ORDER OF THE
DEPARTMENT OF COMMERCE

The Wisconsin Department of Commerce proposes an order to repeal and recreate ch. Comm 70 including the Appendix material, and to create ss. Comm 62.0903 (1m), Comm 62.0905, and Comm 62.3001 (4), relating to historic and existing buildings.

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ANALYSIS OF PROPOSED RULES

Statutory Authority and Statutes Interpreted

Statutory Authority: ss. 101.02 (1) and (15) and 101.121, Stats.
Statutes Interpreted: ss. 101.02 (1) and (15) and 101.121, Stats.

General Summary

Under sections 101.02 (1) and (15), Stats., the Department has authority to protect public health, safety, and welfare, at public buildings and places of employment, by promulgating and enforcing requirements for construction and maintenance of those facilities.

Under section 101.121, Stats., the Department also has the responsibility to develop reasonable rules for the preservation and restoration of buildings designated as historic buildings. Owners of qualified historic buildings that are altered or changed in occupancy may choose to follow the compliance alternatives established under Comm 70 in lieu of strict compliance with chapters Comm 61 to 65, which is the *Wisconsin Commercial Building Code* (WCBC).

Currently, the Department adopts by reference the suite of International Codes as the base building construction rules under chapters Comm 61 to 65. The purpose of the rule modifications in chapter Comm 70 and the creation of rules under chapter Comm 62 is to improve the consistency of application of the construction requirements to historic buildings with the application of the WCBC to non-historic buildings, and to update the existing technical requirements relating to historic buildings.

The energy conservation requirements are reprinted in this rule package but there are no substantive changes proposed to these energy rules. Therefore, it is determined these rules are an environmental type III action, which does not require the preparation of an environmental analysis.

Detailed Summary

Although the entire chapter Comm 70 would be repealed and recreated under this proposal, many of the current requirements and provisions would not change. The reason for reprinting the entire chapter is to have all of the technical requirements available for reference to those requirements being changed, and to modify the format and terminology for consistency with other codes.

The following are the major changes contained in the revised chapters Comm 62 and 70:

1. Require a review of IBC chapter 9 for the installation of automatic sprinkler systems when an existing building is changed to include a Group A-2–assembly occupancy. This requirement will ensure consistent application of the sprinkler requirements for both historic and existing buildings and structures. [Comm 62.0903 (1m)]

2. Require automatic sprinkler systems, standpipes, and elevator controls for emergency recall and in-car operation that comply with the applicable requirements in the IBC for an existing building or portion of an existing building, when an existing building greater than 60 feet in height is changed to include a Group R-1–transient-type residential or R-2–permanent-type residential occupancy. These requirements will ensure consistent application of the sprinkler requirements for both historic and existing buildings and structures. [Comm 62.0903 (1m) (b), Comm 62.0905 and Comm 62.3001 (4)]

3. Clarify the application and election requirements of Comm 70 relating to the repair, alteration, or change of occupancy to a qualified historic building. [Comm 70.03 (2)]

4. Modify the administration and enforcement requirements by cross-referencing ch. Comm 61 for consistency in application. [Comm 70, subchapter II]

5. Eliminate duplicative terms and definitions relating to repair, alteration, and change of occupancy. Terms deleted include restored, preserved, reconstituted and reproduced. [Comm 70.17]

6. Clarify that the requirements under Comm 70.22 (1) will evaluate only the number of stories to the prevailing code. The height of the building as specified in the prevailing code under IBC Table 503 will not be evaluated. Also, modify Table 70.22-1 relating to number of stories by clarifying the numerical value of zero (0) means the building is at the maximum number of stories under the prevailing code. [Comm 70.22 (1) and Table 70.22-1]

7. Modify the title of Table 70.22-4 to attic draftstopping and compartmentalization and the title of Table 70.22-5 to fireblocking, which are consistent with comparable terminology and requirements in the IBC. [Table 70.22-4 and Table 70.22-5]

8. Eliminate the sentence under Comm 70.22 (5) stating that fireblocking and draftstopping be installed in existing walls where the wall cavity is exposed. This application is consistent with the application of the prevailing code to non-historic existing buildings. [Comm 70.22 (5)]

9. Eliminate the footnote under Table 70.22-6, which states where a 3-hour separation is required and a 4-hour separation is provided the maximum numerical value is zero. The rule now states that a numerical value of +2 may be assigned when an increase of at least 1-hour fire-resistive rating increase is provided above that required in the prevailing code. [Table 70.22-6]

10. Clarify that the single numerical value for shaft enclosures is to be accumulative using the worst shaft enclosure condition for all the openings. [Comm 70.22 (7)]

