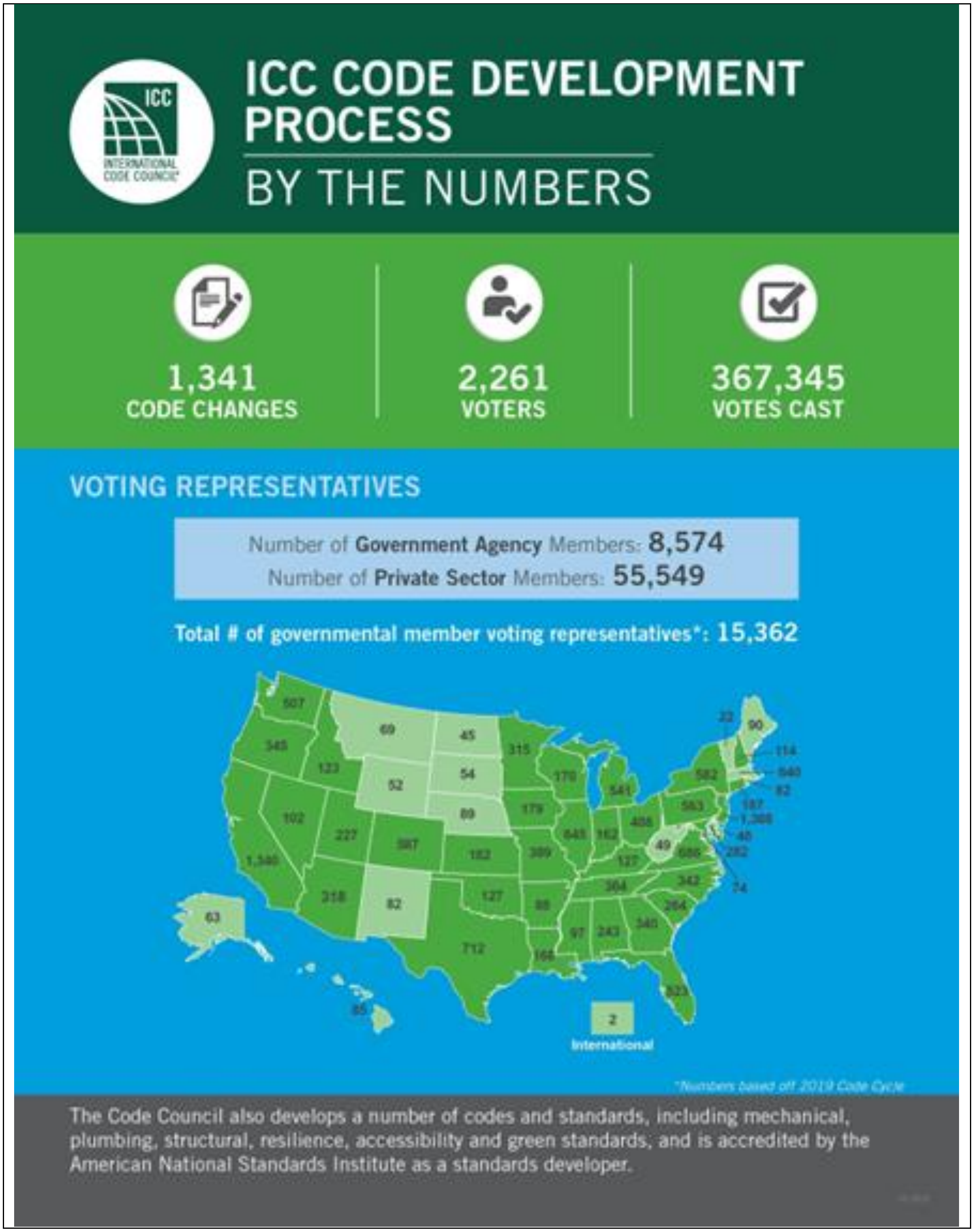
   - A reorganization of IEBC that relocates the starting point for all compliance paths available to historic buildings into a single chapter.

   - Chapter 3, Provisions for all Compliance Methods, has been substantially reworked to incorporate and align all requirements (ex., structural, accessibility, etc.) for existing buildings, regardless of compliance path chosen. (Previously, requirements varied by selected compliance path.)

   - For historic buildings; the term 'character-defining feature' has been defined and used to improve consistency.



Source: ICC website
https://www.iccsafe.org/wp-content/uploads/ICC_Code_Development_Process_INFO.jpg.webp


ICC
INTERNATIONAL CODE COUNCIL®
ICC CODE DEVELOPMENT PROCESS
BY THE NUMBERS
1,341
CODE CHANGES
2,261
VOTERS
367,345
VOTES CAST
VOTING REPRESENTATIVES
Number of Government Agency Members: 8,574
Number of Private Sector Members: 55,549
Total # of governmental member voting representatives*: 15,362
69
45
52
54
89
315
49
82
63
712
2
International
*Numbers based off 2019 Code Cycle
The Code Council also develops a number of codes and standards, including mechanical, plumbing, structural, resilience, accessibility and green standards, and is accredited by the American National Standards Institute as a standards developer.

2027 IEBC Code Development Proposals for Historic Buildings

CAH-1 = Code Hearing -1
CAH-2 = Code Hearing -2

D = Disapproved
AS = Approved as Submitted
AM = Approved as Modified
NA = No Action (available for PH)

Notes on Code Development Hearings and Voting:

CAH-1: Committees approve, approve with modifications, or disapprove each code change proposal.

CAH-2: Revisions to proposals reviewed at CAH-1 are presented and online comments considered. Committees approve or disapprove the original proposal based on comments submitted to approve with modifications, or confirm that 'no action' will be taken (retaining decision from CAH-1). During the hearing, floor modifications can be proposed to modify the submitted comments.

PC (Public Comment): Public comment may be submitted for only those proposals that received comment at CAH-2.

PCH: (Public Comment Hearing): Eligible voters (governmental members) attending vote on proposed changes. Voters can approve or disapprove the original proposal or the comment. No floor modifications are permitted.

Vote (Governmental Consensus Vote): Following PCH, and the in person voting at PCH, additional eligible voters vote online. Voting includes:

- Consent Agenda: Approved proposals from CAH-1 and CAH-2 grouped with single vote (approval/disapproval) cast. Excludes proposals that received a PC comment.
- Individual Proposals modified in the PC or PCH voted on. Final electronic vote can reverse only proposals that were modified in the PC.

Proposal #	Proposal	Proponent(s)	Outcome	
			CAH-1	CAH-2
ADM57-25	Limits demolition of unsafe historic buildings (*heard by Administrative Committee)*	APT/NTHP	D	NA
EB2-25	Creates a term "Character Defining Feature" to be used throughout the code	BCAC	AS	+Consent
EB6-25	Allows historic buildings to use the Historic Buildings chapter with all the compliance methods and not just the Work Area Compliance Method (note: replaced EB5)	BCAC	EB6-25 AS	AM (Comments 1, 2, 3 and 4)
EB8-25	Moves all provisions for historic buildings into single chapter	BCAC	AS	NA
EB112-25	Clarifies the relationship between the Historic Buildings chapter and the rest of the IEBC	BCAC	AM	+AM (comment 1)
EB 113	Clarifies the role and obligation of the design professional in identifying unsafe conditions in the historic building report.	J. Humble	D	NA
EB114-25	Revises and clarifies the requirements for the report required by the Historic Buildings chapter *(heard by Structural Committee*).	BCAC	D	NA
EB115-25	Combines "dangerous" and "unsafe" provisions in one place	BCAC	AS	+Consent
EB116-25	Where a change of use returns a space to a historic use, exempts the project from the full change of occupancy requirements	APT/NTHP	D	-Consent

EB117-25	Allows historic buildings to deviate from code requirements within a set de minimus range	APT/NTHP	D	-Consent
EB118-25	Allows damaged historic structural systems to be restored rather than meeting requirements for new construction	BCAC	AM	+Consent
EB119-25	Reorganizes the historic buildings chapter for greater clarity	BCAC	AS	+Consent
EB120-25	Clarifies the allowances for using historic stairways	BCAC	AS	+Consent
EB121-25	Clarifies existing requirements for dimensions in means of egress in Historic Buildings chapter	BCAC	AS	+Consent
EB122-25	Clarifies existing requirements for historic transoms in Historic Buildings chapter	BCAC	AS	+Consent
EB123-25	Clarifies requirements for character defining interior finishes in Historic Buildings chapter	BCAC	AS	+Consent
EB124-25	Expands when existing character defining interior finishes can be used as one-hour assemblies	BCAC	D	AM (comment 1)
EB125-25	Leverages new “character defining feature” definition in requirements for historic glazing	BCAC	AS	+Consent
EB126-25	Leverages new “character defining feature” definition in requirements for exit signs	BCAC	AS	+Consent
EB127-25	Clarifies requirements for automatic sprinkler systems in historic buildings	BCAC	AS	+Consent
EB129-25	Leverages new “character defining feature” definition in requirements for natural light	BCAC	AS	+Consent
EB130-25	Clarifies and reorganizes requirements for relocated historic buildings	BCAC	AS	+Consent
EB132-25	Expands allowances for single-exit buildings for historic buildings	APT/NTHP	D	NA

ADM57-25

Summary: Limits demolition of unsafe historic buildings (heard by Administrative Committee)

CAH-1: Disapproved
CAH-2: None-PC (Public Comment)

CAH-2: Comment:

IEBC: [A] 117.1, 1201.5.1 (New)

Proponents: Sean Denniston, Heritage Green Consulting, representing Association for Preservation Technology (sean@heritagegreenconsulting.com) requests As Modified by Committee (AMC2)

Replace as follows:

2024 International Existing Building Code

[A]117.1 General. When the *code official* determines any structure is so old, dilapidated or has become so out of repair and is dangerous, unsafe, insanitary and otherwise unfit for human habitation or occupancy the *code official* can order either of the following:

1. The code official is permitted to authorize the owner or owner's authorized agent to make the structure safe by *repairs* in order to make the structure safe and sanitary. Where there has been a cessation of construction repairs of any structure for a period of more than 2 years, the structure will be ordered demolished and removed.

2. The code official is permitted to order the owner or owner's authorized agent to demolish and remove any such structure. Demolition orders of *historic buildings* shall be in accordance with Section 1201.5.1.

1201.5.1Demolition of unsafe *historic buildings*. A *historic building* shall only be ordered demolished by the code official where it poses an imminent danger to public safety that cannot be remedied through securing the *building* site.

Reason:

ADM57-25 was disproved at CAH1 by only one vote. During the committee discussion, there appeared to be a misunderstanding of the purpose of the proposal. A comment was made that unfit historic buildings had 2 years to make repairs and remedy unsafe conditions and that should be sufficient. The purpose of this proposal is not to give more time to owners of historic buildings who are operating in good faith to render their buildings safe. The purpose is to prevent building owners from attempting to use this section - whether through bad faith efforts to allow their buildings to deteriorate or in more opportunistic circumstances - in order to circumvent preservation protections for the historic building.

This comment does make 2 modifications for greater usability and enforceability:

1. It moves the conditions for demolition order of a historic building to the section of the historic buildings chapter (1205) that deals with unsafe conditions in order to consolidate requirements for unsafe buildings for greater usability by the code user.
2. It broadens the conditions under which a code official can order demolition. The original proposal limited demolitions to buildings that posed an immanent danger to the public that could not be remedied through any means other than demolition. However, this left limited guard rails since nearly any unsafe condition can be remedied provided sufficient time and budget. Therefore, the comment only limits the demolition order to situations where there is no immanent danger or the immanent danger cannot be managed

through securing the site, which means that it cannot be managed reasonably quickly. This will improve enforceability.

Cost Impact:

The change proposal is editorial in nature or a clarification and has no cost impact on the cost of construction

Justification for no cost impact: The proposal impacts procedure. It may decrease the cost of enforcement.

Comment (CAH2)# 1215

CAH-1: Proposal

IEBC: [A] 117.1

Proponents: Sean Denniston, Heritage Green Consulting, representing Association for Preservation Technology (sean@heritagegreenconsulting.com); James Lindberg, representing National Trust for Historic Preservation (jlindberg@savingplaces.org)

2024 International Existing Building Code

Revise as follows:

[A]117.1 General. When the code official determines any structure is so old, dilapidated or has become so out of repair and is dangerous, unsafe, insanitary and otherwise unfit for human habitation or occupancy the code official can order either of the following:

1.The code official is permitted to authorize the owner or owner's authorized agent to make the structure safe by repairs in order to make the structure safe and sanitary. Where there has been a cessation of construction repairs of any structure for a period of more than 2 years, the structure will be ordered demolished and removed.

2.The code official is permitted to order the owner or owner's authorized agent to demolish and remove any such structure.

Exception: A historic building shall only be ordered demolished by the code official where it poses an imminent danger to public safety that cannot be remedied through means other than demolition.

Reason:

Many jurisdictions have historic preservation requirements in their municipal or building codes intended to protect the historic character and integrity of historic buildings. These regulations typically include restrictions on the demolition of historic buildings. These vary in stringency, but generally make demolishing a historic building more difficult than demolishing non-historic buildings. These restrictions generally require the owner to demonstrate that the historic building meets some criteria for technical or financial infeasibility before the historic building can be demolished. However, these restrictions also typically include an exception for buildings that have been found unsafe/unfit and ordered demolished by the building official. Here is an example from Vancouver, WA (VMC 20.510.050(A)(3)):

"A structure as identified above (ed: a historic building) shall not be demolished except in the following manner:

3. Demolition of Unsafe Buildings. If the City Building Official has found the structure to be unsafe under the provisions of Chapter 17.32 VMC, Unfit Buildings and Premises Code, and has ordered that the structure be demolished."

Or this example from the City of Milwaukee's historic preservation regulations (320-21-16):

"EMERGENCY RAZING NOT PROHIBITED. Nothing contained in this section shall prohibit the demolition of a structure for which a court order has been issued or for which the commissioner of neighborhood services has issued an emergency raze order under s. 218-4.5."

These kinds of exceptions to historic building demolition restrictions make sense, as we do not want preservation requirements in the code to create a barrier to the jurisdiction protecting public safety. However, they also create significant problems. The historic building owner who knows that their building doesn't meet the requirements for demolition under the jurisdiction's preservation regulation is incentivized to try to get the jurisdiction to order demolition in order to avoid those restrictions. In fact, they are even incentivized to allow their building to deteriorate to the point that it will qualify as unsafe. This creates very significant problems for preservation, for public safety and for code officials.

The first problem is for preservation. Communities enact historic preservation ordinances to protect their local cultural heritage. One of the most important protections is the one against the loss of historic buildings to demolition. If there is an end-run around these demolition restrictions, particularly a path that does not require engagement with preservation authorities, then those protections are significantly weakened. Any building owner that wants to demolish a historic building can just allow their building to deteriorate to the point of unsafeness and negate the protections on their building. This "demolition by neglect" is a long-established issue faced by preservationists.

The second problem is for public safety. The potential end-run around preservation regulations creates an incentive for owners to allow their buildings to become unsafe. That building will likely pose risks to public safety long before it reaches the state where they can be considered unsafe or where they come to the attention of the code official. Disinvestment in the building also then creates a drag on the value of neighboring buildings and economic viability of the neighborhood.

The third problem is for code officials. This path around preservation requirements goes straight through the code official. Code officials can be pressured by building owners to condemn their buildings. They may even find themselves being accused of neglecting public safety if they don't, in an effort to shift the blame for the hazard from the owner to the building official. This is exactly what is happening in Vancouver, WA. In Vancouver, permits for the demolition of certain historic buildings requires meeting a set of requirements to determine financial infeasibility of preservation (VMC 20.510.050(A)(3)). These are substantially more stringent than the standards for a demolition order for an unsafe building. Since 2020, the owners of four historic buildings with demolition restrictions on them have requested that the code official find these buildings unfit and order their demolition, which has created significant backlash from the preservation community (as seen in the discussions at Historic Preservation Commission meetings).

This proposal addresses these issues through a simple modification to Section 117. Section 117 gives the code official two options for an unsafe building: order repair or order demolition. The exception makes it clear that the code official can only order demolition of a historic building (a defined term in the I-Codes) if the historic building poses an immanent danger to public safety that cannot be remedied through means other than demolition. This eliminates the potential conflict between this code section and local preservation regulations, and the likelihood of the code official getting caught between preservation regulations/authorities and an owner seeking to circumvent them. The proposed wording ensures that the code official does not lose the authority to protect public safety. If an unsafe historic building poses an immanent threat to public safety, the code official can still order demolition if that is the only means of remedying the danger.

This proposal is submitted by the Association for Preservation Technology and the National Trust for Historic Preservation and further supported by Main Street America, National Trust Community Investment Corporation and RePurpose Capital (see attached letter of support), which represent a significant portion of national historic preservation organizations.

Bibliography:

1. Ellenbecker, L. (2022, November 17). "Vancouver's historic Providence Academy smokestack to be removed." The Columbian. https://www.columbian.com/news/2021/oct/18/providence-academy-smokestack-to-be-removed/

2. Goldwyn, A. M. (1995). Demolition by Neglect: A Loophole in Preservation Policy. University of Pennsylvania, 1995, Philadelphia.
3. "Minutes of the Clark County Historic Preservation Commission Meeting." Clark County, 11/4/2020, Vancouver, WA.

Cost Impact:

The change proposal is editorial in nature or a clarification and has no cost impact on the cost of construction.

Justification for no cost impact: The proposal impacts procedure. It may decrease the cost of enforcement.

Attached Files

- Support for amendments to IEBC.pdf
  https://www.cdpaccess.com/proposal/11776/35734/files/download/9280/

EB2-25

Summary: Creates a term "Character Defining Feature" to be used throughout the code.

CAH-1: Approved as Submitted
CAH-2: Approved (Consent Agenda)

CAH-1: Proposal

IEBC: SECTION 202 (New)

Proponents: Jeff Grove, Chair, representing BCAC (bcac@iccsafe.org)

2024 International Existing Building Code

Add new definition as follows:

CHARACTER DEFINING FEATURE. Visual aspects and physical features that comprise the appearance and historic significance of the historic building, such as the overall shape of the building, its materials, craftsmanship, decorative details, interior spaces and features, as well as the various aspects of its site and environment.

