

# PROPOSED CHANGES - 2021 *INTERNATIONAL EXISTING BUILDING CODE*, HISTORIC BUILDINGS

**Association for Preservation Technology, Technical Committee Codes & Standards**  
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This package describes proposed changes to the Historic Building Chapter (chapter 12) of the *International Existing Building Code* (IEBC) for submission January 10, 2022. If accepted, these changes will become part of the 2024 IEBC. The IEBC, published by the International Code Council (ICC), is the model code available for adoption at jurisdiction throughout the US.

These proposed changes have been developed by a team of architects and engineers engaged in historic buildings nationwide and committed to code improvements to remove barriers in the existing code for historic buildings. This includes code officials interested in encouraging building rehabilitation in older cities, and the Technical Committee's Main Street subcommittee, architects and program staff working on Main Street programs across the US.

The proposed changes are organized into 6 specific proposals, following the format required by the ICC. In summary, these proposals are intended to:

- Increase the useability of the IEBC for historic buildings by clarifying procedures and aligning these with historic preservation practice
- Support the use of historic house museums and redevelopment of small (Main Street) buildings
- Increase consistency of application across the optional code compliance paths

Table 1 summarizes the six proposed code development changes

Table 2 compares the existing (2021) format with the proposed (2024)

Table 3 summarizes the source of proposed changes, where based in the 2021 IEBC

**Table 1**  
**HISTORIC BUILDING, CHAPTER 12 PROPOSED CODE CHANGES**

#	Working Title	Proposal #	Summary	Rationale
1	Scoping	7939	All historic buildings directed to Chapter 12 regardless of compliance path (some limitations) Adds consideration of preservation as an intent Clarifies path for accessibility	Code useability and clarity (Ch. 12 previously improperly used beyond Work Area Method)
2	Historic Building Allowances	7917	Combines existing provisions currently separated for Alteration and Change of Occupancy Adds definition of 'character-defining feature'. Clarifies content of historic building report	Sections were inconsistent; concept of less stringency for Alterations incorrect and outdated.  'Character-defining' is an accepted state/federal preservation term and will permit removal of inconstant language in many provisions.
3	Special Occupancy - Museums	8166	Clarifies that allowance is 3000 sf/floor.	For specialized museums, consistency with other code provisions that indicate "per floor" for smaller buildings.
4	Historic Tolerances	7970	Permits minor dimensional and rating noncompliant conditions to be retained.	Permission to maintain existing historic conditions when alteration would achieve no significant loss or gain in safety relieves projects of unnecessary costs and permits retention of historic materials.
5	Small Building Automatic Sprinkler System Equivalencies	8167	Provides accepted and specific fire safety equivalencies for small (ex., Main Street) buildings	Codify commonly accepted solutions, including those derived from Performance Compliance.
6	Distinct Hazard	8165	Adds definition	Code useability and consistency. Term currently undefined

**Table 2  
PROPOSED (2024) AND EXISTING (2021) FORMAT**

Notes:

1. Numbering refers to individual proposed code changes (and not to numbering should all 6 proposals be accepted). Numbering in this table and throughout subject to change.
2. Items in black indicate no change.
3. Key:

Proposal 1	Proposal 4
Proposal 2	Proposal 5
Proposal 3	Proposal 6

PROPOSED 2024 IEBC, Ch 12	EXISTING 2021 IEBC, Ch 12
<b>DEFINITIONS</b>	
Character-Defining Feature	
Distinct Hazard	
<b>SECTION 1201 GENERAL</b>	<b>SECTION 1201 GENERAL</b>
1201.1 Intent	1201.1 Scope
1201.2 Scope	1201.2 Report
1201.3 Special occupancy exceptions—museums	1201.3 Special occupancy exceptions—museums
1201.4 Flood hazard areas	1201.4 Flood hazard areas
1201.5 Tolerances	1201.5 Unsafe Conditions
1201.6 Accessibility	
1201.7 Historic Building Report	
<b>SECTION 1202 REPAIRS</b>	<b>SECTION 1202 REPAIRS</b>
1202.1 General	1202.1 General
1202.2 Replacement	1202.2 Replacement
<b>SECTION 1203 GENERAL SAFETY</b>	<b>SECTION 1203 FIRE SAFETY</b>
1203.1 Scope	1203.1 Scope
1203.2 Automatic fire extinguishing system	1203.2 General
1203.3 Means of egress	1203.3 Means of egress
1203.4 Transoms	1203.4 Transoms
1203.5 Interior finishes	1203.5 Interior finishes
1203.6 Flame Spread Index	1203.6 Stairway enclosure
1203.7 Stairway enclosure	1203.7 One-hour fire-resistant assemblies
1203.8 One-hour fire-resistant assemblies	1203.8 Glazing in fire-resistance-rated systems
1203.9 Glazing in fire-resistance-rated systems	1203.9 Stairway railings
1203.10 Stairways	1203.10 Guards
1203.12 Guards and handrails	1203.11 Exit Signs
1203.13 Exit signs	1203.12 Automatic Fire Extinguishing Systems
1203.14 Door swing	<b>SECTION 1204 CHANGE OF OCCUPANCY</b>
1203.14 Roof covering	1204.1 General
1203.15 Building area	1204.2 Building Area
1201.7 Exterior ratings	1204,3 Location on Property.
1201.8 Natural light	1204.4 Occupancy Separation
	1204.5 Roof covering
	1204.6 Means of Egress
	1204.7 Door swing
	1204.8 Transoms
	1204.9 Interior finishes
	1204.10 One- hour fire-resistant assemblies
	1204.11 Stairways and guards
	1204.12 Exit signs

PROPOSED 2024 IEBC, Ch 12	EXISTING 2021 IEBC, Ch 12
	1204.13 Exit stair live load
	1204.14 Natural light
<b>SECTION 1205 AUTOMATIC SPRINKLER SYSTEM EQUIVALENCIES</b>	
1204.1 General	
1204.2 Mixed-use buildings	
1204.3 Fire alarm	
1204.4 Automatic sprinkler systems	
<b>SECTION 1205 STRUCTURAL</b>	<b>SECTION 1205 STRUCTURAL</b>
1205.1 General	1205.1 General
1205.2 Dangerous conditions	1205.2 Dangerous conditions
1205.3 Exit stair live load	
1205.4 Structural evaluation	
<b>SECTION 1206. RELOCATED BUILDINGS</b>	<b>SECTION 1206. RELOCATED BUILDINGS</b>
1206.1 Relocated Buildings	1206.1 Relocated Buildings