11. Modify Comm 70.22 (8) to require the existing HVAC system to be evaluated in accordance with the prevailing code for fire and smoke dampers and use conditions similar to the *International Existing Building Code*® (IEBC). The existing duct system is to be evaluated under Table 70.22-7 for vertical shaft requirements. [Tables 70.22-7 and 70.22-8]

12. Include new conditions under Table 70.22-11 relating to smoke control systems. The conditions would state that smoke control systems and operable windows required and provided in accordance with the prevailing code would receive a numerical value of zero (0). [Table 70.22-11]

13. Clarify that the emergency power requirement under Table 70.22-15 relates to illumination emergency power. [Table 70.22-15]

14. Revise the requirements under Table 70.22-16 to be closer to the conditions listed under the IEBC for elevator controls and to modify the numerical values. [Table 70.22-16]

15. Modify the sprinkler requirements by using terminology and values consistent with the IBC, eliminating the footnotes relating to partial sprinklers, and altering the values for the sprinkler table based on values from other Tables. [Table 70.22-17]

16. Consolidate all the separate subchapters relating to structural, accessibility, energy, mechanical and electric under the specific requirements under one subchapter relating to miscellaneous building requirements. Eliminate various requirements under subchapter V that cross-reference compliance to the prevailing code and retain only those requirements that provide alternatives to compliance with the prevailing code. Eliminate those requirements, such as atriums and existing penetrations in fire-resistive assemblies, which were deemed to have a more restrictive application than what would be required for non-historic buildings. [See subchapter V]

17. Group all of the means of egress requirements under one code section and modify them for consistency with the application of the IBC to non-historic buildings and also to the exemptions specified under the IEBC for historic buildings, including transom windows in corridors. [Comm 70.30]

18. Include specific requirements for high-rise buildings that are converted to R-residential occupancies. The new requirements state that sprinklers and standpipes are required in all the work areas, which is defined as the area of all reconfigured spaces, and specify that elevators serving the work areas are to be provided with Phase I and Phase II operations complying with chapter Comm 18. [Comm 70.34]

19. Revise the structural requirements to be consistent with the minimum requirements for non-historic buildings. [Comm 70.38 and 70.39]

Federal Comparisons

An Internet-based search for "historic building code regulations" in the *Code of Federal Regulations* (CFR) did not identify any existing or proposed federal regulations establishing building construction standards to protect public safety and welfare for historic buildings that are altered or changed in occupancy. However, it did identify the following existing federal regulations that address the preservation of historic buildings for tax relief and incentives:

- 36 CFR 67–*Historic Preservation Certifications Pursuant to Sec. 48(g) and Sec. 170(h) of the Internal Revenue Code of 1986*. Under t:

- 36 CFR 68–*The Secretary of the Interior Standards for the Treatment of Historic Properties*.

An Internet-based search for the referenced federal regulations of the 2003 and 2004 issues of the *Federal Register* did not identify any proposed changes to these regulations relating to the preservation of historic buildings.

State Comparisons

An internet-based search of adjacent states' codes resulted in the following codes that establish building construction requirements relating to alteration and change of occupancy of historic buildings:

- Minnesota incorporates by reference the 2000 edition of the Guidelines for the Rehabilitation of Existing Buildings as published by the International Conference of Building Officials, Whittier, California. It appears these rules may be an earlier version of the *International Existing Building Code*® (IEBC), which covers similar safety construction topic areas to those covered under Comm 70. Both the IEBC and Comm 70 are based upon the requirements in the *International Building Code*® (IBC).

- Under Michigan's Rehabilitation Code for Existing Buildings the 2003 edition of the IEBC is incorporated by reference. The IEBC covers similar safety construction topic areas to those covered under Comm 70, and both the IEBC and Comm 70 are based upon the requirements in the IBC.

- Iowa incorporates by reference the 1994 edition of the Uniform Building Code (UBC), as the State Building Code. Under the Iowa State Building Code, repairs, alterations and additions to historic buildings may be made without conformance to the UBC, only when authorized by those municipalities exercising jurisdiction. The UBC is a precursor to the IBC.

- Illinois does not have a statewide building code covering historic buildings. In Illinois enactment of building codes is at the local municipal level.