Reason:

Current text uses a variety of unspecific terms to establish when special consideration will be given to historic materials.

The proposed term is used by the professionals working in the historic preservation field (local, state, national), and has been reviewed by the federal National Park Service, involved in all projects using historic tax incentives, and responsible for the National Register of Historic Places (NRHP): the ICC codes reference the NRHP to define what buildings are considered historic.

By adding the proposed definition, the code official is relieved of the responsibility of identifying historic materials and a single definition is used in lieu of current language that is vague and inconsistent:

1203.5 "…where it is demonstrated that they are historic finishes."

1203.8 "Historic glazing materials…"

1203.10.12 "…replaced in a manner that will preserve the historic appearance…"

1203.11 "… would damage the historic character…"

1203.14. "…lead to a loss of historic character…"

The proposed code change for Section 1201.2 Report, uses this definition in determining how historic materials would be identified and documented by the registered design professional or, in the case of buildings covered in the scope of the International Residential Code, by the owner.

This is one of a group of code change proposals related to IEBC Chapter 12 Historic buildings. While they work together, each proposal can stand on it's own merit. Please see the proposal for the reorganization of this chapter for a clean copy of what this chapter would look like if all the proposals pass.

This proposal is submitted by the ICC Building Code Action Committee (BCAC).

BCAC was established by the ICC Board of Directors in July 2011 to pursue opportunities to improve and enhance assigned International Codes or portions thereof. In 2023 and 2024 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 BCAC webpage.

Cost Impact:

The change proposal is editorial in nature or a clarification and has no cost impact on the cost of construction

Justification for no cost impact: This is a definition. It does not change construction requirements.

EB6-25

Summary: Allows historic buildings to use the Historic Buildings chapter with all the compliance methods and not just the Work Area Compliance Method (note: replaced EB5).

CAH-1: Approved as Submitted
CAH-2: Approved As Modified by comments

CAH-2: Comment 1

IEBC: SECTION 106, [A] 106.2.1, CHAPTER 3, SECTION 301, 301.1, 301.1.1 (New), 301.2, 301.3, 501.1, 601.1, 1101.4, 1201.1, 1301.1

Proponents: Jeff Grove, Chair, representing BCAC (bcac@iccsafe.org); Grant Ullrich, City of Chicago, representing Self (grant.ullrich@cityofchicago.org) requests As Modified by Committee (AMC2)

Further modify as follows:

2024 International Existing Building Code

SECTION 106 CONSTRUCTION DOCUMENTS

[A]106.2.1 Construction documents. Construction documents shall be dimensioned and drawn on suitable material. Electronic media documents are permitted to be submitted where *approved* by the *code official*. Construction documents shall be of sufficient clarity to indicate the location, nature and extent of the work proposed and show in detail that it will conform to the provisions of this code and relevant laws, ordinances, rules and regulations, as determined by the *code official*. The *work areas* and the compliance method shall be shown.

CHAPTER 3
PROVISIONS FOR ALL COMPLIANCE METHODS

SECTION 301 GENERAL

301.1 Scope. *Repairs, alterations*, *changes of occupancy*, *additions* to and relocations of *existing buildings* shall comply with Section 301.2, 301.3 or 301.4. Sections 302 through 309 shall apply to all work.

301.1.1Selection of Compliance Method . The applicant shall indicate on the construction documents the compliance method that will be applied to the building.

301.2 Repairs. *Repairs* shall comply with Chapter 4.

301.3 Alterations, changes of occupancy and additions. As selected by the applicant, *alterations* ~~*Alterations*~~, *changes of occupancy* and *additions* shall comply with one of the methods listed in Section 301.3.1, 301.3.2 or 301.3.3 ~~as selected by the applicant~~. Sections 301.3.1 through 301.3.3 shall not be applied in combination with each other.

Exception: Subject to the approval of the *code official*, *alterations* complying with the laws in existence at the time the building or the affected portion of the building was built shall be considered in compliance with this code. New structural members added as part of the *alteration* shall comply with the *International Building Code*. This exception shall not apply to the following:

1.*Alterations* for accessibility required by Section 306.

2.*Alterations* that constitute *substantial improvement* in *flood hazard areas*, which shall comply with Sections 503.2, 701.3 or 1303.1.3.

3.Structural provisions of Section 304, Chapter 5 or to the structural provisions of Sections 706, 805 and 906.

501.1 Scope. Where the applicant has selected the prescriptive compliance method, *alterations, changes of occupancy,* and *additions* to *existing buildings* , including *historic buildings,* shall comply with this chapter.

601.1 Scope. Where the applicant has selected the work area compliance method, *alterations*, *changes of occupancy* and *additions* to *existing buildings*, including *historic buildings*, shall comply with this chapter.

~~1101.4Other work~~ .

Any ~~*repair*~~ or ~~*alteration*~~ work within an ~~*existing building*~~ to which an ~~*addition*~~ is being made shall comply with the applicable requirements for the work as classified in Chapter 6.

1201.1 Scope. Where use of this chapter is elected by the applicant, *historic buildings* shall be permitted to comply with this chapter instead of the corresponding provisions in Chapters 3, 4, 7 through 11 and 14. .

1301.1 Scope. Where the applicant has selected the performance compliance method, *alterations*, *changes of occupancy* and *additions* to *existing buildings*, including *historic buildings*, shall comply with this chapter.

Reason:

During the testimony, one of the questions was about how a code official would know which compliance method was chosen. We feel that requiring that information on the construction documents would address that issue.

New Section 301.1.1 states that the compliance method chosen should be identified in the construction documents. This will speed up review of existing building projects, especially as a building is modified over time. The changes in Section 106.2.1 also requires this in the information on the construction drawings.

Section 301.3 already states that the applicant chooses the method. This is moved to the front of the sentence to make this more obvious. This is restated at the beginning of each compliance method – Chapter 5, 6 and 13 as a reminder.

Section 1101.4 is deleted in the additions chapter for the Work area method since this is already addressed in other chapters.

Cost Impact:

The change proposal is editorial in nature or a clarification and has no cost impact on the cost of construction

Justification for no cost impact:

This change is asking for information on permits and construction documents. There are no change in construction requirement.

Comment (CAH2)# 860

CAH-2: Comment 2

IEBC: CHAPTER 4, 401.1, CHAPTER 5, 501.1, CHAPTER 6, 601.1, CHAPTER 7, 701.1, CHAPTER 8, 801.1, CHAPTER 9, 901.1, CHAPTER 10, 1001.1, 1001.2.1, CHAPTER 11, 1101.1, CHAPTER 13, 1301.1, CHAPTER 14, 1401.1

Proponents: Jeff Grove, Chair, representing BCAC (bcac@iccsafe.org); Grant Ullrich, City of Chicago, representing Self (grant.ullrich@cityofchicago.org) requests As Modified by Committee (AMC2)

Further modify as follows:

2024 International Existing Building Code

CHAPTER 4
REPAIRS

401.1 Scope. *Repairs* shall comply with this chapter. ~~*Repairs* to *historic buildings* need only comply with Chapter 12.~~

Exception: Historic buildings shall comply with this chapter except as modified in Chapter 12.

CHAPTER 5
PRESCRIPTIVE COMPLIANCE METHOD

501.1 Scope. Where the applicant has selected the prescriptive compliance method, *alterations, changes of occupancy,* and *additions* to *existing buildings*, ~~including *historic buildings,*~~ shall comply with this chapter.

Exception: Historic buildings shall comply with this chapter except as modified in Chapter 12.

CHAPTER 6
WORK AREA COMPLIANCE METHOD

601.1 Scope. Where the applicant has selected the work area compliance method, *alterations*, *changes of occupancy* and *additions* to *existing buildings*, ~~including *historic buildings,*~~ shall comply with this chapter.

Exception: Historic buildings shall comply with this chapter except as modified in Chapter 12.

CHAPTER 7
ALTERATIONS—LEVEL 1

701.1 Scope. Level 1 *alterations* shall comply with this chapter. ~~Level 1 *alterations* to *historic buildings* shall comply with this chapter, except as modified in Chapter 12.~~

CHAPTER 8
ALTERATIONS—LEVEL 2

801.1 Scope.

Level 2 *alterations* shall comply with this chapter and Chapter 7.

~~Level 2 *alterations* to *historic buildings* shall comply with this chapter and Chapter 7, except as modified in Chapter 12.~~

Exception: Buildings in which the reconfiguration is exclusively the result of compliance with the accessibility requirements of Section 306.7.1 shall be permitted to comply with Chapter 7.

CHAPTER 9
ALTERATIONS—LEVEL 3

901.1 Scope. Level 3 *alterations* shall comply with this chapter and Chapters 7 and 8. ~~Level 3 *alterations* to *historic buildings* shall comply with this chapter and Chapters 7 and 8, except as modified in Chapter 12.~~

CHAPTER 10
CHANGES OF OCCUPANCY

1001.1 Scope. *Changes of occupancy* shall comply with this chapter. ~~*Changes of occupancy* to *historic buildings* shall comply with this chapter, except as modified in Chapter 12.~~

1001.2.1 Change of use.

Any work undertaken in connection with a change in use shall conform to the applicable requirements for the work as classified in Chapter 6 and to the requirements of Sections 1002 through 1010.

~~**Exception:** As modified in Section 1204 for *historic buildings*.~~

CHAPTER 11
ADDITIONS

1101.1 Scope. *Additions* to *existing buildings* shall comply with the International Codes as adopted for new construction without requiring the *existing building* to comply with any requirements of those codes or of these provisions, except as required by this chapter and Chapter 3. Where an *addition* impacts the *existing building* , that portion of the *existing building* shall comply with this code.

CHAPTER 13
PERFORMANCE COMPLIANCE METHOD

1301.1 Scope. Where the applicant has selected the performance compliance method, *alterations*, *changes of occupancy* and *additions* to *existing buildings*, ~~including *historic buildings*,~~ shall comply with this chapter.

Exception: Historic buildings shall comply with this chapter except as modified in Chapter 12.

CHAPTER 14
RELOCATIONS

1401.1 Scope. Relocations of *existing buildings*, including *relocatable buildings*, shall comply with this chapter. ~~Relocations of *historic buildings* shall comply with this chapter, except as modified in Chapter 12.~~

Exception: Historic buildings shall comply with this chapter except as modified in Chapter 12.

Reason:

The intent of this proposal is coordination with the approach for dealing with the special allowances for historic buildings that are address in Chapter 12 and the EB8-25, the approved proposal that made the chapter for historic buildings a separate chapter outside of the three compliance methods.

Compliance with historic buildings is stated at beginning of each compliance method. This does not need to be repeated in Chapter 7, 8, 9 and 10. This was added in EB6 for Chapter 8, 9 and 10 to match Chapter 7. However, EB8 took this out of Chapter 7.

Cost Impact:

The change proposal is editorial in nature or a clarification and has no cost impact on the cost of construction

Justification for no cost impact: This is a coordination item between EB6 and EB8. This modification does not change construction requirements.

Comment (CAH2)# 869

CAH-2: Comment 3

IEBC: CHAPTER 3, SECTION 301, 301.1, SECTION 302 (New), 301.5, 301.8, 301.9, 301.6, 301.7, [BS] 301.7.1, SECTION 303 (New), 303.1 (New), 301.1.1, 301.5.1

Proponents: Jeff Grove, Chair, representing BCAC (bcac@iccsafe.org); Grant Ullrich, City of Chicago, representing Self (grant.ullrich@cityofchicago.org) requests As Modified by Committee (AMC2)

Further modify as follows:

2024 International Existing Building Code

CHAPTER 3

PROVISIONS FOR ALL COMPLIANCE METHODS

SECTION 301 GENERAL

301.1 Scope. *Repairs, alterations*, *changes of occupancy*, *additions* to and relocations of *existing buildings* shall comply with Section 301.2, 301.3 or 301.4. Sections 302 through ~~309~~ 311 shall apply to all work.

SECTION 302 GENERAL PROVISIONS

~~301.5~~ 302.1 Additional codes. *Repairs, alterations, changes of occupancy, additions* to and relocations of *existing buildings* shall comply with the provisions for *repairs, alterations, changes of occupancy, additions* and relocations, respectively, in this code and the *International Energy Conservation Code*, *International Fire Code*, *International Fuel Gas Code*, *International Mechanical Code*, *International Plumbing Code*, *International Private Sewage Disposal Code*, *International Property Maintenance Code*, *International Residential Code* and NFPA 70. Where provisions of the other codes conflict with provisions of this code, the provisions of this code shall take precedence.

~~301.8~~ 302.2 Occupancy and use. Where determining the appropriate application of this code, the occupancy and use of a building shall be determined in accordance with Chapter 3 of the International Building Code.

~~301.9~~ 302.3 Dangerous conditions. The *code official* shall have the authority to require the elimination of conditions deemed *dangerous*.

~~301.6~~ 302.4 **Existing materials.** Materials already in use in a building in compliance with requirements or approvals in effect at the time of their erection or installation shall be permitted to remain in use unless determined by the code official to be *unsafe*.

~~301.7~~ 302.5 **New and replacement materials.** Except as otherwise required or permitted by this code, materials permitted by the applicable code for new construction shall be used. Like materials shall be permitted for *repairs* and *alterations*, provided that *unsafe* conditions are not created. Hazardous materials shall not be used where the code for new construction would not permit their use in buildings of similar occupancy, purpose and location.

[BS] ~~301.7.1~~ 302.5.1 **New structural members and connections.**

New structural members and connections shall comply with the detailing provisions of the *International Building Code* for new buildings of similar structure, purpose and location.

Exception: Where alternative design criteria are specifically permitted.

SECTION 303 SPECIAL USE AND OCCUPANCY

303.1General .

Special uses and occupancies, in existing buildings, regardless of compliance method, shall comply with this section. The provisions for this section shall apply to the special use and occupancies described herein.

~~301.1.1~~ 303.2 **Bleachers, folding and telescopic seating and grandstands.** Existing bleachers, folding and telescopic seating and grandstands shall comply with ICC 300.

~~301.5.1~~ 303.3 **Additional codes in health care.** In existing Group I-2 occupancies, ambulatory health care *facilities*, outpatient clinics and hyperbaric *facilities*, *repairs, alterations*, *changes of occupancy, additions* and relocations shall also comply with NFPA 99.

Reason:

The BCAC supports the reorganization provided by EB6-25 throughout the IEBC. However, we feel that the organization of the IEBC, new 301.1 through 301.4, should be separated from general provisions (relocated to Section 302) and requirement for special occupancies (relocated to Section 303). EB6-25 did not indicated where current Section 301.1.1 should have been included.

This is coordinated with the CAH2 comment for EB7-25, so there will not be a conflict, however, this proposal can be approved separately.

Cost Impact:

The change proposal is editorial in nature or a clarification and has no cost impact on the cost of construction

Justification for no cost impact:

This is an organization item. There is no additional construction requirements in this modification.

Comment (CAH2)# 870

CAH-1: Proposal

IEBC: [A] 101.2, CHAPTER 3, SECTION 301, 301.1, 301.2, 301.3, 301.3.1, 301.3.2, 301.3.3, 301.4, SECTION 302, 302.2, 302.2.1, 302.3, 302.4, [BS] 302.4.1, 302.5, 302.1, CHAPTER 4, SECTION 401, 401.1, CHAPTER 5, SECTION 501, 501.1, 501.1.1, SECTION 506, CHAPTER 6, SECTION 601, 601.1, 601.1.1, SECTION 602, 602.1, 602.2, SECTION 603, 603.1, 603.2, SECTION 604, 604.1, 604.2, SECTION 605, 605.1, 605.2, SECTION 606, 606.1, 606.2, SECTION 607, 607.1, 607.2, CHAPTER 7, SECTION 701, 701.1, CHAPTER 8, SECTION 801, 801.1, 801.2, CHAPTER 9, SECTION 901, 901.1, 901.2, CHAPTER 10, SECTION 1001, 1001.1, CHAPTER 11, SECTION 1101, 1101.1, CHAPTER 12, SECTION 1201, 1201.1, SECTION 1204, SECTION 1206, CHAPTER 13, SECTION 1301, 1301.1, 1301.1.1, CHAPTER 14, SECTION 1401, 1401.1

Proponents: Grant Ullrich, City of Chicago, representing Self (grant.ullrich@cityofchicago.org)

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

2024 International Existing Building Code

[A]101.2 Scope.

The provisions of this code shall apply to the *repair*, *alteration*, *change of occupancy*, *addition* to and relocation of *existing buildings*.

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

CHAPTER 3
PROVISIONS FOR ALL COMPLIANCE METHODS

Revise as follows:

SECTION 301 ~~ADMINISTRATION~~ GENERAL

301.1~~Applicability~~ Scope . ~~The *repair*,~~ *Repairs*, *alterations*, *changes of occupancy*, *additions* to ~~or~~ and relocations of ~~all~~ *existing buildings* shall comply with Section 301.2, 301.3 or 301.4. ~~The provisions of~~ Sections 302 through 309 shall apply to all work. ~~*alterations*, *repairs*, *additions*, relocation of structures and *changes of occupancy* regardless of compliance method.~~

301.2 Repairs. *Repairs* shall comply with ~~the requirements of~~ Chapter 4.

301.3Alterations, ~~addition or~~ changes of occupancy and additions .

~~The *alteration*,~~ *Alterations*, ~~*addition* or~~ *changes of occupancy* and *additions* ~~of all *existing buildings*~~ shall comply with one of the methods listed in Section 301.3.1, 301.3.2 or 301.3.3 as selected by the applicant. Sections 301.3.1 through 301.3.3 shall not be applied in combination with each other.

> **Exception:** Subject to the approval of the *code official*, *alterations* complying with the laws in existence at the time the building or the affected portion of the building was built shall be considered in compliance with ~~the~~

~~provisions of~~ this code. New structural members added as part of the *alteration* shall comply with the *International Building Code*. This exception shall not apply to the following:

1. *Alterations* for accessibility required by Section 306.

2. *Alterations* that constitute *substantial improvement* in *flood hazard areas*, which shall comply with Sections 503.2, 701.3 or 1303.1.3.