**Table 3  
PROPOSED 2024 IEBC, CODE CHANGE AND SOURCE**

PROPOSED 2024 IEBC, CH 12	DESCRIPTION	CODE CHANGE #	SOURCE (21 IEBC)
<b>DEFINITIONS</b>			
Distinct Hazard	New	6	
Character-Defining Feature	New	2	
<b>SECTION 1201 GENERAL</b>			
1201.1 Intent	New	1	
1201.2 Scope	New	1	
1201.3 Special occupancy exceptions—museums	Edit	3	1201.3
1201.4 Flood hazard areas	NC		
1201.5 Tolerances	New	4	
1201.6 Accessibility	Redirection/no change	1	
1201.7 Historic Building Report	Edit	2	1201.2
<b>SECTION 1202 REPAIRS</b>			
1202.1 General	NC		
1202.2 Replacement	NC		
<b>SECTION 1203 GENERAL SAFETY</b>	Rename		
1203.1 Scope	Clarify	2	1203.1
1203.2 Automatic fire extinguishing system	Rename/edit	2	1203.2, 1203.12
1203.3 Means of egress	Edit/combine	2	1203.3, 1204.6
1203.4 Transoms	Edit/combine/renumber	2	1203.4, 1204.8
1203.5 Interior finishes	Edit/combine	2	1203.5
1203.6 Flame Spread Index	Edit/combine/renumber	2	1204.9
1203.7 Stairway enclosure	Edit/combine/renumber	2	1204.11
1203.8 One-hour fire-resistant assemblies	Edit/combine/renumber	2	1203.7, 1204.4, 1204.10
1203.9 Glazing in fire-resistance-rated systems	Edit/combine/renumber	2	1203.8
1203.10 Stairways	Edit/combine/renumber	2	1204.11
1203.12 Guards and handrails	Edit/combine/renumber	2	1203.9, 1203.10
1203.13 Exit signs	Edit/combine/renumber	2	1203.11, 1204.12
1203.14 Door swing	Edit/combine/renumber	2	1204.7
1203.14 Roof covering	Edit/combine/renumber	2	1204.5
1203.15 Building area	Edit/combine/renumber	2	1204.2
1201.7 Exterior ratings	Relocated	2	1204.3
1201.8 Natural light	Relocated	2	1204.14
<b>SECTION 1204 SMALL BUILDING AUTOMATIC SPRINKLER SYSTEM EQUIVALENCIES</b>			
1204.1 Sprinkler system alternatives	New	5	
1204.2 Group A-2, M or R-2 occupancies	New	5	
1204.3 Other than Group A-2, M or R-2 occupancies	New	5	
1204.4 Automatic sprinkler system type	New	5	
<b>SECTION 1205 STRUCTURAL</b>			
1205.1 General	NC		
1205.2 Dangerous conditions	NC		
1205.3 Exit stair live load	Relocate	2	1204.13
1205.4 Structural evaluation	Relocate	2	1201.2
<b>SECTION 1206. RELOCATED BUILDINGS</b>			
1206.1 Relocated Buildings	NC		

Section 4  
CHAPTER 12, ALL PROPOSALS ADOPTED

PROPOSED DEFINITIONS (CHAPTER 2)

**Character-Defining Features.** Those visual aspects and physical elements and spaces that comprise the appearance of an historic building and that are significant to the historical, architectural and cultural values, including the overall shape of the historic building or property, its materials, craftsmanship, decorative details, interior spaces and features, as well as the various aspects of its site and environment.

**Distinct Hazard.** Any clear and evident condition that exists as an immediate danger to the safety of the occupants or public right of way. Conditions that do not meet the requirements of current regular codes and ordinances do not, of themselves, constitute a distinct hazard.

SECTION 1201 GENERAL

**1201.1 Intent.** The intent of this chapter is to preserve the integrity and character-defining features of historic buildings while maintaining a reasonable degree of protection of life, health and safety for its occupants.

**1201.2 Scope.** Historic buildings shall comply with Chapter 3 and the provisions of this chapter for Repair, Alteration, Relocation and Change of Occupancy regardless of compliance path, except as limited by this chapter.

**1201.3 Special occupancy exceptions—museums.** Where a building in Group R-3 is used for Group A, B or M purposes such as museum tours, exhibits, and other public assembly activities, or for museums less than 3,000 square feet (279 m<sup>2</sup>) per floor, the occupancy shall be classified as Group B where life safety conditions are approved by the code official in accordance with Section 1201.2. Adequate means of egress in such buildings, which may include a means of maintaining doors in an unlocked position to permit egress, a limit on building occupancy to an occupant load permitted by the means of egress capacity, a limit on occupancy of certain areas or floors, or supervision by a person knowledgeable in the emergency exiting procedures, shall be provided.

**1201.4 Flood hazard areas.** In flood hazard areas, if all proposed work, including repairs, work required because of a change of occupancy, and alterations, constitutes substantial improvement, then the existing building shall comply with Section 1612 of the International Building Code, or Section R322 of the International Residential Code, as applicable.