Council Members and Representation

The proposed rules were developed with the assistance of the Historic Building Code Advisory Council. The members of that citizen advisory council are as follows:

Name	**Representing**
Bruce Johnson	Wisconsin Builders Association
Steve Gleisner	City of Milwaukee Fire Department
Charles Quagliana	AIA-Wisconsin
Chris Rute	Milwaukee Historic Preservation Commission
Jim Sewell	Wisconsin Historical Society
Harry Sulzer	City of Madison
David Vos	Project Developers/Alexander Company

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SECTION 1. Comm 62.0903 (1m) is created to read:

Comm 62.0903 (1m) EXISTING BUILDINGS. These are department rules in addition to the requirements in IBC section 903.2: (a) When an existing building or structure or portion of an existing building or structure is changed to include a Group A-2 occupancy an approved automatic sprinkler systems shall be provided in locations as described in IBC section 903.

(b) When an existing building or structure or portion of an existing building or structure is changed to include a multifamily dwelling occupancy an approved automatic sprinkler systems shall be provided in locations as described in s. Comm 62.0903 (2).

(c) An approved automatic sprinkler system shall be provided throughout the entire building or in that portion of the building where an existing building or structure that is greater than 60 feet in height is changed to include a Group R-1 or R-2 occupancy.

SECTION 2. Comm 62.0905 is created to read:

Comm 62.0905 Standpipe systems. This is a department rule in addition to the requirements in IBC section 905.1: Standpipe systems shall be provided in existing buildings and structures or portions of existing buildings and structures in accordance with IBC section 905 when existing buildings or structures that are greater than 60 feet in height are changed to include a Group R-1 or R-2 occupancy.

SECTION 3. Comm 62.3001 (4) is created to read:

Comm 62.3001 (4) EXISTING BUILDINGS GREATER THAN 60 FEET IN HEIGHT. This is a department rule in addition to the requirements in IBC section 3001: At least one existing elevator shall be provided with emergency recall operation and emergency in-car operation complying with ch. Comm 18 when an existing building or structure that is greater than 60 feet in height is changed to include a Group R-1 or R-2 occupancy.

SECTION 4. Comm 70 is repealed and recreated to read:

Subchapter I – Scope and Application

Comm 70.01 Purpose of code. Pursuant to s. 101.121, Stats., this chapter provides elective design and construction alternatives when repairing, altering, or changing the occupancy of buildings or structures designated as qualified historic buildings, or converting qualified historic buildings to be used as public buildings or places of employment. The alternative requirements are intended to facilitate the restoration of historic buildings so as to preserve their historic fabric or restored architectural elements and features, to encourage energy conservation, to permit a cost-effective approach to preservation and restoration and to provide for the health, safety and welfare of occupants and visitors in historic buildings.

Comm 70.02 Scope. (1) GENERAL. This chapter applies to a qualified historic building or a portion of qualified historic buildings used as a public building or a place of employment, except as provided in sub. (2).

(2) NON-APPLICABLE BUILDINGS. Compliance with this chapter may not be elected for any of the following:

(a) Group I institutional occupancies.

(b) Group E educational occupancies.

(c) Group R-4 residential occupancies.

(d) New buildings or structures constructed in a historic district.

(e) New additions to qualified historic buildings.

(e) Buildings exempt from the prevailing code specified in s. Comm 61.02 (3).

Note: See IBC chapter 3 for occupancy designations.

Comm 70.03 Application. (1) RETROACTIVITY. This chapter does not apply retroactively to a qualified historic building unless specifically stated in an administrative rule.

(2) ELECTION AND APPLICATION. (a) *Repairs.* When repairs are made to a qualified historic building, the applicable code in effect at the time of the original construction shall be applied to the repair.

Note: The first commercial building code was effective on October 15, 1914. Chapters Comm 75 to 79, existing buildings code, may be used for buildings constructed prior to October 15, 1914.

(b) *Alterations.* 1. Except as specified in subd. 2., an alteration to a qualified historic building shall comply with the prevailing code.

2. This chapter may be applied when an alteration affects elements, features or spaces that are specifically addressed in this chapter.

(c) *Change of occupancy.* When a change of occupancy occurs in a qualified historic building or portion of a qualified historic building, this chapter or the prevailing code shall be applied to the building.

(d) *Exhibit buildings.* When a qualified historic building is changed to an exhibit building, subch. VI or the prevailing code shall be applied.

(3) IMPACT OF OTHER CODES. When compliance to this chapter is elected, the provision of any other building code, including any county or municipal building code, or of any other local ordinance or regulation does not apply, if that provision concerns a matter dealt with in this chapter.

Comm 70.04 Verification of historic status. When an owner of a qualified historic building elects to be subject to the requirements in this chapter, a verification of historic status form shall be completed and submitted with the plans and specifications to the department or an authorized representative for review. The state historic preservation officer or an authorized municipal official shall sign the verification of historic status form verifying the building complies as a qualified historic building.