3. Structural provisions of Section 304, Chapter 5 or to the structural provisions of Sections 706, 805 and 906.

301.3.1 Prescriptive compliance method. *Alterations*, ~~*additions* and~~ *changes of occupancy* and *additions* complying with Chapter 5 ~~of this code~~ in buildings complying with the *International Fire Code* shall be considered in compliance with ~~the provisions of~~ this code.

301.3.2 Work area compliance method. *Alterations*, ~~*additions* and~~ *changes of occupancy* and *additions* complying with the applicable requirements of Chapters 6 through 12 ~~of this code~~ shall be considered in compliance with ~~the provisions of~~ this code.

301.3.3 Performance compliance method. *Alterations*, ~~*additions* and~~ *changes of occupancy* and *additions* complying with Chapter 13 ~~of this code~~ shall be considered in compliance with ~~the provisions of~~ this code.

301.4~~Relocated buildings~~ Relocations . ~~Relocated buildings~~ Relocations of *existing buildings*, including *relocatable buildings*, shall comply with ~~the requirements of~~ Chapter 14.

Delete without substitution:

~~SECTION 302 GENERAL PROVISIONS~~

Revise as follows:

~~302.2~~ 301.5 Additional codes. ~~Alterations, *repairs*~~, *Repairs, alterations*, ~~*additions* and~~ *changes of occupancy*, *additions* to~~, or~~ and relocations ~~of,~~ of *existing buildings* ~~and structures~~ shall comply with the provisions for *repairs*, *alterations*, ~~*repairs, additions* and~~ *changes of occupancy*, *additions* ~~or~~ and relocations, respectively, in this code and the *International Energy Conservation Code*, *International Fire Code*, *International Fuel Gas Code*, *International Mechanical Code*, *International Plumbing Code*, *International Private Sewage Disposal Code*, *International Property Maintenance Code*, *International Residential Code* and NFPA 70. Where provisions of the other codes conflict with provisions of this code, the provisions of this code shall take precedence.

~~302.2.1~~ 301.5.1 Additional codes in health care. In existing Group I-2 occupancies, ambulatory health care *facilities*, outpatient clinics and hyperbaric *facilities*, *repairs*, *alterations*, ~~*repairs, additions* and~~ *changes of occupancy*, ~~to, or~~ *additions* and relocations ~~of, *existing buildings* and structures~~ shall also comply with NFPA 99.

~~302.3~~ 301.6 Existing materials. Materials already in use in a building in compliance with requirements or approvals in effect at the time of their erection or installation shall be permitted to remain in use unless determined by the code official to be *unsafe*.

~~302.4~~ 301.7 New and replacement materials. Except as otherwise required or permitted by this code, materials permitted by the applicable code for new construction shall be used. Like materials shall be permitted for *repairs* and *alterations*, provided that *unsafe* conditions are not created. Hazardous materials shall not be used where the code for new construction would not permit their use in buildings of similar occupancy, purpose and location.

[BS]~~302.4.1~~ 301.7.1 New structural members and connections.

New structural members and connections shall comply with the detailing provisions of the *International Building Code* for new buildings of similar structure, purpose and location.

Exception: Where alternative design criteria are specifically permitted.

~~302.5~~ 301.8 Occupancy and use. Where determining the appropriate application of ~~the referenced sections of~~ this code, the occupancy and use of a building shall be determined in accordance with Chapter 3 of the International Building Code.

~~302.1~~ 301.9 Dangerous conditions. The *code official* shall have the authority to require the elimination of conditions deemed *dangerous*.

CHAPTER 4
REPAIRS

SECTION 401 GENERAL

401.1 Scope. *Repairs* shall comply with ~~the requirements of~~ this chapter. *Repairs* to *historic buildings* need only comply with Chapter 12.

CHAPTER 5
PRESCRIPTIVE COMPLIANCE METHOD

SECTION 501 GENERAL

501.1 Scope. ~~The provisions of this chapter shall control the~~ Where the applicant has selected the prescriptive compliance method, *alterations*, ~~*addition* and~~ *changes of occupancy,* and *additions* to ~~of~~ *existing buildings* ~~and structures~~, including *historic buildings*, ~~and structures as referenced in Section 301.3.1~~ shall comply with this chapter.

Delete without substitution:

~~501.1.1Compliance with other methods~~ .

~~*Alterations*~~, ~~*additions*~~ and ~~*changes of occupancy*~~ to ~~*existing buildings*~~ and structures shall comply with the provisions of this chapter or with one of the methods provided in Section 301.3.

Revise as follows:

SECTION 506 CHANGES OF OCCUPANCY

CHAPTER 6
CLASSIFICATION OF WORK WORK AREA COMPLIANCE METHOD

SECTION 601 GENERAL

601.1 Scope. Where the applicant has selected the work area compliance method, ~~The provisions of this chapter shall be used in conjunction with Chapters 7 through 12 and shall apply to the~~ *alterations*, ~~*addition* and~~ *changes of*

occupancy and *additions* ~~of *existing structures*~~ to *existing buildings*, including ~~historic structures~~ *historic buildings*, ~~as referenced in Section 301.3.2~~ shall comply with this chapter. ~~The work performed on an *existing building* shall be classified in accordance with this chapter.~~

Delete without substitution:

~~601.1.1Compliance with other alternatives~~ .

~~*Alterations*~~, ~~*additions*~~ and ~~*changes of occupancy*~~ to ~~*existing structures*~~ shall comply with the provisions of Chapters 7 through 12 or with one of the alternatives provided in Section 301.3.

Revise as follows:

SECTION 602 ~~ALTERATION~~ALTERATIONS—LEVEL 1

602.1~~Scope~~ General . Level 1 alterations include the removal and replacement or the covering of existing materials, elements, *equipment or fixtures* using new materials, elements, *equipment or fixtures* that serve the same purpose.

602.2~~Application~~ Compliance . Level 1 *alterations* shall comply with ~~the provisions of~~ Chapter 7.

SECTION 603 ~~ALTERATION~~ ALTERATIONS—LEVEL 2

603.1~~Scope~~ General .

Level 2 *alterations* include the addition or elimination of any door or window, the reconfiguration or extension of any system, or the installation of any additional equipment, and shall apply where the w*ork area* is equal to or less than 50 percent of the building area.

> **Exception:** The movement or addition of nonfixed and movable fixtures, cases, racks, counters and partitions not over 5 feet 9 inches (1753 mm) in height shall not be considered a Level 2 *alteration*.

603.2~~Application~~ Compliance . Level 2 *alterations* shall comply with ~~the provisions of Chapter 7 for Level 1 *alterations* as well as the provisions of Chapter 8~~ Chapters 7 and 8.

SECTION 604 ~~ALTERATION~~ALTERATIONS—LEVEL 3

604.1~~Scope~~ General . Level 3 *alterations* apply where the *work area* exceeds 50 percent of the *building area*.

604.2~~Application~~ Compliance . Level 3 *alterations* shall comply with ~~the provisions of Chapters 7 and 8 for Level 1 and 2 *alterations*, respectively, as well as the provisions of Chapter 9~~ Chapters 7 through 9.

SECTION 605 ~~CHANGE~~CHANGES OF OCCUPANCY

Delete without substitution:

~~605.1Scope~~ .

~~*Change of occupancy*~~ provisions apply where the activity is classified as a ~~*change of occupancy*~~ as defined in Chapter 2.

Revise as follows:

~~605.2~~ 605.1~~Application~~ Compliance . *Changes of occupancy* shall comply with ~~the provisions of~~ Chapter 10.

SECTION 606 ADDITIONS

Delete without substitution:

~~606.1Scope~~ .

Provisions for ~~*additions*~~ shall apply where work is classified as an ~~*addition*~~ as defined in Chapter 2.

Revise as follows:

~~606.2~~ 606.1~~Application~~ Compliance . *Additions* to *existing buildings* shall comply with ~~the provisions of~~ Chapter 11.

SECTION 607 HISTORIC BUILDINGS

Delete without substitution:

~~607.1Scope~~ .

~~*Historic building*~~ provisions shall apply to buildings classified as historic as defined in Chapter 2.

Revise as follows:

~~607.2~~ 607.1~~Application~~ Compliance . Except as specifically provided ~~for~~ in Chapter 12 where the applicant elects to use Chapter 12, *historic buildings* shall comply with applicable provisions of ~~this code for the type of work being performed~~ Chapters 7 through 11.

CHAPTER 7
ALTERATIONS—LEVEL 1

SECTION 701 GENERAL

701.1 Scope. Level 1 *alterations* ~~as described in Section 602~~ shall comply with ~~the requirements of~~ this chapter. Level 1 *alterations* to *historic buildings* shall comply with this chapter, except as modified in Chapter 12.

CHAPTER 8
ALTERATIONS—LEVEL 2

SECTION 801 GENERAL

801.1 Scope.

Level 2 *alterations* ~~as described in Section 603~~ shall comply with ~~the requirements of~~ this chapter and Chapter 7.

Level 2 *alterations* to *historic buildings* shall comply with this chapter and Chapter 7, except as modified in Chapter 12.

Exception: Buildings in which the reconfiguration is exclusively the result of compliance with the accessibility requirements of Section 306.7.1 shall be permitted to comply with Chapter 7.

Delete without substitution:

~~**801.2Alteration Level 1 compliance**~~ **.**

In addition to the requirements of this chapter, all work shall comply with the requirements of Chapter 7.

CHAPTER 9
ALTERATIONS—LEVEL 3

SECTION 901 GENERAL

Revise as follows:

901.1 Scope. Level 3 *alterations* ~~as described in Section 604~~ shall comply with ~~the requirements of~~ this chapter and Chapters 7 and 8. Level 3 *alterations* to *historic buildings* shall comply with this chapter and Chapters 7 and 8, except as modified in Chapter 12.

901.2 Compliance.

~~In addition to the provisions of this chapter, work shall comply with all of the requirements of Chapters 7 and 8.~~ The requirements of Sections 802, 803, 804 and 805 shall apply within all *work areas* whether or not they include exits and corridors shared by more than one tenant and regardless of the occupant load.

Exception: Buildings in which the reconfiguration of space affecting exits or shared egress access is exclusively the result of compliance with the accessibility requirements of Section 306.7.1 shall not be required to comply with this chapter.

CHAPTER 10
CHANGECHANGES OF OCCUPANCY

SECTION 1001 GENERAL

Delete and substitute as follows:

~~**1001.1Scope**~~ **.**

The provisions of this chapter shall apply where a ~~*change of occupancy*~~ occurs, as defined in Section 202.

1001.1Scope .

Changes of occupancy shall comply with this chapter. *Changes of occupancy* to *historic buildings* shall comply with this chapter, except as modified in Chapter 12.

CHAPTER 11
ADDITIONS

SECTION 1101 GENERAL

Revise as follows:

1101.1 Scope. ~~An *addition* to a building or structure~~ *Additions* to *existing buildings* shall comply with the International Codes as adopted for new construction without requiring the *existing building* ~~or structure~~ to comply with any requirements of those codes or of these provisions, except as required by this chapter and Chapter 3. Where an *addition* impacts the *existing building* ~~or structure~~, that portion of the *existing building* shall comply with this code.

CHAPTER 12
HISTORIC BUILDINGS

SECTION 1201 GENERAL

1201.1 Scope. ~~This chapter is intended to provide means for the preservation of *historic buildings. Historic*~~ Where use of this chapter is elected by the applicant, *historic buildings* shall be permitted to comply with ~~the provisions of~~ this chapter instead of the corresponding provisions in Chapters 3, 4, 7 through 11 and 14. ~~relating to their *repair*, *alteration*, relocation and *change of occupancy*~~.

SECTION 1204 ~~CHANGE~~CHANGES OF OCCUPANCY

SECTION 1206 ~~RELOCATED BUILDINGS~~ RELOCATIONS

CHAPTER 13
PERFORMANCE COMPLIANCE METHODS METHOD

SECTION 1301 GENERAL

1301.1 Scope. ~~The provisions of this chapter shall apply to the~~ Where the applicant has selected the performance compliance method, *alterations*, ~~*addition* and~~ *changes of occupancy* ~~of~~ and *additions* to *existing* ~~*structures*~~ *buildings*, including ~~historic structures~~ *historic buildings*, ~~as referenced in Section 301.3.3~~ shall comply with this chapter. ~~The provisions of this chapter are intended to maintain or increase the current degree of public safety, health and general welfare in *existing buildings* while permitting, *alteration*, *addition* and *change of occupancy* without requiring full compliance with Chapters 6 through 12, except where compliance with the prescriptive method of Chapter 5 or the work area method of other provisions of this code is specifically required in this chapter.~~

Delete without substitution:

~~**1301.1.1Compliance with other methods** .~~

~~*Alterations*~~, ~~*additions*~~ and ~~*changes of occupancy*~~ to ~~*existing structures*~~ shall comply with the provisions of this chapter or with one of the methods provided in Section 301.3.

Revise as follows:

CHAPTER 14
RELOCATED OR MOVED BUILDINGS RELOCATIONS

SECTION 1401 GENERAL

1401.1 Scope. ~~This chapter provides requirements for relocated or moved structures~~ Relocations of *existing buildings*, including *relocatable buildings*, ~~as defined in Chapter 2~~ shall comply with this chapter. Relocations of *historic buildings* shall comply with this chapter, except as modified in Chapter 12.

Reason:

This proposal is intended to complement and extend the work of the Scoping Task Group and IEBC scoping cleanup proposal submitted by BCAC (Proposal 11184).

The scoping task group aimed to create greater consistency in the scoping language for each chapter in the I-Codes and remove redundant administrative language from scoping sections.

This proposal builds on that work in the context of the IEBC by improving editorial consistency across the IEBC.

- For consistency in chapter and section titles and scoping section language, where types of work are referred to in scoping statements they are referred to in the plural (repairs vs repair and additions vs addition).
- "Relocations" instead of various formulations of "relocated and moved buildings."
- Where the various types of work are listed, the items have been reordered to match the order in which they appear in the IEBC scoping section (101.2): repair, alteration, change of occupancy, addition [to], and relocation [of].
- Chapter 6, which is the charging chapter for the work area compliance method is retitled from "Classification of Work" to "Work Area Compliance Method" for consistency with the naming of Chapters 5 and 13.
- The title of Chapter 13 is changed from plural to singular to better reflect that the chapter contains a single method.
- The scoping statements for Level 2 and 3 alterations and changes of occupancy (801.1, 901.1, and 1001.1) are revised to indicate the relationship to Chapter 12, similar to the language in the scoping statement for Level 1 alterations (701.1).
- The scoping statement for Chapter 14 (Relocations) is revised to indicate the relationship to Chapter 12, similar to the language in the scoping statement for Chapter 5 (Repairs).

Cost Impact:

The change proposal is editorial in nature or a clarification and has no cost impact on the cost of construction

Justification for no cost impact: This change is editorial.

EB8-25

Summary: Moves all provisions for historic buildings into a single chapter

CAH-1: Approved As Submitted
CAH-2: Consent Agenda

IEBC: CHAPTER 3, SECTION 301, 301.1, 301.1.1, 301.2, 301.3 (New), 301.4, 301.3, 301.3.1, 301.3.2, 301.3.3, SECTION 306, 306.1, CHAPTER 5, SECTION 501, 501.1, SECTION 507, 507.1, 507.2, [BS] 507.3, [BS] 507.4, CHAPTER 6, SECTION 601, 601.1, SECTION 607, 607.1, 607.2, CHAPTER 7, SECTION 701, 701.1, CHAPTER 8, SECTION 801, 801.1, CHAPTER 9, SECTION 901, 901.1, CHAPTER 13, SECTION 1301, 1301.1, 1301.1.1, CHAPTER 12, SECTION 1201, 1201.1, SECTION 1202, SECTION 1203, SECTION 1304 (New), 1304.1 (New), 306.7.18, 306.7.18.1, 306.7.18.2, 306.7.18.3, 306.7.18.4, 306.7.18.5, 306.7.18.6, 306.7.18.7 , SECTION 1205, SECTION 1204, SECTION 1206

Proponents: Jeff Grove, Chair, representing BCAC (bcac@iccsafe.org)

2024 International Existing Building Code

CHAPTER 3

PROVISIONS FOR ALL COMPLIANCE METHODS

SECTION 301 ADMINISTRATION

Revise as follows:

301.1 Applicability. The repair, alteration, change of occupancy, addition or relocation of all existing buildings shall comply with Section 301.2, 301.3, ~~or~~ 301.4 or 301.5. The provisions of Sections 302 through 309 shall apply to all alterations, repairs, additions, relocation of structures and changes of occupancy regardless of compliance method.

301.1.1 Bleachers, folding and telescopic seating and grandstands. Existing bleachers, folding and telescopic seating and grandstands shall comply with ICC 300.

301.2 Repairs. Repairs shall comply with the requirements of Chapter 4.

Add new text as follows:

301.3Historic buildings . Alterations, additions or changes of occupancy of historic buildings shall comply with one of the methods described in Section 301.5 except as modified by Chapter 13.

301.4 Relocated buildings. Relocated buildings shall comply with the requirements of Chapter 14.

Revise as follows:

~~301.3~~ 301.5 Alteration, addition or change of occupancy. The alteration, addition or change of occupancy of all existing buildings shall comply with one of the methods listed in Section

~~301.3.1~~

301.5.1,

~~301.3.2~~

301.5.2 or

~~301.3.3~~

301.5.3 as selected by the applicant. Sections

~~301.3.1~~

301.5.1 through

~~301.3.3~~

301.5.3 shall not be applied in combination with each other.

Exception: Subject to the approval of the code official, alterations complying with the laws in existence at the time the building or the affected portion of the building was built shall be considered in compliance with the provisions of this code. New structural members added as part of the alteration shall comply with the International Building Code. This exception shall not apply to the following:

1.Alterations for accessibility required by Section 306.

2.Alterations that constitute substantial improvement in flood hazard areas, which shall comply with Sections 503.2, 701.3 or 1303.1.3.

3.Structural provisions of Section 304, Chapter 5 or to the structural provisions of Sections 706, 805 and 906.

~~301.3.1~~ 301.5.1 Prescriptive compliance method. Alterations, additions and changes of occupancy complying with Chapter 5 of this code in buildings complying with the International Fire Code shall be considered in compliance with the provisions of this code.