**Exception:** If a historic building will continue to be a historic building after the proposed work is completed, then the proposed work is not considered a substantial improvement. For the purposes of this exception, a historic building is any of the following:

1. Listed or preliminarily determined to be eligible for listing in the National Register of Historic Places.
2. Determined by the Secretary of the U.S. Department of Interior to contribute to the historical significance of a registered historic district or a district preliminarily determined to qualify as a historic district.
3. Designated as historic under a state or local historic preservation program that is approved by the Department of Interior.

**1201.5 Tolerances.** The code official is authorized to accept a tolerance where there are practical physical impediments to achieving a required dimension or performance rating, or where that compliance would threaten, degrade, or destroy a character-defining feature. The approved solution should be as close as possible to the required dimension or rating. Tolerances shall be documented in the report as required by Section 1201.2.

**1201.5 Accessibility.** Accessibility of historic structures shall comply with Section 306, as applicable.

**1201.6 Historic Building Report.** A Historic Building Report shall be prepared by a registered design professional and filed with the code official by a registered design professional where such a report is

necessary in the opinion of the code official. Such report shall be in accordance with Chapter 1 and shall include the following:

1. Documentation that the building meets the definition of historic building.
2. Identification, description and photograph of provisions of character-defining features able to be preserved using the provisions of this Section.
3. For each character-defining to be retained using the provisions of this Section, identification of the historic building provision permitting its preservation.
4. For each character-defining feature where preservation cannot occur using the historic building provisions in this Section, description of how the intent of these provisions will be met. The code official is authorized to accept any reasonably equivalent alternative.

## 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.

## SECTION 1203 GENERAL SAFETY

**1203.1 Scope.** Historic buildings using the prescriptive or work area compliance methods undergoing Alterations, Changes of Occupancy, or Relocation shall comply with Section 1203.

**1203.2 Automatic Fire Extinguishing System.** Every historic building that does not conform to the construction requirements required by the *International Building Code* or this code for the occupancy or use and that constitutes a distinct fire hazard as defined herein shall be provided with an automatic fire-extinguishing system or as approved by the code official. However, an automatic fire extinguishing system shall not be used to substitute for, or act as an alternative to, the required number of exits from any facility.

**1203.3 Means of egress.** Existing door openings and corridor and stairway widths 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 means of egress. The capacity of the means of egress shall be adequate for the occupant load, or as approved by operational controls to limit occupancy.

**1203.4 Transoms.** In corridor walls required by these provisions to be fire-resistance rated, existing transoms in corridors and other fire-resistance-rated walls may be maintained if fixed in the closed position. Buildings with an automatic sprinkler system shall have a sprinkler installed on each side of the transom. In non-sprinklered buildings, transoms shall be protected with fixed wired glass or other approved glazing set in a steel frame and installed on one side of the transom.

**1203.5 Interior finishes.** Existing character-defining interior finishes shall be accepted.

**1203.6 Flame Spread Index.** 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 with an automatic sprinkler system installed in

accordance with the International Building Code and the nonconforming materials are character defining features. can be substantiated as being historic in character.

**1203.7 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.

**1203.8 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 or metal lath and plaster.

**1203.9 Glazing in fire-resistance-rated systems.** Character-defining 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. In non-sprinklered buildings, glazing shall be protected with fixed wired glass or other approved glazing set in a steel frame and installed on one side of the glazing.

**1203.10 Stairways.** Existing stairway geometry and configuration shall be accepted provided they are not structurally dangerous or unsafe.

**1203.11 Guards and Handrails.** The retention of guards and handrails, including retention of existing heights and spacings of elements, shall be permitted provided the existing guards are identified as character-defining features and no unsafe conditions are created. Where more than 50% of new materials is required, restored guards and handrails shall meet the structural loading conditions of other codes, as applicable.

**Exception.** Where an existing stair is replaced with construction of materials, dimensions and aesthetic features documented to match existing, the handrail may be omitted where there is documentation that a handrail did not originally exist, and no unsafe conditions are created.