~~301.3.2~~ 301.5.2 Work area compliance method. Alterations, additions and changes of occupancy complying with the applicable requirements of Chapters 6 through ~~12~~ 11 of this code shall be considered in compliance with the provisions of this code.

~~301.3.3~~ 301.5.3 Performance compliance method. Alterations, additions and changes of occupancy complying with Chapter 12 ~~13~~ of this code shall be considered in compliance with the provisions of this code.

SECTION 306 ACCESSIBILITY FOR EXISTING BUILDINGS

306.1 Scope. The provisions of Sections 306.1 through ~~306.7.18~~ 306.7.17 apply to maintenance and repair, change of occupancy, additions and alterations to existing buildings~~, including those identified as historic buildings~~.

CHAPTER 5
PRESCRIPTIVE COMPLIANCE METHOD

SECTION 501 GENERAL

501.1 Scope. The provisions of this chapter shall control the alteration, addition and change of occupancy of existing buildings and structures~~, including historic buildings and structures~~ as referenced in Section ~~301.3~~ 301.5.1.

Exception: Historic buildings shall comply with this chapter except as modified in Chapter 13.

Delete without substitution:

~~SECTION 507 HISTORIC BUILDINGS~~

~~507.1Historic buildings~~ .

The provisions of this code that require improvements relative to a building's existing condition or, in the case of ~~repairs~~, that require improvements relative to a building's predamage condition, shall not be mandatory for ~~historic buildings~~ unless specifically required by this section.

~~507.2Life safety hazards~~ .

The provisions of this code shall apply to ~~historic buildings~~ judged by the ~~code official~~ to constitute a distinct life safety hazard.

~~[BS]507.3Flood hazard areas~~ .

~~Within flood hazard areas established in accordance with Section 1612.3 of the International Building Code, or Section R306 of the International Residential Code, as applicable, where the work proposed constitutes substantial improvement, the building shall be brought into compliance with Section 1612 of the International Building Code, or Section R306 of the International Residential Code, as applicable.~~

Exception: ~~Historic buildings meeting any of the following criteria need not be brought into compliance:~~

1. ~~Listed or preliminarily determined to be eligible for listing in the National Register of Historic Places.~~

2. ~~Determined by the Secretary of the US Department of Interior as contributing to the historical significance of a registered historic district or a district preliminarily determined to qualify as an historic district.~~

3. ~~Designated as historic under a state or local historic preservation program that is approved by the Department of Interior.~~

~~[BS]507.4Structural~~ .

~~Historic buildings shall comply with the applicable structural provisions in this chapter.~~

Exceptions:

1. ~~The code official shall be authorized to accept existing floors and existing live loads and to approve operational controls that limit the live load on any floor.~~

2. ~~Repair of substantial structural damage is not required to comply with Sections 405.2.3 and 405.2.4. Substantial structural damage shall be repaired in accordance with Section 405.2.1.~~

CHAPTER 6
CLASSIFICATION OF WORK

SECTION 601 GENERAL

Revise as follows:

601.1 Scope. The provisions of this chapter shall be used in conjunction with Chapters 7 through ~~12~~ 11 and shall apply to the alteration, addition and change of occupancy of existing structures~~, including historic structures,~~ as referenced in Section ~~301.3.2~~ 301.5.2. The work performed on an existing building shall be classified in accordance with this chapter.

Exception: Historic buildings shall comply with this chapter except as modified in Chapter 13.

Delete without substitution:

~~SECTION 607 HISTORIC BUILDINGS~~

~~607.1Scope~~ .

~~Historic building~~ provisions shall apply to buildings classified as historic as defined in Chapter 2.

~~607.2Application~~ .

Except as specifically provided for in Chapter 12, ~~historic buildings~~ shall comply with applicable provisions of this code for the type of work being performed.

CHAPTER 7
ALTERATIONS—LEVEL 1

SECTION 701 GENERAL

Revise as follows:

701.1 Scope. Level 1 alterations as described in Section 602 shall comply with the requirements of this chapter. ~~Level 1 alterations to historic buildings shall comply with this chapter, except as modified in Chapter 12.~~

CHAPTER 8
ALTERATIONS—LEVEL 2

SECTION 801 GENERAL

801.1 Scope.

Level 2 alterations as described in Section 603 shall comply with the requirements of this chapter.

Exception: Buildings in which the reconfiguration is exclusively the result of compliance with the accessibility requirements of Section 306.7.1 shall be permitted to comply with Chapter 7.

CHAPTER 9
ALTERATIONS—LEVEL 3

SECTION 901 GENERAL

901.1 Scope. Level 3 alterations as described in Section 604 shall comply with the requirements of this chapter.

CHAPTER 1312
PERFORMANCE COMPLIANCE METHODS

SECTION ~~1301~~ 1201 GENERAL

~~1301.1~~ 1201.1 Scope. The provisions of this chapter shall apply to the alteration, addition and change of occupancy of existing structures~~, including historic structures,~~ as referenced in Section ~~301.3.3~~ 301.5.3. The provisions of this chapter are intended to maintain or increase the current degree of public safety, health and general welfare in existing buildings while permitting, alteration, addition and change of occupancy without requiring full compliance with Chapters 6 through 12, except where compliance with the prescriptive method of Chapter 5 or the work area method of other provisions of this code is specifically required in this chapter.

Exception: Historic buildings shall comply with this chapter except as modified in Chapter 13.

~~1301.1.1~~ 1201.1.1 Compliance with other methods. Alterations, additions and changes of occupancy to existing structures shall comply with the provisions of this chapter or with one of the methods provided in Section ~~301.3~~ 301.5.

CHAPTER 12 13
HISTORIC BUILDINGS

SECTION ~~1201~~ 1301 GENERAL

1301.1 ~~1201.1~~ Scope. This chapter is intended to provide means for the preservation of historic buildings. Historic buildings shall comply with the provisions of this chapter relating to their repair, alteration, relocation and change of occupancy.

SECTION ~~1202~~ 1302 REPAIRS

SECTION ~~1203~~ 1303 FIRE SAFETY

Add new text as follows:

SECTION 1304 ACCESSIBILITY

1304.1General . The provisions of Sections 306.1 through 306.7.17 apply to maintenance and repair, change of occupancy, additions and alterations for accessibility to existing buildings identified as historic buildings.

~~306.7.18~~ 1304.2~~Historic structures~~ Application .

Where compliance with the requirements for accessible routes, entrances or toilet rooms would threaten or destroy the historic significance of the historic structure, as determined by the authority having jurisdiction, the alternative requirements of Sections 1304.2.1 ~~306.7.18.1~~ through 1304.2.7 ~~306.7.18.7~~ for that element shall be permitted.

Exceptions:

1.Accessible means of egress required by Chapter 10 of the International Building Code are not required to be provided in historic structures.

2.The altered element or space is not required to be on an accessible route, unless required by Section ~~306.7.18.1~~ 1304.2.1 or ~~306.7.18.2~~ 1304.2.2.

Revise as follows:

~~306.7.18.1~~ 1304.2.1 Site arrival points. Not fewer than one exterior accessible route, including curb ramps from a site arrival point to an accessible entrance, shall be provided and shall not be less than 36 inches (914 mm) minimum in width.

~~306.7.18.2~~ 1304.2.2 Multiple-level buildings and facilities. An accessible route from an accessible entrance to public spaces on the level of the accessible entrance shall be provided.

~~306.7.18.3~~ 1304.2.3 Entrances.

Where an entrance cannot be made accessible in accordance with Section 306.7.5, an accessible entrance that is unlocked while the building is occupied shall be provided; or, a locked accessible entrance with a notification system or remote monitoring shall be provided.

Signs complying with Section 1112 of the International Building Code shall be provided at the public entrances and the accessible entrance.

~~306.7.18.4~~ 1304.2.4 Toilet facilities. Where toilet rooms are provided, not fewer than one accessible single-user toilet room or one accessible family or assisted-use toilet room complying with Section 1110.2.1 of the International Building Code shall be provided.

~~306.7.18.5~~ 1304.2.5 Bathing facilities. Where bathing rooms are provided, not fewer than one accessible single-user bathing room or one accessible family or assisted-use bathing rooms complying with Section 1110.2.1 of the International Building Code shall be provided.

~~306.7.18.6~~ 1304.2.6 Type A units. The alteration to Type A individually owned dwelling units within a Group R-2 occupancy shall be permitted to meet the provision for a Type B dwelling unit.

~~306.7.18.7~~ 1304.2.7 Type B units. Type B dwelling or sleeping units required by Section 1108 of the International Building Code are not required to be provided in historic buildings.

SECTION ~~1205~~ 1305 STRUCTURAL

SECTION ~~1204~~ 1306 CHANGE OF OCCUPANCY

SECTION ~~1206~~ 1307 RELOCATED BUILDINGS

Reason:

The purpose of this proposal is to move the requirements for historic buildings into one location so it can be generally referenced the same as Repairs and Relocated buildings. This will improve consistency across the three methods for the reuse of historic buildings. Some sections without changes are included to better show consistency across methods and chapters.

This is one of a group of changes from BCAC regarding the reuse of historic buildings. See the proposal to reorganize the chapter for a clean copy of the chapter for Historic Buildings if all the proposals are approved, however, they are all stand alone proposals.301.1 and 301.3 - allows for the requirements for historic buildings to be in one chapter, regardless of method.

306 - accessibility in historic building has been relocated to the historic building chapter.

501.1, 601.1, 1301.1 - allows for historic buildings to use the same exceptions for existing building offered for all existing buildings. The exception allows for historic buildings to have additional allowances currently permitted.

507 - deleted

507.1 similar to 1201.1

507.2 similar to 1201.5 and 1205.2

507.3 - same as 1201.4

507.4 - same as 1205.1

607, 701.1 - Deleted reference to Chapter 12 in work area method as redundant. This is addressed in 301.3 and 601.1.

Move chapter for Performance compliance methods to Chapter 12

Move chapter for Historic Buildings to Chapter 13 - this moves historic buildings out of the work area method.

1304(new) - relocate the historic building provisions for accessibility from Chapter 3.

1305 & 1306 - Switch structural and change of occupancy sections so that the order of the sections are related to IBC chapter orders and consistent with BCAC proposals for Chapter 3 and 10.

This is one of a group of code change proposals related to IEBC Chapter 12 Historic buildings. While they work together, each proposal can stand on it's own merit. Please see the proposal for the reorganization of this chapter for a clean copy of what this chapter would look like if all the proposals pass.

This proposal is submitted by the ICC Building Code Action Committee (BCAC).

BCAC was established by the ICC Board of Directors in July 2011 to pursue opportunities to improve and enhance assigned International Codes or portions thereof. In 2023 and 2024 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 BCAC webpage.

Cost Impact:

The change proposal is editorial in nature or a clarification and has no cost impact on the cost of construction

Justification for no cost impact: This is a movement of existing sections with no change in construction requirements.

EB112-25

Summary: Clarifies the relationship between the Historic Buildings chapter and the rest of the IEBC

CAH-1: Approved As Modified
CAH-2: Approved as Modified by Comment

CAH-2: Comment 1

IEBC: SECTION 1201, 1201.1, 1201.2, SECTION 1202, 1202.1, 1202.2

Proponents: Jeff Grove, Chair, representing BCAC (bcac@iccsafe.org) requests As Modified by Committee (AMC2)

Further modify as follows:

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SECTION 1201 GENERAL

1201.1 Scope. ~~The *repair, alteration, change of occupancy* and *relocation* of *historic buildings* shall comply with this chapter.~~

Historic buildings shall comply with the provisions for *repairs*, *alterations*, *changes of occupancy* or *relocations* in this code except as modified by this Chapter.

~~**1201.2Conformance** .~~

~~The building shall be safe for human occupancy as determined by the *International Fire Code* and the *International Property Maintenance Code*. Any *repair, alteration* or *change of occupancy* undertaken within the historic building shall comply with the requirements of this code applicable to the work being performed except as permitted otherwise in this chapter.~~

SECTION 1202 REPAIRS

1202.1 General. Repairs to any portion of a *historic building* or structure shall be permitted with original or like materials and original methods of construction, subject to the provisions of this chapter. Hazardous materials, such as asbestos and lead-based paint, shall not be used where the code for new construction would not permit their use in buildings of similar occupancy, purpose and location.

~~The work shall not make the building less complying than it was before the *repair* was undertaken. Work on nondamaged components that is necessary for the required *repair* of damaged components shall be considered part of the *repair* and shall not be subject to requirements for alterations.~~

1202.2 Conformance. The work shall not make the building less complying than it was before the *repair* was undertaken. Work on nondamaged components that is necessary for the required *repair* of damaged components shall be considered part of the *repair* and shall not be subject to requirements for alterations.

Reason:

The intent of this proposal is strictly correlation and removal of redundant language from related code changes.

EB6 and EB112 put in different starts for Chapter 12. EB6 was dealing with scope across the IEBC and did not know that EB8 would make this a separate chapter applicable to all the compliance methods.

This proposal provides a replacement for 1201.1 that addresses the scope of Chapter 12 in a concise manner. It is intended to be a replacement for the text provided in EB6 and EB112.

This will also be consistent with EB8 for the Chapter 3 reference to this chapter. A CAH2 comment has been submitted to EB8 for that coordination.

The deletion of 1201.2 Conformance, is because the first sentence is already addressed in Chapter 3 in a more comprehensive manner under the section for Additional Codes. The second sentence is already addressed in the scope section.

This modification to 1202.1 is to delete a sentence that was inadvertently repeated in Section 1202.1 and 1202.2.

Cost Impact:

The change proposal is editorial in nature or a clarification and has no cost impact on the cost of construction

Justification for no cost impact: This is a coordination item between approved code change proposals. There is no change in construction requirements.

Comment (CAH2)# 893

CAH-1: Proposal

IEBC: SECTION 1201, 1201.1, 1201.2 (New), SECTION 1202, 1202.1, 1202.2 (New)

Proponents: Jeff Grove, Chair, representing BCAC (bcac@iccsafe.org)

2024 International Existing Building Code

SECTION 1201 GENERAL

Revise as follows:

1201.1 Scope. ~~This chapter is intended to provide means for the preservation of historic buildings.~~ The repair, alteration, change of occupancy and relocation of historic ~~Historic~~ buildings shall comply with ~~the provisions of~~ this chapter ~~relating to their repair, alteration, relocation and change of occupancy.~~

Add new text as follows:

1201.2Conformance . The building shall be safe for human occupancy as determined by the International Fire Code and the International Property Maintenance Code. Any repair, alteration or change of occupancy undertaken within the historic building shall comply with the requirements of this code applicable to the work being performed except as permitted otherwise in this chapter.

SECTION 1202 REPAIRS

Revise as follows:

1202.1 General. Repairs to any portion of a historic building or structure shall be permitted with original or like materials and original methods of construction, subject to the provisions of this chapter. Hazardous materials, such as asbestos

and lead-based paint, shall not be used where the code for new construction would not permit their use in buildings of similar occupancy, purpose and location.

The work shall not make the building less complying than it was before the repair was undertaken. Work on nondamaged components that is necessary for the required repair of damaged components shall be considered part of the repair and shall not be subject to requirements for alterations.

Add new text as follows:

1202.2Conformance . The work shall not make the building less complying than it was before the repair was undertaken. Work on nondamaged components that is necessary for the required repair of damaged components shall be considered part of the repair and shall not be subject to requirements for alterations.

Reason:

The intent of this proposal is to allow historic buildings to have the same options as permitted for existing buildings elsewhere in the IEBC. While technically this would be applicable as a chapter or the work area method, this may not be interpreted the same for a stand alone chapter. Currently, this is not clear even as a chapter within the work area method. One example is an existing stairway to remain as is unless it is unsafe.

1201.1 - This change matches the proposal for the proposals to change the scoping requirements consistently throughout the codes.

1201.2 - This new text follows the same format as the other stand alone chapters - Repairs and Relocated buildings. The text is copied from Relocated buildings.

1202.2 - The text is copied from Section 401.2 under Repairs.

This is one of a group of code change proposals related to IEBC Chapter 12 Historic buildings. While they work together, each proposal can stand on it's own merit. Please see the proposal for the reorganization of this chapter for a clean copy of what this chapter would look like if all the proposals pass.

This proposal is submitted by the ICC Building Code Action Committee (BCAC).

BCAC was established by the ICC Board of Directors in July 2011 to pursue opportunities to improve and enhance assigned International Codes or portions thereof. In 2023 and 2024 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 BCAC webpage.

Cost Impact:

The change proposal is editorial in nature or a clarification and has no cost impact on the cost of construction

Justification for no cost impact: This is a clarification of the intent of the requirements for historic buildings. There is no change to construction requirement.

EB113-25 Comment

Summary: Clarifies the role and obligation of the design professional in identifying unsafe conditions in the historic building report.

CAH-1: Disapproved
CAH-2: None-PC (Public Comment)

CAH-2: Comment 1

Proponents: Sean Denniston, Heritage Green Consulting, representing Association for Preservation Technology (sean@heritagegreenconsulting.com); Jeff Grove, Chair, representing BCAC (bcac@iccsafe.org); Jonathan Humble, Jonathan Humble, FAIA, LLC, representing Himself (festeel@att.net) requests As Modified by Committee (AMC2)

Replace as follows:

2024 International Existing Building Code

[BS]1201.2 Report. A historic building undergoing alteration or change of occupancy shall be investigated and evaluated, and a written report shall be prepared and filed with the code official by a registered design professional where required by the code official. The report shall identify all ~~unsafe~~ conditions ~~as defined in~~ deemed unsafe by the code official in accordance with Section 115 . For buildings assigned to Seismic Design Category D, E or F, a description of the vertical and horizontal elements of the lateral force-resisting system and strengths or weaknesses therein shall be included. Additionally, the report shall describe the components of the building that provide a level of safety substantially below that required of existing nonhistoric buildings.

Exception: An investigation, evaluation and report shall not be required where the alteration is scoped by Section 602 as a Level 1 alteration and does not make the building or structure less compliant with the provisions of the International Building Code.

Reason:

EB113-25, and the discussion at CAH-1 and at BCAC IEBC work group meetings highlighted an issue with the clarity of the language in this section regarding unsafe conditions. It is possible to interpret this language as a requirement that the registered design professional (RDP) is solely responsible for identifying the unsafe conditions. That is why EB113 and the related floor modifications attempted to establish limits to the liability that an RDP would incur by this requirement.

However, in IEBC Section 115, it is the code official who is ultimately responsible for determining conditions that are unsafe. Therefore, if information is to be included in the report about unsafe conditions in accordance with Section 115, then those must be conditions deemed unsafe by the code official. This modification clarifies the language to better align with the most logical reading of the requirements and reduce the potential for misinterpretation.

If the comment for EB114-25 passes and 1201.2 is restructured, this change can be easily reconciled with that proposal by including the following as Item 1: "Identification of all conditions deemed unsafe by the code official in accordance with Section 115."

This proposal is submitted by the ICC Building Code Action Committee (BCAC).

BCAC was established by the ICC Board of Directors in July 2011 to pursue opportunities to improve and enhance assigned International Codes or portions thereof. In 2023 and 2024 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 BCAC webpage.

Cost Impact:

The change proposal is editorial in nature or a clarification and has no cost impact on the cost of construction

Justification for no cost impact: This comment clarifies the requirement for greater usability.

Comment (CAH2)# 1095

CAH-1: Proposal

IEBC: [BS] 1201.2

Proposed Change as Submitted

Proponents: Jonathan Humble, Jonathan Humble, FAIA, LLC, representing Himself (festeel@att.net)

THIS CODE CHANGE WILL BE HEARD BY THE IBC STRUCTURAL CODE COMMITTEE. SEE THE TENTATIVE HEARING ORDER FOR THAT COMMITTEE.

2024 International Existing Building Code

Revise as follows:

[BS]1201.2 Report. A historic building undergoing alteration or change of occupancy shall be investigated and evaluated, and a written report shall be prepared and filed with the code official by a registered design professional where required by the code official. The report shall identify ~~all~~ unsafe conditions as defined in Section 115 that are clearly visible and able to be accessed by the registered design professional. For buildings assigned to Seismic Design Category D, E or F, a description of the vertical and horizontal elements of the lateral force-resisting system and strengths or weaknesses therein shall be included. Additionally, the report shall describe the components of the building that provide a level of safety substantially below that required of existing nonhistoric buildings.

> Exception: An investigation, evaluation and report shall not be required where the alteration is scoped by Section 602 as a Level 1 alteration and does not make the building or structure less compliant with the provisions of the International Building Code.

Reason:

The proposal deletes the word “all” in sentence number two. Merriam-Webster dictionary defines “all” as “whole, entire, total, all mean including everything or everyone without exception.” (Merriam-Webster, Inc. Copyright © 2024) The problem is that by inserting the word “all” in this requirement is that:

- It assumes that the design professional has access to all parts or portions of an existing building prior to developing construction documents, and
- The current language assumes that the design professional will be performing both a historic alteration, restoration, or repair project and a whole building unsafe building review concurrently.

Frequently design professionals may be restricted from accessing all portions of a building simply because the project may be minor in nature, or the building owner does not wish to have a whole building unsafe analysis, or the building owner may not permit exploratory demolition, or the building owner and/or tenant does not wish to have their operations interrupted, or for whatever other reason. This is why in many cases a contingency ($) is recommended by the design professional as a line item in the project cost as an emergency fund for unknown issues when they arise during the alterations or repairs construction process.

By removing the word “all” will allow the design professional to practice their trade without fear of potential litigation for not finding each and every unsafe condition within a building and allow the design professional to focus their attention on the owner’s project requirements and those unsafe conditions within that project scope.

Further, by adding the phrase "that are clearly visible and able to be accessed by the registered design professional" also allows the design professional to execute their job on the same level playing field as the code official is allowed in Sections 109 Inspections. This also permits the design professional to perform their services without having to provide a guarantee or warrant their services to work that they cannot perform.

Cost Impact:

Decrease

Estimated Immediate Cost Impact:

The cost for performing a survey for unsafe conditions, versus a survey of "all" unsafe conditions, should be less cost to the building owner of the historic property as this will mean that only those conditions that are clearly or visually identifiable and accessible will be assessed as part of the survey. Excluded from the services by the design professional will be areas of the building that require exploratory demolition and restoration, the additional services of specialists to perform tests, the services of a general, mechanical, plumbing, electrical or specialized contractor to assist in the concealed exploratory work, and other specialized persons as necessary.

Estimated Immediate Cost Impact Justification (methodology and variables):

Using public cost data information as a guide, take for example the most common historic building which is a residential property. Roughly 70% of the US designated historic buildings are residential properties. For example, assume a two-story residential historic property that is between 1,500 sf and 2,500 sf, a single person from the design professional firm conducts the physical survey in one day, and a second day to prepare and review the report before turning it over to the owner. The estimated cost for a visual survey might range between $2,500 and $4,000 for a survey report. If we add one of the exclusions noted above, such as minor exploratory demolition and restoration, this could increase that cost to over $10,000 for the additional time and visits for the design professional and for the services of a general contractor and restoration expert to execute that work. The general contractors expenses for this minor would be in the range of $3,000 to $5,000 (3 days) to set up, install protection to the remainder of the building, and disassembling the construction area, and the restoration expert $3,000 to $5,000 (3 days) to match the altered area to the remainder of the historic character of the building. This estimate subject to change based on the regional or city/town code indexing (e.g., standard average cost versus cost differences for specific regions) based on the location of the project.

EB113-25

EB114-25

Summary: Revises and clarifies the requirements for the report required by the Historic Buildings chapter

CAH-1: Disapproved
CAH-2: None-PC (Public Comment)

CAH-2: Comment 1

IEBC: [BS] 1201.2

Proponents: Sean Denniston, Heritage Green Consulting, representing Association for Preservation Technology (sean@heritagegreenconsulting.com); Jeff Grove, Chair, representing BCAC (bcac@iccsafe.org) requests As Modified by Committee (AMC2)

Modify as follows:

2024 International Existing Building Code

[BS]1201.2Historic Building Report. ~~Where required by the code official, a~~ A *historic building* undergoing a *repair* of *substantial structural damage*, an *alteration* ~~or,~~ *change of occupancy*, or *relocation* shall be investigated and evaluated, and a written report shall be prepared and filed with the *code official* by a *registered design professional* where required by the *code official*. The report shall include the following:

1. Identification of *unsafe* conditions as described in Section 115.

2.Documentation that the property meets the definition of a historic building

3.Where a *character-defining feature* within the area of work does not meet the requirements in this code, the report shall include the following:

3.1.Identification of the character-defining feature.

3.2.Identification of the applicable ~~code~~ sections of the code that are not met.

3.3.Description of how the alternative means will meet the intent of the code, if applicable.

4.Documentation required by other sections of this chapter.

5.For buildings assigned to Seismic Design Category D, E or F, a description of the vertical and horizontal elements of the lateral force-resisting system and strengths or weaknesses therein ~~shall be included~~.

6.Identification of any components of the *building* within the area of work that provide a level of safety substantially below that required of existing nonhistoric *buildings* and a description of how the components will be made to provide an *approve*d level of safety, if applicable.

Exception ~~**Exceptions:**~~

1.~~Repairs.~~

2.An investigation, evaluation and report shall not be required where the *alteration* is scoped by Section 602 as a Level 1 *alteration* and does not make the building or structure less compliant with the provisions of this code.

3.~~For buildings within the scope of the *International Residential Code*, the investigation, evaluation and report shall be permitted to be prepared by the owner or owner's representative.~~

Reason:

This comment makes a handful of refinements to EB114 based on proposed floor modifications and committee and commenter feedback:

- "Historic Building" was added to the title to provide clarity about the difference between this report and others in the IEBC.
- Relocation was added to the scope of the report based on a committee comment at CAH 1.
- Repairs of substantial structural damage was added based on a committee comment at CAH 1
- "where required by the code official" was moved back to its original location. This makes the investigation and evaluation mandatory, but the report is only required when the code official wants it.
- The original proposal removed a sentence very similar to the proposed Item 6. BCAC originally thought that this text was too open for interpretation to be uniformly enforceable. However, some testifiers felt that this information was important to maintain in the records for the building. Therefore, we are providing this comment to leave that option open for discussion at CAH2.
- The exception for repairs was eliminated because they are not identified as being in scope of 1201.2 to begin with.
- The exception allowing for a report for an IRC-scoped building to be submitted by an owner or owner representative was also removed. It was originally added because a similar requirement in the IECC-R allows a report about historic buildings to be signed by an owner and there was a desire to align the two report practices. However, the IEBC report requires the expertise of an RDP since it bears on life-safety, so the IECC-R report approach is not appropriate here. Additionally, the IEBC is only an option for IRC-scope buildings and is not required, so there is no need for this allowance.

In regard to other issues raised by floor modifications:

- Humble's and Furr's floor mods raised the issue of liability for an RDP identifying unsafe conditions. This is addressed in a separate comment to EB113-25. If that comment is approved, Item 1 would read: "Identification of all conditions deemed unsafe by the code official in accordance with Section 115."
- Quinn's floor mod to document that the building "will continue to meet the definition upon completion of the proposed work was not included." There is no practical way to determine whether a historic building will continue to meet the definition after the alteration. The authorities having jurisdiction over historic building listings (State Historic Preservation Offices and local preservation authorities) do not typically have a process to do this. This was discussed with Quinn and she understands the issue.
- Gonzalex-Laders' floor mod to allow the SHPO or local preservation authority to sign the report was not included. This report requires the technical expertise of an RDP, therefore it is not appropriate to allow preservation authorities to submit these reports. They are allowed to sign the IECC report, but that report does not bear on issues of safety and therefore it would not be appropriate here.

Cost Impact:

The change proposal is editorial in nature or a clarification and has no cost impact on the cost of construction

Justification for no cost impact: This change is for items in a report, and does not include any construction requirements.

Comment (CAH2)# 1128

CAH-1: Proposal

IEBC: [BS] 1201.2
Proponents: Jeff Grove, Chair, representing BCAC (bcac@iccsafe.org)

THIS CODE CHANGE WILL BE HEARD BY THE IBC STRUCTURAL CODE COMMITTEE. SEE THE TENTATIVE HEARING ORDER FOR THAT COMMITTEE.

2024 International Existing Building Code

Revise as follows:

[BS]1201.2 Report. Where required by the code official, a ~~A~~ historic building undergoing alteration or change of occupancy shall be investigated and evaluated, and a written report shall be prepared and filed with the code official by a registered design professional ~~where required by the code official~~. The report shall include the following:

1.~~The report shall identify all~~ Identification of unsafe conditions as ~~defined~~ described in Section 115.

2.Documentation that the property meets the definition of a historic building

3.Where a character-defining feature does not meet the requirements in this code the report shall include the following:

3.1.Identification of the character-defining feature.

3.2.Identification of the applicable code sections of the code not met.

3.3.Description of how the alternative means will meet the intent of the code, if applicable.

4.Documentation required by other sections of this chapter.

5.For buildings assigned to Seismic Design Category D, E or F, a description of the vertical and horizontal elements of the lateral force-resisting system and strengths or weaknesses therein shall be included.

~~Additionally, the report shall describe the components of the building that provide a level of safety substantially below that required of existing nonhistoric buildings.~~

~~Exception~~ Exceptions:

1.Repairs.

2.An investigation, evaluation and report shall not be required where the alteration is scoped by Section 602 as a Level 1 alteration and does not make the building or structure less compliant with the provisions of ~~the International Building Code~~ this code.

3.For buildings within the scope of the International Residential Code, the investigation, evaluation and report shall be permitted to be prepared by the owner or owner's representative.

Reason:

The proposal eliminates the unpredictability of whether a Report will be required, relieves the code official of determining that the code's definition of historic building is met, and ensures that the information documenting character-defining features and any alternatives becomes part of the official project record. The proposed language follows the intent of the Report in the first editions of the IEBC, although provides more specific direction as to what must be included.

This is one of a group of code change proposals related to IEBC Chapter 12 Historic buildings. While they work together, each proposal can stand on it's own merit. Please see the proposal for the reorganization of this chapter for a

clean copy of what this chapter would look like if all the proposals pass.This proposal is submitted by the ICC Building Code Action Committee (BCAC).

BCAC was established by the ICC Board of Directors in July 2011 to pursue opportunities to improve and enhance assigned International Codes or portions thereof. In 2023 and 2024 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 BCAC webpage.

Cost Impact:

The change proposal is editorial in nature or a clarification and has no cost impact on the cost of construction

Justification for no cost impact: This requirement is for a report on alternative. It does not change the construction costs.

EB115-25

Summary: Combines "dangerous" and "unsafe" provisions in one place

CAH-1: Approved as Submitted
CAH-2: Consent Agenda

CAH-1: Proposal

IEBC: 1201.5, [BS] 1205.2

Proponents: Jeff Grove, Chair, representing BCAC (bcac@iccsafe.org)

2024 International Existing Building Code

Revise as follows:

1201.5 ~~Unsafe~~ Dangerous or unsafe conditions. Conditions determined by the code official to be dangerous or unsafe shall be remedied. Work shall not be required beyond what is required to remedy the dangerous or unsafe conditions.

Delete without substitution:

~~[BS]1205.2Dangerous conditions~~ .

Conditions determined by the ~~code official~~ to be ~~dangerous~~ shall be remedied. Work shall not be required beyond what is required to remedy the ~~dangerous~~ condition.

Reason:

The intent of this proposal is to reinforce what is expected for unsafe conditions. Right now one section is under General and another is at the end of the chapter under Structural. Not all users are keyed into the difference between the definitions for 'dangerous' and 'unsafe'. In addition, the definition of 'unsafe' includes 'dangerous'. This would better serve the user if both criteria are indicated in the general provisions. Unsafe buildings are addressed administratively in Section 115; and are required in the report in section 1201.2.

The following are the existing definitions for reference –

[BS]DANGEROUS. Any building, structure or portion thereof that meets any of the conditions described below shall be deemed dangerous:

1.The building or structure has collapsed, has partially collapsed, has moved off its foundation or lacks the necessary support of the ground.

2.There exists a significant risk of collapse, detachment or dislodgement of any portion, member, appurtenance or ornamentation of the building or structure under permanent, routine or frequent loads; under actual loads already in effect; or under snow, wind, rain, flood, earthquake aftershock or other environmental loads when such loads are imminent.

UNSAFE. Buildings, structures or equipment that are unsanitary, or that are deficient due to inadequate means of egress facilities, inadequate light and ventilation, or that constitute a fire hazard, or in which the structure or individual structural members meet the definition of "Dangerous," or that are otherwise dangerous to human life or the public welfare, or that involve illegal or improper occupancy or inadequate maintenance shall be deemed unsafe. A vacant structure that is not secured against entry shall be deemed unsafe.

This is one of a group of code change proposals related to IEBC Chapter 12 Historic buildings. While they work together, each proposal can stand on it's own merit. Please see the proposal for the reorganization of this chapter for a clean copy of what this chapter would look like if all the proposals pass.

This proposal is submitted by the ICC Building Code Action Committee (BCAC).

BCAC was established by the ICC Board of Directors in July 2011 to pursue opportunities to improve and enhance assigned International Codes or portions thereof. In 2023 and 2024 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 BCAC webpage.

Cost Impact:

The change proposal is editorial in nature or a clarification and has no cost impact on the cost of construction

Justification for no cost impact: This is removing redundant language. There is no change to construction requirements.

EB116-25

Summary: Where a change of use returns a space to a historic use, exempts the project from the full change of occupancy requirements

CAH-1: Disapproved
CAH-2: None-CA (Consent Agenda)

CAH-2: Comment:

IEBC: 1204.1.1 (New)

Proponents: Sean Denniston, Heritage Green Consulting, representing Association for Preservation Technology (sean@heritagegreenconsulting.com) requests As Modified by Committee (AMC2)

Replace as follows:

2024 International Existing Building Code

1204.1.1Resumption of Previous Occupancy Classification .

Resumption of a previous occupancy in an historic building, or portion thereof, shall not be considered a change of occupancy, regardless of any period of time in which it may have remained unoccupied or occupied by other uses, provided:

1.Demonstration of the resumed occupancy is included in the report required by Section 1201.2.

2.Previous changes of occupancy did not include an alteration.

3.Any alteration undertaken in conjunction with the resumption of occupancy complies with the applicable requirements of this code.

Reason:

In response to comments at CAH#1, the proposed language has been simplified and clarified and the allowance has been narrowed.

The original proposal allowed the resumption of any historic occupancy. This comment narrows the allowance to a specific situation that is frequently found in historic downtown buildings where an upper story is converted to another use without actually modifying the space. For example, it is not uncommon for upper floors that were once used as apartments or offices to be used as storage without changing the spaces or for upper floor apartments to be used as offices without modifying the spaces.

If the previous change of occupancy coincided with an alteration that modified the space for its new use, then this section would not apply.

Cost Impact:

Decrease

Estimated Immediate Cost Impact: By accepting previous occupancies, construction costs will be decreased.

Estimated Immediate Cost Impact Justification (methodology and variables): This comment will generally decrease the cost of compliance since it will generally reduce the scope of code compliance that is triggered by a change of occupancy. However, the magnitude of the savings is highly dependent on the specifics of the project, particularly the occupancy that will be recommencing use, and cannot be generalized as a typical savings estimate.

Comment (CAH2)# 1219

CAH-1: Proposal

IEBC: 1201.6 (New)

Proponents: Sean Denniston, Heritage Green Consulting, representing Association for Preservation Technology; James Lindberg, representing National Trust for Historic Preservation (jlindberg@savingplaces.org)

2024 International Existing Building Code

Add new text as follows:

1201.6 Historic Occupancies.

The documented occupancy of a qualified historic building or property, or portion thereof, shall be permitted to continue, or be returned to that use, and not be considered as a change of occupancy, regardless of any period of time in which it may have remained unoccupied or occupied by other uses, provided such building or property otherwise conforms to all applicable requirements of this code.

Documentation of the previous occupancy shall be provided in the report required by Section 1201.2.

Reason:

Referred to as the "Change of Occupancy Penalty," the code's current approach to proposed projects involving a Change of Occupancy is steeped in the approach that existed prior to the first edition of the IEBC in 2003, the '25-50% rule.' While the intent of the 2003 edition of the IEBC was to eliminate barriers to rehabilitation, code changes through the 2024 edition have increased the stringency of buildings undergoing a Change of Occupancy, as compared to the requirements for buildings considered an Alteration - Level 3, part of the Work Area Compliance method.