**1203.12 Exit signs.** Where exit sign or egress path marking location would damage character defining features, alternative exit signs and locations are permitted with approval of the code official. Alternative signs shall identify the exits and egress path.

**1203.13 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.

**1203.14 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.

**1203.15 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.

**1203.16 Exterior Ratings.** Historic structures undergoing a change of use to a higher-hazard category in accordance with Section 1011.7 may use alternative methods to comply with the fire-resistance and exterior opening protective requirements. Such alternatives shall apply to character-defining features and comply with Section 1201.2.

**1203.17 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 or damage to character-defining features, the existing level of natural light shall be considered to be acceptable.

## **SECTION 1204 AUTOMATIC SPRINKLER SYSTEM EQUIVALENCIES**

**1204.1 General.** The following alternatives shall be permitted in lieu of full compliance with the Prescriptive Compliance Method or Work Area Method when undergoing alterations or a change of occupancy.

**1204.2 Group A-2, M or R-2 Occupancies.** Group A-2, M, or R-2 occupancies can be rehabilitated without an automatic sprinkler system provided the following conditions are met:

1. Building is less than 4 stories in height above grade plane and less than 3000 sqft per floor.

2. Group A-2 and M occupancies shall be located on the first floor. Group R-2 shall be located on upper floors.
3. Type IIIB construction.
4. Two exits per floor.
5. Vertical openings have 2-hour fire-resistance rating.
6. Fire-resistance rated separations in accordance with the *International Building Code*.
7. Compliance with Section 907 of the *International Building Code* and Item 4 of Section 1205.1.2.

**1204.3 Other than Group A-2, M or R-2 Occupancies.** In other than A-2, M, R-2 occupancies, where an automatic fire sprinkler system is required, a fire alarm system compliant with Section 907 of the *International Building Code* shall be accepted in lieu of the automatic fire extinguishing suppression provided that:

1. Buildings are less than 4 stories in height above grade plane and less than 300 sqft per floor.
2. The required number of exits are provided.
3. Carbon monoxide detection is in accordance with Section 915 of the *International Building Code*.
4. The fire alarm system contains the following components and capabilities:
  - 4.1 Manual pull stations.
  - 4.2 Full coverage smoke detection in accordance with NFPA 72.
  - 4.3 Occupant notification in accordance with Section 907.5 of the *International Building Code*.
  - 4.4 Emergency lighting in accordance with Section 1008 of the *International Building Code*.

**1204.4 Automatic sprinkler system type.** Where an automatic fire sprinkler system is not required but will be used as an alternative to other provisions of this code, the following systems are acceptable:

1. Buildings of four stories or less: NFPA 13R
2. Buildings five stories above grade plane or greater: NFPA 13
3. Free standing buildings or with property line separation, two floors above grade plane or less and limited to 1500 sqft per floor: NFPA 13D
4. An alternative life-safety system as approved by the code official.

## 1205 STRUCTURAL

**1205.1 General.** Historic buildings shall comply with the applicable structural provisions of Chapter 4 or 5.

**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.

**1205.2 Dangerous conditions.** Conditions determined by the code official to be unsafe shall be remedied. Work shall not be required beyond what is required to remedy the unsafe conditions.

**1205.3 Exit stair live load.** Existing historic stairways in buildings changed to a Group R-1 or R-2 occupancy shall be accepted where it can be shown that the stairway can support a 75-pounds-per-square-foot (366 kg/m<sup>2</sup>) live load.

**1205.4. Structural Evaluation.** For buildings assigned to Seismic Design Category D, E, or F, a structural evaluation describing, at a minimum, the vertical and horizontal elements of the lateral force-resisting system and any strengths or weaknesses therein shall be prepared in accordance with Section 1205.2.

## SECTION 1206 RELOCATED BUILDINGS

**1206.1 Relocated buildings.** 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.