The 2024 IEBC continues to penalize buildings where a new occupancy or use is proposed by imposing requirements reaching those associated with new construction. This is inconsistent with the intent of the IEBC and a major deterrent to the improvement of vacant or other existing buildings.

The proposal eliminates the unintended barriers and encourages building rehabilitation. Rehabilitation of vacant and underutilized buildings is beneficial to the community, can provide needed housing, and will increase public safety by eliminating the risks associated with vacant or unimproved buildings.

Acceptance of documented historic occupancies has long been a provision of The California Historical Building Code. It will also align with state and federal housing and historic building policy that recognizes the importance of protection of the nation's historic and cultural resources, including through the use of state and federal historic tax credits, as administered by the National Park Service, that have been responsible for the rehabilitation of thousands of historic buildings since 1976.

This proposal is submitted by the Association for Preservation Technology and the National Trust for Historic Preservation and further supported by Main Street America, National Trust Community Investment Corporation and RePurpose Capital (see attached letter of support), which represent a significant portion of national historic preservation organizations.

- Support for amendments to IEBC.pdf
  https://www.cdpaccess.com/proposal/11961/35804/documentation/185869/attachments/download/9284/

Bibliography:

California Historical Building Code

8-302. Change in occupancy.

The use or character of the occupancy of a qualified historical building or property may be changed from or returned to its historical use or character, providing the qualified historical building or property conforms to the requirements applicable to the new use or character of occupancy as set forth in the CHBC. Such change in occupancy shall not mandate conformance with new construction requirements as set forth in regular code.

Cost Impact: Decrease

Estimated Immediate Cost Impact: By accepting previous occupancies, aligning requirements for Changes of Occupancy or Use with those for the highest level of Alteration (Level 3), construction costs will be decreased with a cost impact of $0.

Estimated Immediate Cost Impact Justification (methodology and variables): This proposal will generally decrease the cost of compliance since it will generally reduce the scope of code compliance that is triggered by a change of occupancy. However, the magnitude of the savings is highly dependent on the specifics of the project, particularly the occupancy that will be recommencing use, and cannot be generalized as a typical savings estimate.

EB117-25

Summary: Allows historic buildings to deviate from code requirements within a set de minimus range

CAH 1: Disapproved
CAH 2: Content Agenda

CAH-1: Proposal

IEBC: 1201.6 (New)

Proponents: Sean Denniston, Heritage Green Consulting, representing Association for Preservation Technology (sean@heritagegreenconsulting.com); James Lindberg, representing National Trust for Historic Preservation (jlindberg@savingplaces.org)

2024 International Existing Building Code

Add new text as follows:

1201.6Tolerances .

The code official shall be permitted to accept a de minimis variation of up to 10% of a non-structural requirement where:

1. Achieving a required dimension or performance rating is technically infeasible.
2. Where compliance would damage a character-defining feature.
3. Where acceptance of the tolerance would not affect the intent of the code provision or
4. Alternate means to achieve the intent of the code provision are provided.

Documentation of the above shall be provided in the report required by Section 1201.2.

Reason:

For historic buildings, the inability to meet all requirements for new construction can result in a resistance to reuse or improve these buildings. Vacant and other existing buildings can be more easily rehabilitated if granted the opportunity to have minimal levels of variation providing the noted specific conditions are met (physical impediments, that the variation is granted for items that are character-defining features, and that the intent of this code will be met). The provision requires the application and basis of tolerances to be documented in the Report prepared by the design professional (or the case of in the case of buildings covered in the scope of the International Residential Code, by the owner. The code official retains the authority to determine which tolerances are acceptable.

Historic buildings were constructed prior to modern construction, and small differences in dimensions are inevitable. Requiring compliance with new construction standards is often not feasible, and the cost of making changes can make a project financially infeasible. Leaving buildings vacant or underutilized or under improved presents significantly greater community risk than the risk presented by dimensional variations determined to have 'diminimus' impact on safety.

Acceptance of the proposal provides the code official necessary flexibility to accept those requirements which will not have significant impact on the level of safety provided by the rehabilitated building. It also eliminates the built in conflict between the application of historic preservation requirements which require the retention of character-defining features, and inflexible code requirements.

The proposal also eliminates the unintended barriers that were intended to be eliminated by the 2003 edition of the IEBC.

This proposal is submitted by the Association for Preservation Technology and the National Trust for Historic Preservation and further supported by Main Street America, National Trust Community Investment Corporation and RePurpose Capital (see attached letter of support), which represent a significant portion of national historic preservation organizations.

Support for amendments to IEBC.pdf
https://www.cdpaccess.com/proposal/11963/35806/documentation/185883/attachments/download/9420/

Cost Impact: The change proposal is editorial in nature or a clarification and has no cost impact on the cost of construction

Justification for no cost impact: The proposed change is intended to clarify the amount of variation within the code intent.

EB118-25

Summary: Allows damaged historic structural systems to be restored rather than meeting requirements for new construction

CAH-1: Approved as Modified by Committee
CAH-2: Consent Agenda

CAH-1: Proposal

IEBC: 1202.3 (New), [BS] 507.4, [BS] 1205.1

Proponents: Jeff Grove, Chair, representing BCAC (bcac@iccsafe.org)

2024 International Existing Building Code

SECTION 1202 REPAIRS

1202.1 General. Repairs to any portion of a historic building or structure shall be permitted with original or like materials and original methods of construction, subject to the provisions of this chapter. Hazardous materials, such as asbestos and lead-based paint, shall not be used where the code for new construction would not permit their use in buildings of similar occupancy, purpose and location.

1202.2 Replacement.

Replacement of existing or missing features using original materials shall be permitted. Partial replacement for repairs that match the original in configuration, height and size shall be permitted.

Replacement glazing in hazardous locations shall comply with the safety glazing requirements of Chapter 24 of the International Building Code.

Exception: Glass block walls, louvered windows and jalousies repaired with like materials.

Add new text as follows:

1202.3Damaged buildings . Structural repairs shall be permitted to return the building to its predamage condition without additional work.

Revise as follows:

[BS]507.4 Structural.

Historic buildings shall comply with the applicable structural provisions in this chapter.

~~Exceptions~~ Exception:

1.The code official shall be authorized to accept existing floors and existing live loads and to approve operational controls that limit the live load on any floor.

2.~~Repair of substantial structural damage is not required to comply with Sections 405.2.3 and 405.2.4. Substantial structural damage shall be repaired in accordance with Section 405.2.1.~~

[BS]1205.1 General.

Historic buildings shall comply with the applicable structural provisions for the work as classified in Chapter 6.

~~Exceptions~~ Exception:

1.The code official shall be authorized to accept existing floor and previously approved live loads and roof live loads and to approve operational controls that limit the live load or roof live load.

2.~~Regardless of the level of damage, structural repairs shall be permitted to return the building to its predamage condition without additional work.~~

Reason:

Historic buildings damaged by flood are addressed in Section 1201.4. This allows for work to not be considered a substantial improvement.

Section 1202.1 and 1202.2 allow for historic buildings to be repaired to their original construction and materials.

The intent of this section is to allow for buildings that receive substantial damage to the vertical and lateral force resisting systems or to the gravity load carrying elements to also be restored rather than meeting new requirements. This is an allowance for historic buildings rather than complying with 405.2.3 and 405.2.4. This is current text for repairs in Section 507.4 Exception 2 and 1205.1 Exception 2.

This is one of a group of code change proposals related to IEBC Chapter 12 Historic buildings. While they work together, each proposal can stand on it's own merit. Please see the proposal for the reorganization of this chapter for a clean copy of what this chapter would look like if all the proposals pass.

This proposal is submitted by the ICC Building Code Action Committee (BCAC).

BCAC was established by the ICC Board of Directors in July 2011 to pursue opportunities to improve and enhance assigned International Codes or portions thereof. In 2023 and 2024 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 BCAC webpage.

Cost Impact:

The change proposal is editorial in nature or a clarification and has no cost impact on the cost of construction

Justification for no cost impact: This allows for historic buildings to be maintained, so there are no increases to construction requirements.

EB119-25

Summary: Reorganizes the historic buildings chapter for greater clarity.

CAH-1 Approved as Submitted
CAH-2: Consent Agenda

CAH-1: Proposal

IEBC: CHAPTER 12, SECTION 1203, 1203.1, 1203.2 (New), 1203.7, 1203.8, 1203.4, 1203.6, 1203.5, 1203.4 (New), 1203.2, 1203.12, 1203.5 (New), 1203.3, 1203.9, 1203.10, 1203.10.1, 1203.10.2, 1203.11, 1203.6 (New), SECTION 1205, [BS] 1205.1, [BS] 1205.2, SECTION 1204, 1204.1, 1204.3 (New), 1204.3, 1204.4, 1204.5, 1204.10, 1204.8, 1204.9, 1204.5 (New), 1204.6, 1204.7, 1204.11, 1204.12, 1204.14, [BS] 1204.13, SECTION 1206, 1205.1 (New), 1206.1, 1205.3 (New)

Proponents: Jeff Grove, Chair, representing BCAC (bcac@iccsafe.org)

2024 International Existing Building Code

CHAPTER 12

HISTORIC BUILDINGS

Revise as follows:

SECTION 1203 ~~FIRE SAFETY~~ ALTERATIONS

1203.1 Scope. *Historic buildings* undergoing *alterations*~~, *changes of occupancy* or that are moved~~ shall comply with Section 1203.

Add new text as follows:

1203.2Fire and smoke protection features . Fire and smoke protection features in historic buildings shall comply with Sections 1203.2.1 through 1203.2.4.

Revise as follows:

1203.2.1~~1203.7~~ One-hour fire-resistant assemblies. Where 1-hour fire-resistance-rated construction is required by these provisions, it need not be provided, regardless of construction or occupancy, where the existing wall and ceiling finish is wood or metal lath and plaster.

1203.2.2 ~~1203.8~~ Glazing in fire-resistance-rated systems. Historic glazing materials are permitted in interior walls required to have a 1-hour fire-resistance rating where the opening is provided with *approved* smoke seals and the area affected is provided with an automatic sprinkler system.

1203.2.3~~1203.4~~ Transoms. In ~~buildings with automatic sprinkler systems of~~ Group R-1, R-2 or R-3 occupancies, existing transoms in corridors and other fire-resistance-rated walls ~~may~~ shall be permitted to be maintained ~~if~~ where the transom is fixed in the closed position and the building has an automatic sprinkler system. A sprinkler shall be installed on each side of the transom.

1203.2.4 ~~1203.6~~ Stairway enclosure. In buildings of three stories or less, exit enclosure construction shall limit the spread of smoke by the use of tight-fitting doors and solid elements. Such elements are not required to have a fire-resistance rating.

1203.3 ~~1203.5~~ Interior finishes. The existing interior finishes shall be accepted where it is demonstrated that they are the historic finishes.

Add new text as follows:

1203.4Automatic sprinkler systems . Automatic sprinkler systems in historic buildings shall comply with Section 1203.4.1 and 1203.4.2.

Revise as follows:

1203.4.1 ~~1203.2~~ General. Every *historic building* that does not conform to the construction requirements specified in this code for the occupancy or use and that constitutes a distinct fire hazard as defined herein shall be provided with an *approved* automatic sprinkler system as determined appropriate by the *code official*. However, an automatic sprinkler system shall not be used to substitute for, or act as an alternative to, the required number of exits from any *facility*.

1203.4.2~~1203.12~~ Automatic sprinkler systems.

Every *historic building* that cannot be made to conform to the construction requirements specified in the *International Building Code* for the occupancy or use and that constitutes a distinct fire hazard shall be deemed to be in compliance if provided with an *approved* automatic sprinkler system.

Exception: Where the *code official* approves an alternative life-safety system.

Add new text as follows:

1203.5Means of egress . Means of egress in historic buildings shall comply with Section 1203.5.1 through 1203.5.4.

Revise as follows:

1203.5.1 ~~1203.3Means of egress~~ Width and capacity . Where, in the opinion of the *code official*, there is sufficient width and height for a person to pass through the opening or traverse the means of egress, existing door openings and corridor and stairway widths are not required to meet the widths required by the *International Building Code* or this code. Where *approved* by the *code official*, the front or main exit doors need not swing in the direction of the path of exit travel, provided that other *approved* means of egress having sufficient capacity to serve the total occupant load are provided.

1203.5.2 ~~1203.9~~Stairway ~~railings~~ handrails and guards . Grand stairways shall be accepted without complying with the handrail and guard requirements. Existing handrails and guards at all stairways shall be permitted to remain, provided they are not structurally *dangerous*.

1203.5.3 ~~1203.10~~ Guards. Guards shall comply with Sections 1203.5.3.1 ~~1203.10.1~~ and 1203.5.3.2 ~~1203.10.2~~.

1203.5.3.1 ~~1203.10.1~~ Height. Existing guards shall comply with the requirements of Section 404.

1203.5.3.2 ~~1203.10.2~~ Guard openings. The spacing between existing intermediate railings or openings in existing ornamental patterns shall be accepted. Missing elements or members of a guard may be replaced in a manner that will preserve the historic appearance of the building or structure.

1203.5.4 ~~1203.11~~ Exit signs. Where exit sign or egress path marking location would damage the historic character of the building, alternative exit signs are permitted with approval of the *code official*. Alternative signs shall identify the exits and egress path.

Add new text as follows:

1203.6Accessibility . Accessibility in historic buildings shall comply with Section 306.

Delete without substitution:

~~SECTION 1205 STRUCTURAL~~

Revise as follows:

[BS]1203.7 ~~1205.1General~~ Structural .

Historic buildings shall comply with the applicable structural provisions for the work as classified in Chapter 6.

Exceptions:

1.The *code official* shall be authorized to accept existing floor and previously *approved* live loads and roof live loads and to approve operational controls that limit the live load or roof live load.

2.Regardless of the level of damage, structural *repairs* shall be permitted to return the building to its predamaged condition without additional work.

[BS]1203.7.1 ~~1205.2~~ Dangerous conditions. Conditions determined by the *code official* to be *dangerous* shall be remedied. Work shall not be required beyond what is required to remedy the *dangerous* condition.

SECTION 1204 CHANGE OF OCCUPANCY

1204.1 General. *Historic buildings* undergoing a *change of occupancy* shall comply with Section 1203 and 1204. *Historic buildings* undergoing a *change of occupancy* shall comply with the applicable provisions of Chapter 10, except as specifically permitted in this chapter. Where Chapter 10 requires compliance with specific requirements of Chapter 7, Chapter 8 or Chapter 9 and where those requirements are subject to the exceptions in Section 1202, the same exceptions shall apply to this section.

1204.2 Building area. The allowable floor area for *historic buildings* undergoing a *change of occupancy* shall be permitted to exceed by 20 percent the allowable areas specified in Chapter 5 of the International Building Code.

Add new text as follows:

1204.3Fire and smoke protection features. .

Fire and smoke protection features in historic buildings undergoing a change of occupancy shall comply with Sections 1204.3.1 through 1204.3.5.

Revise as follows:

1204.3.1 ~~1204.3~~ Location on property. Historic structures undergoing a *change of use* to a higher-hazard category in accordance with Section 1011.7 ~~may~~ shall be permitted to use alternative methods to comply with the fire-resistance and exterior opening protective requirements. Such alternatives shall comply with Section 1201.2.

1204.3.2 ~~1204.4~~ Occupancy separation. Required occupancy separations of 1 hour may be omitted where the building is provided with an *approved* automatic sprinkler system throughout.

1204.3.3 ~~1204.5~~ Roof covering. Regardless of occupancy or use group, roof-covering materials not less than Class C, where tested in accordance with ASTM E108 or UL 790, shall be permitted where a fire-retardant roof covering is required.

1204.3.4 ~~1204.10~~ One-hour fire-resistant assemblies. Where 1-hour fire-resistance-rated construction is required by these provisions, it need not be provided, regardless of construction or occupancy, where the existing wall and ceiling finish is wood lath and plaster.

1204.3.5 ~~1204.8~~ Transoms.

In corridor walls required by these provisions to be fire-resistance rated, existing transoms ~~may~~ shall be permitted to be maintained ~~if~~ where the transom is fixed in the closed position, and fixed wired glass set in a steel frame or other *approved* glazing shall be installed on one side of the transom.

Exception: Transoms conforming to Section 1203.2.3 ~~1203.4~~ shall be accepted.

1204.4 ~~1204.9~~ Interior finishes.

Where interior finish materials are required to comply with the fire test requirements of Section 803.1 of the *International Building Code*, existing nonconforming materials shall be permitted to be surfaced with an *approved* fire-retardant coating to achieve the required classification. Compliance with this section shall be demonstrated by testing the fire-retardant coating on the same material and achieving the required fire classification. Where the same material is not available, it shall be permitted to test on a similar material.

Exception: Existing nonconforming materials need not be surfaced with an *approved* fire-retardantcoating where the building is equipped throughout with an automatic sprinkler system installed in accordance with the *International Building Code* and the nonconforming materials can be substantiated as being historic in character.

Add new text as follows:

1204.5Means of egress .

Means of egress in historic buildings shall comply with Section 1204.5.1 through 1204.5.4.

Revise as follows:

1204.5.1 ~~1204.6Means of egress~~ Width and capacity . Existing door openings and corridor and stairway widths less than those that would be acceptable for nonhistoric buildings under these provisions shall be *approved*, provided that, in the opinion of the *code official*, there is sufficient width and height for a person to pass through the opening or traverse the exit and that the capacity of the exit system is adequate for the occupant load, or where other operational controls to limit occupancy are *approved* by the *code official*.

1204.5.2 ~~1204.7~~ Door swing. Where *approved* by the *code official*, existing front doors need not swing in the direction of exit travel, provided that other *approved* exits having sufficient capacity to serve the total occupant load are provided.

1204.5.3 ~~1204.11~~Stairways ~~and guards~~ .

Existing stairways, including handrails and guards, shall comply with the requirements of these provisions. The *code official* shall grant alternatives for stairways ~~and guards if~~ where alternative stairways are found to be acceptable or are judged to meet the intent of these provisions. ~~Existing stairways shall comply with Section 1203.~~

Exception: For buildings less than 3,000 square feet (279 m^2), existing conditions are permitted to remain at all stairways ~~and guards~~.

1204.5.4 ~~1204.12~~ Exit signs. The *code official* ~~may~~ shall be permitted to accept alternative exit sign locations where the location of such signs would damage the historic character of the building or structure. Such signs shall identify the exits and exit path.

1204.6 ~~1204.14~~ Natural light. Where it is determined by the *code official* that compliance with the natural light requirements of Section 1010.1 will lead to loss of historic character or historic materials in the building, the existing level of natural lighting shall be considered to be acceptable.

[BS]1204.7 ~~1204.13Exit stair~~ Stairway live load. ~~Existing historic stairways in~~ In historic buildings changed to a Group R-1 or R-2 occupancy, existing stairways shall be accepted where it can be shown that the stairway can support a 75-pounds-per-square-foot (366 kg/m^2) live load.

SECTION 1205 ~~1206~~ RELOCATED BUILDINGS

Add new text as follows:

1205.1General . Historic buildings that are being relocated shall comply with Sections 1203, 1204 and 1205 as applicable. *Historic buildings* being relocated shall otherwise be considered a *historic building* for the purposes of this code.

Revise as follows:

1205.2 ~~1206.1Relocated buildings~~ Foundations . Foundations of relocated *historic buildings* and structures shall comply with the *International Building Code*. ~~Relocated *historic buildings* shall otherwise be considered a *historic building* for the purposes of this code. Relocated *historic buildings* and structures shall be sited so that exterior wall and opening requirements comply with the *International Building Code* or with the compliance alternatives of this code.~~

Add new text as follows:

1205.3Exterior walls . *Historic buildings* that are relocated shall be sited so that exterior wall and opening requirements comply with the *International Building Code* or with the compliance alternatives of this code.

Reason:

The intent of this proposal is to

1. Separate the chapter into main topics similar to the rest of the IEBC - Repair, Alterations, Change of Occupancy and Relocation.

2. Group the requirements by topic, and in the order similar to the IBC. This is also proposed for IEBC Chapter 3 and 10.

3. Remove 'may' to improve code language.

The following is some additional explanations on specific sections.

1203.1 - the requirements for change of occupancy and relocated buildings have been relocated to 1204.1 and 12051.

12034.5.3 - the last sentence is deleted because this is addressed in 1204.1. The building is historic, not just the stairway.

1205 - The existing section has been separated into topics instead of lumped together. The general statement has been moved up into 1205.1. Foundation and exterior wall requirements are divided into 1205.2 and 1205.3.

The is no technical change in this proposal. Other proposals address technical revisions.

This is one of a group of code change proposals related to IEBC Chapter 12 Historic buildings. While they work together, each proposal can stand on it's own merit. Please see the clean copy of what this chapter would look like if all the proposals pass.

This proposal is submitted by the ICC Building Code Action Committee (BCAC).

BCAC was established by the ICC Board of Directors in July 2011 to pursue opportunities to improve and enhance assigned International Codes or portions thereof. In 2023 and 2024 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 BCAC webpage.

Cost Impact:

The change proposal is editorial in nature or a clarification and has no cost impact on the cost of construction

Justification for no cost impact: This is a reorganization of existing sections with no change in construction requirements.

Attached Files

- **BCAC IEBC Chapter 12 clean draft.pdf**
  https://www.cdpaccess.com/proposal/11448/34365/files/download/8929/

EB120-25

Summary: Clarifies the allowances for using historic stairways.

CAH-1: Approved as Submitted
CAH-2: Consent Agenda

CAH-1: Proposal

IEBC: SECTION 1203, 1203.7, SECTION 1204, 1204.10

Proponents: Jeff Grove, Chair, representing BCAC (bcac@iccsafe.org)

2024 International Existing Building Code

Revise as follows:

SECTION 1203 ~~FIRE SAFETY~~ ALTERATIONS

1203.1 Scope. *Historic buildings* undergoing *alterations*, *changes of occupancy* or that are moved shall comply with Section 1203.

1203.9~~Stairway railings~~ Stairways . ~~Grand stairways shall be accepted without complying with the handrail and guard requirements.~~ Existing stairways, including handrails and guards ~~at all stairways~~ shall be permitted to remain, provided they are not structurally *dangerous*.

Any stairway replacing an existing stairway within a space where the pitch or slope cannot be reduced because of existing construction shall not be required to comply with the maximum riser height and minimum tread depth requirements.

Delete without substitution:

~~1203.10Guards~~ .

Guards shall comply with Sections 1203.10.1 and 1203.10.2.

~~1203.10.1Height~~ .

Existing guards shall comply with the requirements of Section 404.

Revise as follows:

1203.10 ~~1203.10.2Guard openings~~ Guards . ~~The~~ For existing guards, the guard height and spacing between existing intermediate railings or openings in existing ornamental patterns shall be ~~accepted~~ permitted to remain where the guards are character defining features. Missing elements or members of a guard ~~may~~ shall be permitted to be replaced to match the existing guards~~in a manner that will preserve the historic appearance of the building or structure~~..

SECTION 1204 CHANGE OF OCCUPANCY

Delete without substitution:

~~**1204.11Stairways and guards .**~~

~~Existing stairways shall comply with the requirements of these provisions. The *code official* shall grant alternatives for stairways and guards if alternative stairways are found to be acceptable or are judged to meet the intent of these provisions. Existing stairways shall comply with Section 1203.~~

~~**Exception:** For buildings less than 3,000 square feet (279 m^2), existing conditions are permitted to remain at all stairways and guards.~~

Reason:

In the review of the provisions indicated as requirements for stairways, there were serveral terminoloy glitches and redundancies identified.

1203.9 - The intent is to allow the same allowances for stairways in historic buildings as alterations and changes of occupancy in other buildings.

There is no technical reason to call out grand stairways differently from other existing stairways. In addition, what is a 'grand stairway' is not defined in any of the codes, so this is not uniformly enforced.

Section 1011.5.1 Exception 2 allows for existing stairways to remain in a change of occupancy. Exception 3 allows or new stairways replacing existing stairways to maintain a steeper angle if the structure does not allow a lower slope. The revised text matches those allowances.

1203.10 -

Guards are used at dropoffs in addition to along stairways. So guards do need to be addressed for those locations. the intent is the same as stairways, to allow existing guards to remain and be repaired to match.

The current reference to Section 404 for height is to a generic means of egress reference. This is the same as allowing for the guard to remain as is, so the guard height and openings can be addressed in one section.

404.1 General. Repairs shall be done in a manner that maintains the level of protection provided for the means of egress.

1204.11 -

The 2024 commentary for 1204.11 is

"This provision gives an opportunity to analyze the stairway's functionality as an exit, and to alter only those elements that are judged to be unsafe or inadequate, provided that an alternative stairway is considered acceptable. The exception allows existing stairway conditions to remain for smaller buildings, considering the shorter time required for egress and the smaller occupancy."

Section 1203.9 already allows for existing stairways to remain. Alternatives means is already addressed in 1201.2. The stairway width and height is already addressed in 1204.6 with the general means of egress requirements. In addition, there are two technical issues with the current test. This is a generic requirement for stairways, not exit and exit access stairways. Guards in the title and 2nd sentence, but there do not seem to be any requirements for guards in the text. Therefore, it is proposed to remove this text as unnecessary.

This is one of a group of code change proposals related to IEBC Chapter 12 Historic buildings. While they work together, each proposal can stand on it's own merit. Please see the proposal for the reorganization of this chapter for a clean copy of what this chapter would look like if all the proposals pass.

This proposal is submitted by the ICC Building Code Action Committee (BCAC).

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Cost Impact:

The change proposal is editorial in nature or a clarification and has no cost impact on the cost of construction

Justification for no cost impact: This is editorially revising the text to match current allowances for stairways and guards.

EB121-25

Summary: Clarifies existing requirements for dimensions in means of egress in Historic Buildings chapter

CAH-1: Approved as Submitted
CAH-2: Consent Agenda

CAH-1: Proposal

IEBC: SECTION 1203, 1203.3, 1204.7, SECTION 1204, 1204.6

Proponents: Jeff Grove, Chair, representing BCAC (bcac@iccsafe.org)

2024 International Existing Building Code

Revise as follows:

SECTION 1203 ~~FIRE SAFETY~~ ALTERATIONS

1203.1 Scope. Historic buildings undergoing alterations, changes of occupancy or that are moved shall comply with Section 1203.

1203.3 Means of egress.

~~Where, in the opinion of the code official, there is sufficient width and height for a person to pass through the opening or traverse the means of egress, existing~~

Existing door openings,

~~and~~

corridor and stairway widths and heights

~~are not required to meet the widths~~

less than those required by the International Building Code or this codeshall be approved, provided that, in the opinion of the code official, the means of egress has sufficient width and height for a person to pass through the opening or traverse the exit.

~~Where approved by the code official, the front or main exit doors need not swing in the direction of the path of exit travel, provided that other approved means of egress having sufficient capacity to serve the total occupant load are provided.~~

1203.4 ~~1204.7~~ Door swing. Where approved by the code official, existing front or main exit doors need not swing in the direction of exit travel, provided that other approved exits having sufficient capacity to serve the total occupant load are provided.

SECTION 1204 CHANGE OF OCCUPANCY

1204.6 Means of egress. Existing door openings, ~~and~~ corridor and stairway widths and heights less than those required by the International Building Code or this code~~that would be acceptable for nonhistoric buildings under these provisions~~ shall be approved, provided that, in the opinion of the code official, the means of egress complies with the following:

1. There ~~there~~ is sufficient width and height for a person to pass through the opening or traverse the exit ~~and~~.
2. That ~~that~~ the capacity of the exit system is adequate for the occupant load, or where other operational controls to limit occupancy are approved by the code official.

Reason:

The intent of this proposal is to clarify what is required for widths and heights in the means of egress. The current text in Section 1203.3, 1204.6 and 1204.7 are written so differently that it is difficult to determine what is different.

The provisions in Section 1203 are applicable to COO, so duplication is not required. Currently the last sentence of Section 1203.3 and Section 1204.7 have slightly different wording, but appear to have the same requirements. Therefor, door swing is moved to Section 1203.4 and need not be repeated under 1204.The first sentence in Section 1203.3 and Section 1204.6 have most of the same requirement but are written differently. COO also asks for capacity. Both sections are rewritten the same except for the additional Item 2 in COO. To make the sentence consistent within itself, 'and height' was added in the first sentence because the approval is based on sufficient 'width and height'.

This is one of a group of code change proposals related to IEBC Chapter 12 Historic buildings. While they work together, each proposal can stand on it's own merit. Please see the proposal for the reorganization of this chapter for a clean copy of what this chapter would look like if all the proposals pass.

This proposal is submitted by the ICC Building Code Action Committee (BCAC).

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Cost Impact:

The change proposal is editorial in nature or a clarification and has no cost impact on the cost of construction

Justification for no cost impact: This proposal is to provide consistency. There are no change to construction requirements.

EB122-25

Summary: Clarifies existing requirements for historic transoms in Historic Buildings chapter

CAH-1: Approved as Submitted
CAH-2: Consent Agenda

CAH-1: Proposal

IEBC: SECTION 1203, 1203.4, SECTION 1204, 1204.8
Proponents: Jeff Grove, Chair, representing BCAC (bcac@iccsafe.org)

2024 International Existing Building Code

Revise as follows:

SECTION 1203 ~~FIRE SAFETY~~ ALTERATIONS

1203.4 Transoms. In ~~buildings with automatic sprinkler systems of~~ Group R-1, R-2 or R-3 occupancies, existing transoms in ~~corridors and other~~ fire-resistance-rated walls ~~may~~ shall be permitted to be maintained ~~if~~ where the transom is fixed in the closed position and the building has an automatic sprinkler system. A sprinkler shall be installed on each side of the transom.

SECTION 1204 CHANGE OF OCCUPANCY

1204.8 Transoms.

~~In corridor walls required by these provisions to be fire-resistance rated,~~ In other than Group R-1, R-2 or R-3 occupancies, existing transoms in walls required to be fire-resistance rated, shall be permitted to ~~may~~ be maintained where the transom is ~~if~~ fixed in the closed position, and fixed wired glass set in a steel frame or other approved glazing shall be installed on one side of the transom. In Group R-1, R-2 and R-3, transoms shall comply with Section 1203.4.

~~Exception: Transoms conforming to Section 1203.4 shall be accepted.~~

Reason:

The requirements for transoms in alterations and change of occupancy were compared. Since main corridors are required to be fire-resistance-rated in Group R, it appeared the provisions were meant to apply to rated construction. Since the requirements in Section 1204.8 are less than 1203.4, and the exception sends you do 1203.4, it appears that coordination within these provisions need to be further coordinated and clarified. This is a suggestion for that coordination. We believe this to be the original intent.

This is one of a group of code change proposals related to IEBC Chapter 12 Historic buildings. While they work together, each proposal can stand on it's own merit. Please see the proposal for the reorganization of this chapter for a clean copy of what this chapter would look like if all the proposals pass.

This proposal is submitted by the ICC Building Code Action Committee (BCAC).

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cycle, which included members of the committee as well as interested parties. Related documents and reports are posted on the BCAC website at BCAC webpage.

Cost Impact:

The change proposal is editorial in nature or a clarification and has no cost impact on the cost of construction

Justification for no cost impact: This is a coordination item. Please see reason statement.

EB123-25

Summary: Clarifies requirements for character defining interior finishes in Historic Buildings chapter

CAH-1: Approved as Submitted
CAH-2: Consent Agenda

CAH-1: Proposal

IEBC: SECTION 1203, 1203.5, SECTION 1204, 1204.9

Proponents: Jeff Grove, Chair, representing BCAC (bcac@iccsafe.org)

2024 International Existing Building Code

Revise as follows:

SECTION 1203 ~~FIRE SAFETY~~ ALTERATIONS

1203.5 Interior finishes. The existing interior finishes shall be ~~accepted~~ permitted to remain where ~~it is demonstrated that they are the historic finishes~~ such material are character defining features.

SECTION 1204 CHANGE OF OCCUPANCY

1204.9 Interior finishes.

Where interior finish materials are required to comply with the fire test requirements of Section 803.1 of the International Building Code, existing nonconforming materials shall be permitted to be surfaced with an approved fire-retardant coating to achieve the required classification. Compliance ~~with this section~~ shall be demonstrated by testing the fire-retardant coating on the same material and achieving the required fire classification. Where the same material is not available, it shall be permitted to test on a similar material.

> Exception: Existing nonconforming materials need not be surfaced with an approved fire-retardant coating where the building is ~~equipped throughout~~ provided with an approved automatic sprinkler system ~~installed in accordance with the International Building Code and the nonconforming materials can be substantiated as being historic in character~~ and such materials are character defining features.

Reason:

The proposal removes unneeded words and coordinates terms with other sections in the Chapter. Such as 'provided with an approved automatic sprinkler system is used throughout the chapter. This is the only section that includes "equipped throughout with an automatic sprinkler system installed in accordance with the International Building Code."

This is one of a group of code change proposals related to IEBC Chapter 12 Historic buildings. While they work together, each proposal can stand on it's own merit. Please see the proposal for the reorganization of this chapter for a clean copy of what this chapter would look like if all the proposals pass.

This proposal is submitted by the ICC Building Code Action Committee (BCAC).

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posted on the BCAC website at BCAC webpage.

Cost Impact:

The change proposal is editorial in nature or a clarification and has no cost impact on the cost of construction

Justification for no cost impact: This is an editorial change for consistent terminology. There are no changes to construction requirements.

EB124-25

Summary: Expands when existing character defining interior finishes can be used as one-hour assemblies

CAH-1: Disapproved
CAH-2: Approved as Modified by Comment

CAH-2: Comment 1:

IEBC: 1204.10

Proponents: Sean Denniston, Heritage Green Consulting, representing Association for Preservation Technology (sean@heritagegreenconsulting.com); Jeff Grove, Chair, representing BCAC (bcac@iccsafe.org) requests As Modified by Committee (AMC2)

Replace as follows:

2024 International Existing Building Code

~~**1204.10One-hour fire-resistant assemblies**~~ **.**

Where 1-hour fire-resistance-rated construction is required by these provisions, it need not be provided, regardless of construction or occupancy, where the existing wall and ceiling finish is wood lath and plaster.

Reason:

EB124 did three things. It coordinated the requirements for one-hour fire resistant assemblies with the larger reorganization in EB119-25 by removing 1204.10 since it is made redundant by the new structure. It removed the unnecessary "wood or metal" from the description of lath and plaster and added a new allowance for "other character-defining features" to qualify for the one-hour determination.

This comment reduces what EB-124 does to just eliminating the redundancy in 1204.10. Under EB119, changes of occupancy are made subject to the requirements for alterations in 1203, which already has a one-hour section, so there is not need to repeat it in 1204.

EB108-25 addressed the lath issue already, there is no need to do that here. And this comment eliminates the proposed allowance for other character-defining features to count as one-hour fire-resistant assemblies.

Cost Impact:

The change proposal is editorial in nature or a clarification and has no cost impact on the cost of construction

Justification for no cost impact: This is allowing for existing wall materials to remain. There is no change to construction requirements.

Comment (CAH2)# 1126

CAH-1: Proposal

IEBC: SECTION 1203, 1203.7, SECTION 1204, 1204.10

Proponents: Jeff Grove, Chair, representing BCAC (bcac@iccsafe.org)

2024 International Existing Building Code

Revise as follows:

SECTION 1203 ~~FIRE SAFETY~~ ALTERATIONS

1203.1 Scope. Historic buildings undergoing alterations, changes of occupancy or that are moved shall comply with Section 1203.

1203.7 One-hour fire-resistant assemblies. Where 1-hour fire-resistance-rated construction is required by these provisions, it need not be provided, regardless of construction or occupancy, where the existing wall and ceiling finish is ~~wood or metal~~ lath and plaster or other materials that are a character defining feature.

SECTION 1204 CHANGE OF OCCUPANCY

Delete without substitution:

~~1204.10One-hour fire-resistant assemblies~~ .

Where 1-hour fire-resistance-rated construction is required by these provisions, it need not be provided, regardless of construction or occupancy, where the existing wall and ceiling finish is wood lath and plaster.

Reason:

The revisions to Section 1203.7 is to allow for additional wall materials in historic buildings.

Section 1204.10 is deleted because 1203.7 is applicable for change of occupancies. This does not need to be repeated.

This is one of a group of code change proposals related to IEBC Chapter 12 Historic buildings. While they work together, each proposal can stand on it's own merit. Please see the proposal for the reorganization of this chapter for a clean copy of what this chapter would look like if all the proposals pass.

This proposal is submitted by the ICC Building Code Action Committee (BCAC).

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Cost Impact:

The change proposal is editorial in nature or a clarification and has no cost impact on the cost of construction

Justification for no cost impact: This is allowing for existing wall materials to remain. There is no change to construction requirements.

EB125-25

Summary: Leverages new "character defining feature" definition in requirements for historic glazing

CAH-1: Approved as Submitted
CAH-2: Consent Agenda

CAH-1: Proposal

IEBC: SECTION 1203, 1203.8

Proponents: Jeff Grove, Chair, representing BCAC (bcac@iccsafe.org)

2024 International Existing Building Code

Revise as follows:

SECTION 1203 ~~FIRE SAFETY~~ ALTERATIONS

1203.8 Glazing in fire-resistance-rated systems. ~~Historic glazing~~ Glazing materials that are character defining features are permitted in interior walls required to have a 1-hour fire-resistance rating where the opening is provided with approved smoke seals and the area affected is provided with an automatic sprinkler system.

Reason:

This is a clarification of working, the buildings are historic, not the glazing.

This is one of a group of code change proposals related to IEBC Chapter 12 Historic buildings. While they work together, each proposal can stand on it's own merit. Please see the proposal for the reorganization of this chapter for a clean copy of what this chapter would look like if all the proposals pass.

This proposal is submitted by the ICC Building Code Action Committee (BCAC).

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Cost Impact:

The change proposal is editorial in nature or a clarification and has no cost impact on the cost of construction

Justification for no cost impact: This is an editorial correction to terminology.

EB126-25

Summary: Leverages new "character defining feature" definition in requirements for exit signs

CAH-1: Approved as Submitted
CAH-2: Consent Agenda

CAH-1: Proposal

IEBC: SECTION 1203, 1203.11

Proponents: Jeff Grove, Chair, representing BCAC (bcac@iccsafe.org)

2024 International Existing Building Code

Revise as follows:

SECTION 1203 ~~FIRE SAFETY~~ ALTERATIONS

1203.11 Exit signs. Where exit sign or egress path marking location would alter or replace a character defining feature ~~damage the historic character~~ of the building, alternative exit signs are permitted with approval of the code official. Alternative signs shall identify the exits and egress path.

Reason:

The intent of this proposal is to clarify this requirement. 'Damage' is used for flood and structural provisions, and would be subjective where it came to exit sign placement in a historic building. It may not 'damage' a carving, stained glass transom or painting over a door to put an exit sign in front of it, but it would not allow for that element to be fully appreciated.

The code official can approve an alternative exit sign in a different location - such as higher above the door, or little further down the hallway. Or there may be a exit sign that is part of the building that does not fully meet the exit sign requirements of today.

This is also a companion proposal to the new defined term 'character defining feature'.

This is one of a group of code change proposals related to IEBC Chapter 12 Historic buildings. While they work together, each proposal can stand on it's own merit. Please see the proposal for the reorganization of this chapter for a clean copy of what this chapter would look like if all the proposals pass.

This proposal is submitted by the ICC Building Code Action Committee (BCAC).

BCAC was established by the ICC Board of Directors in July 2011 to pursue opportunities to improve and enhance assigned International Codes or portions thereof. In 2023 and 2024 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 BCAC webpage.

Cost Impact:

The change proposal is editorial in nature or a clarification and has no cost impact on the cost of construction

Justification for no cost impact: This is a clarification for exit sign placement. There are no changes in requirements.

EB127-25

Summary: Clarifies requirements for automatic sprinkler systems in historic buildings

CAH-1: Approved as Submitted
CAH-2: Consent Agenda

CAH-1: Proposal

IEBC: SECTION 1203, 1203.2, 1203.12, SECTION 1204, 1204.6 (New)
Proponents: Jeff Grove, Chair, representing BCAC (bcac@iccsafe.org)

2024 International Existing Building Code

Revise as follows:

SECTION 1203 ~~FIRE SAFETY~~ ALTERATIONS

Delete without substitution:

~~1203.2General~~ .

Every ~~historic building~~ that does not conform to the construction requirements specified in this code for the occupancy or use and that constitutes a distinct fire hazard as defined herein shall be provided with an ~~approved~~ automatic sprinkler system as determined appropriate by the ~~code official~~. However, an automatic sprinkler system shall not be used to substitute for, or act as an alternative to, the required number of exits from any ~~facility~~.

Revise as follows:

1203.12 Automatic sprinkler systems. Automatic sprinkler systems in historic buildings shall be provided in accordance with Sections 703, 803 and 904. As applicable.

Every historic building that cannot be made to conform to the construction requirements specified in the International Building Code for the occupancy or use and that constitutes a distinct fire hazard shall be deemed to be in compliance ~~if~~ where provided with an approved automatic sprinkler system.

An automatic sprinkler system shall not be used to substitute for, or act as an alternative to, the required number of exits from any facility.

Exception: Where the code official approves an alternative life-safety system.

SECTION 1204 CHANGE OF OCCUPANCY

Add new text as follows:

1204.6Automatic sprinkler systems .

Automatic sprinkler systems in historic building undergoing a change of occupancy shall comply with Section 1004.

Exception: Where the code official approves an alternative life-safety system.

Reason:

The intent of this proposal is to:

1) Remove redundant language in Section 1203.

2) Allow for historic buildings to use the same limits for installing sprinkler systems currently permitted for other existing buildings.

3) Indicate what is appropriate for requiring a historic building to add a sprinkler system if they undergo a change of occupancy.

This is one of a group of code change proposals related to IEBC Chapter 12 Historic buildings. While they work together, each proposal can stand on it's own merit. Please see the proposal for the reorganization of this chapter for a clean copy of what this chapter would look like if all the proposals pass.

This proposal is submitted by the ICC Building Code Action Committee (BCAC).

BCAC was established by the ICC Board of Directors in July 2011 to pursue opportunities to improve and enhance assigned International Codes or portions thereof. In 2023 and 2024 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 BCAC webpage.

Cost Impact:

The change proposal is editorial in nature or a clarification and has no cost impact on the cost of construction

Justification for no cost impact: This is a clarification. Since these alternative for sprinklers are already allowed for existing buildings, and alternative means are already permitted for historic buildings, this should be no change of construction requirements.

EB129-25

Summary: Leverages new "character defining feature" definition in requirements for natural light

CAH-1: Approved as Submitted
CAH-2: Consent Agenda

CAH-1: Proposal

IEBC: 1204.14

Proponents: Jeff Grove, Chair, representing BCAC (bcac@iccsafe.org)

2024 International Existing Building Code

Leverages new "character defining feature" definition in requirements for natural light

SECTION 1204 CHANGE OF OCCUPANCY

Revise as follows:

1204.14 Natural light. Where ~~it is determined by the code official that~~ compliance with the natural light requirements of Section 1010.1 will lead to loss of ~~historic character or historic materials in the building~~ character defining features, the existing level of natural lighting shall be considered to be acceptable.

Reason:

The intent of this proposal is a clarification/clean up of the requirements. The current allowance recognizes that enlarging windows or removing walls to increase natural light would change elements in a historic building.

The code official does not decide the detriment to the historic building - this is in the report (1201.2) and the code official approves alternatives.

The second revision is a companion change to the new definition for 'character defining feature'.

This is one of a group of code change proposals related to IEBC Chapter 12 Historic buildings. While they work together, each proposal can stand on it's own merit. Please see the proposal for the reorganization of this chapter for a clean copy of what this chapter would look like if all the proposals pass.

This proposal is submitted by the ICC Building Code Action Committee (BCAC).

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Cost Impact:

The change proposal is editorial in nature or a clarification and has no cost impact on the cost of construction

Justification for no cost impact: This is an editorial clarification. There are no change to construction requirements.

EB130-25

Summary: Clarifies and reorganizes requirements for relocated historic buildings

CAH-1: Approved as Submitted
CAH-2: Consent Agenda

CAH-1: Proposal

IEBC: 1206.1 (New), 1206.1, 1206.3 (New)

Proponents: Jeff Grove, Chair, representing BCAC (bcac@iccsafe.org)

2024 International Existing Building Code

SECTION 1206 RELOCATED BUILDINGS

Add new text as follows:

1206.1General . Historic buildings that are being relocated shall comply with Section 1206. Historic buildings being relocated shall otherwise be considered a historic building for the purposes of this code.

Revise as follows:

1206.2 ~~1206.1~~Foundations ~~Relocated buildings~~ . Foundations of relocated historic buildings and structures shall comply with the International Building Code or the International Residential Code, as applicable. ~~Relocated historic buildingsshall otherwise be considered a historic building for the purposes of this code. Relocated historic buildingsand structures shall be sited so that exterior wall and opening requirements comply with the International Building Code or with the compliance alternatives of this code.~~

Add new text as follows:

1206.3Exterior walls .

Historic buildings that are relocated shall be sited so that exterior wall and opening requirements comply with the International Building Code, the International Residential Code, or this code, as applicable.

Reason:

The existing section 1206 has a charging paragraph and has been separated into topics instead of lumped together. The general statement has been moved up into 1206.1. Foundation and exterior wall requirements are divided into 1206.2 and 1206.3.

The technical change here is that the option of complying with the IRC has been added for historic buildings that are single family homes.

This is one of a group of code change proposals related to IEBC Chapter 12 Historic buildings. While they work together, each proposal can stand on it's own merit. Please see the proposal for the reorganization of this chapter for a clean copy of what this chapter would look like if all the proposals pass.

This proposal is submitted by the ICC Building Code Action Committee (BCAC).

BCAC was established by the ICC Board of Directors in July 2011 to pursue opportunities to improve and enhance assigned International Codes or portions thereof. In 2023 and 2024 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 BCAC webpage.

Cost Impact:

The change proposal is editorial in nature or a clarification and has no cost impact on the cost of construction

Justification for no cost impact: This is primarily a reorganization of the requirements in this section. Allowing for use of the buildings within the scope of the IRC allow for buildings to use the same code throughout, so this is not adding to construction requirements.

EB132-25

Summary: Expands allowances for single-exit buildings for historic buildings

CAH-1: Disapproved
CAH-2: None-PC (Public Comment)

CAH-2: Comment

IEBC: 1204.6.1 (New)

Proponents: Sean Denniston, Heritage Green Consulting, representing Association for Preservation Technology (sean@heritagegreenconsulting.com) requests As Modified by Committee (AMC2)

Replace as follows:

2024 International Existing Building Code

1204.6.1Single Exit Buildings. .

Historic buildings undergoing alterations or a change of use to a Group R-2 occupancy of up to 3 stories in height and less than 3000 square feet per floor of Types I, II, III or IV Construction, are permitted to have a single exit stair provided the following requirements are met:

1.Every dwelling unit has at least one emergency escape and rescue opening complying with Section 1031 of the International Building Code facing a street or public way.

2.The building contains not more than four dwelling units per story.

3.The maximum exit access travel distance is limited to 75 feet.

4.The stairway is enclosed in 2-hour fire-rated walls and all doors leading into the stairway have at least a 1-1/2-hour fire rating.

5.Electrical receptacles shall be prohibited in an interior exit stairway enclosure.

This provision is applicable when the building is provided with an approved automatic sprinkler system or when other provisions of this code allow the approved automatic sprinkler system to be omitted.

Reason:

This proposal is intended to address small, historic, main street structures involved with alterations to an existing R-2 occupancy and changes of use to an R-2 Occupancy.

IEBC 2024 §. 904.1.4 and 803.2.2 allow for sprinklers to be omitted in alterations when the water supply is insufficient.

IEBC 2024 Chapter 13 - Performance Compliance Method could allow a change of use to an R-2 Occupancy without requiring a sprinkler system.

To offset that potential safety concern, this proposal:

- Maintains the maximum allowable height of 3 stories as currently limited by IBC 2024 TABLE 1006.3.4(1) STORIES AND OCCUPIABLE ROOFS WITH ONE EXIT OR ACCESS TO ONE EXIT FOR R-2 OCCUPANCIES.
- Limits the allowable floor area to 3,000 square feet. That is 1,000 square feet less than the proposed change to IBC, E24-24, that was approved by committee during the Group A Code Change Cycle.

- Requires a stair enclosure rating that is one hour greater than would be required for a three story exit enclosure in new construction.
- The maximum allowable exit access travel distance of 75' is significantly less than the 125' currently permitted by IBC 2024 TABLE 1006.3.4(1).
- The prohibition of electrical receptacles in the interior exit stairway enclosure is based on the provision found in E24-24.

Cost Impact:

Decrease

Estimated Immediate Cost Impact: This proposal will generally decrease the cost of compliance since it will generally reduce the scope of code compliance.

Estimated Immediate Cost Impact Justification (methodology and variables): The magnitude of the savings is highly dependent on the specifics of the project, including the building's size, location, and the complexity of the design.

Comment (CAH2)# 1651

CAH-1: Proposal

Note: Topic of Single Exit Buildings.

IEBC: 1204.6.1 (New)

Proposed Change as Submitted

Proponents: Sean Denniston, Heritage Green Consulting, representing Association for Preservation Technology

2024 International Existing Building Code

Add new text as follows:

1204.6.1 Single Exit Buildings .

Historic buildings undergoing a change of use to a Group R-2 occupancy of up to 5 stories in height and less than 3000 sf per floor of Type IV Construction, or better, are permitted to have a single exit stair provided the following requirements are met:

1. Every dwelling unit or tenant space has at least one emergency escape and rescue opening complying with Section 1031 of the International Building Code facing a street, public way, or lawful yard with open, unobstructed, and direct access to the street. Such yard or direct access shall be a minimum width equal to 25 percent of the vertical distance from the windowsill of the highest operable window, facing such yard or direct access, to the grade of such yard or direct access directly below such window, but not less than 36 inches wide.

2. The building contains not more than four tenants or dwelling units per story.

3. The maximum exit access travel distance is limited to 75'.

4. The stairway is enclosed in 2-hour fire-rated walls and all doors leading into the stairway have at least a 1 1/2-hour fire rating.

Reason:

Requirements for a second exit can often create an obstacle to the continued use and re-use of small historic buildings. Property line restrictions and limited footprints often make the addition of a second stair technically infeasible

or cost prohibitive. However, t he number of egress paths is not the factor for building egress safety. For example, due to their smaller size, a single exit can often provide shorter exit travel times in smaller buildings than can be found in larger buildings with multiple exit paths.

This proposal allows for the use of a single exit in certain circumstances. This allowance is contingent on the building also meeting certain other requirements to ensure an overall level of safety. First, it is limited only to R-2 occupancies and not other occupancies with different fire safety or hazard considerations. It also requires that each dwelling unit have secondary access for rescue to ensure that the single exit does not become a single point of failure for rescue. It includes limits on the number of dwelling units per floor to ensure that the exit path does not get overwhelmed. It then has limitations on the travel distance for the exit path to ensure the exception is only used in small buildings that can be evacuated quickly. Finally, it requires a 2-hour fire rating in the exit path. Unlike previous single-exit proposals that have failed in the past, this proposal is focused more on exit distance than building height and dials up the durability of the egress path.

Expansion of allowances for single-stair buildings has become an increasingly common solution in jurisdictions - notably Seattle and New York City - often focused on providing more affordable housing (https://www.centerforbuilding.org/singlestair-tracker). In this proposal, it is also being utilized to specifically encourage the re-use of smaller historic buildings.

Permitting the historic building with a single exit to be improved based on compliance with other requirements of the IEBC and the restrictions included in the proposal will promote reuse of these structures, with the added benefit of reducing the risks associated with vacant and under-utilized structures. The proposal is a targeted expansion of permission in other I-Codes allowing for single exit buildings. Rehabilitation and full occupancy of vacant and underutilized buildings is beneficial to the community, can provide needed housing, and will increase public safety by eliminating the risks associated with vacant or unimproved buildings. Encouraging the reuse of these smaller, single exit buildings aligns with state and federal housing and historic preservation policy that recognizes the importance of protection of the nation's historic and cultural resources, including through the use of state and federal historic tax credits, as administered by the National Park Service, that have been responsible for the rehabilitation of thousands of historic buildings since 1976.

Bibliography:

4. One stair, two perspectives: Single Exit Stair Symposium. NFPA (2024).
5. Single-Stair Tracker — center for building in North America. (n.d.). Center for Building in North America. https://www.centerforbuilding.org/singlestair-tracker

Cost Impact: Decrease

Estimated Immediate Cost Impact: This proposal will generally decrease the cost of compliance since it will generally reduce the scope of code compliance. However, the magnitude of the savings is highly dependent on the specifics of the project, including the building's size, location, and the complexity of the design:

1. Building Height: While this proposal is limited to shorter buildings, it does apply to buildings of different heights. The height of the stair is one of the most significant drivers of cost.
2. Construction Materials: The type of materials (wood, steel, concrete, etc.) also has a significant impact on cost. A metal or concrete stairwell will likely be more expensive than a wooden one, and will be required by the fire code in certain circumstances.
3. Labor Costs: Construction labor rates can vary significantly on the local market, as do design professional (architect or engineer) costs. In high-cost cities, labor might be 50% to 100% higher than in lower-cost areas.
4. Permitting and Design Fees: Likewise, permits can vary significantly from jurisdiction to jurisdiction.

With these considerations in mind, estimated costs could fall into the following:

- Basic/Low-end Construction: For a straightforward project in an average location, the cost of adding a second stairwell might range from $15,000 to $30,000.

- More Complex Designs: For a larger, multi-story building or a stairwell requiring more complex structural work (e.g., reinforced concrete, steel framing, or special finishes), the cost could rise to $40,000 to $60,000 or more.

Estimated Immediate Cost Impact Justification (methodology and variables): Estimation of costs were drawn from average costs of construction.