Note: Copies of the verification of historic status form, SBD 7728, are available at no charge from the Safety and Buildings Division, P.O. Box 7162, Madison, WI 53707-7162, or telephone (608) 266-3151 and TTY (608) 264-8777, or at the Safety and Buildings' web site at www.commerce.state.wi.us.

Subchapter II – Administration and Enforcement

Comm 70.07 Plan review. (1) ALTERATION OR CHANGE OF OCCUPANCY. Except as specified in sub. (2) and (3), before a qualified historic building undergoes an alteration or change of occupancy, plans and specifications shall be submitted to the department or an authorized representative as specified in ss. Comm 61.30.

(2) EXHIBIT BUILDINGS. When a qualified historic building is changed to an exhibit building as specified in subch. VI and the building is not altered, plans and specifications are not required to be submitted to the department or an authorized representative as specified in s. Comm 61.30.

(3) EXPIRATION OF PLAN APPROVAL. Plan approval by the department or its authorized representative for interior building alterations shall expire 2 years after the approval date indicated on the approved building plans if the alteration work is not completed within those 2 years.

Comm 70.08 Supervision and inspection. (1) SUPERVISION. The proposed construction of a project within the scope of this chapter shall comply with the supervision requirements specified in s. Comm 61.50.

(2) INSPECTION. On-site inspections shall be conducted as specified in s. Comm 61.51.

Comm 70.09 Fees. (1) DEPARTMENT FEES. Fees for plan examination and inspection as specified in s. Comm 2.31 shall be submitted to the department with the appropriate completed application form, plans and specifications.

(2) MUNICIPAL FEES. Municipalities providing plan examination and inspection services as agents of the department shall comply with subch. VII of ch. Comm 61.

Comm 70.10 Petition for variance. The department shall consider and may grant a variance to a provision of this chapter in accordance with ch. Comm 3. The petition for variance shall include, where applicable, a position statement from the fire department having jurisdiction.

Note: Chapter Comm 3 requires the submittal of a petition for variance form (SBD-9890) and a fee, and that an equivalency is established in the petition for variance which meets the intent of the rule being petitioned. Chapter Comm 3 requires the department to process petitions on requirements contained in chapter Comm 70 within 10 business days.

Note: The petition for variance form, SBD 9890, required in this chapter is available from the Safety and Buildings Division at P.O. Box 7162, Madison, WI 53707-7162, or at telephone (608) 266-3151 and (608) 264-8777 (TTY), or at the Safety and Buildings' web site at www.commerce.state.wi.us.

Comm 70.11 Penalties. Penalties for violations shall be assessed in accordance with ss. 101.02 (12) and (13) (a), Stats.

Note: Section 101.02 (13) (a), Stats., indicates penalties will be assessed against any employer, employee, owner or other person who fails or refuses to perform any duty lawfully enjoined, within the time prescribed by the department, for which no penalty has been specifically provided, or who fails, neglects or refuses to comply with any lawful order made by the department, or any judgment or decree made by any court in connection with ss. 101.01 to 101.25. For each such violation, failure or refusal, such employee, owner or other person must forfeit and pay into the state treasury a sum not less than $10 nor more than $100 for each violation.

Note: Section 101.02 (12), Stats., indicates that every day during which any person, persons, corporation or any officer, agent or employee thereof, fails to observe and comply with an order of the department constitutes a separate and distinct violation of such order.

Subchapter III – Definitions

Comm 70.17 Definitions. In this chapter:

(1) "Accessible" means capable of being reached without undesired removal or alteration of any part or parts of the permanent structure finish material or paved sidewalk or driveway, which would cause damage to historic fabric of the building.

(2) "Alter" or "alteration" includes any physical construction or renovation to an existing building other than repair or addition.

(3) "Authorized representative" means any certified municipality or county as specified in s. Comm 61.70, and any appointed agent as specified in s. Comm 61.71.

(4) "Building" means any structure used or intended for supporting or sheltering any use or occupancy.

(5) "Certified municipal register of historic property" means a register of historic property which is part of an historic preservation ordinance promulgated by a city, village, town or county if the ordinance is certified by the state historical society under s. 44.44, Stats.

(6) "Change of occupancy" includes a change in the purpose or level of activity within a building that involves a change in application of the requirements of the prevailing code.

(7) "Department" means the department of commerce.

(8) "Exhibit building" means a qualified historic building that is open to the general public only for display or tours.

(9) "Historic fabric" includes the existing materials, and portions of the building still intact when exposed or as they appeared and were used in the past.

(10) "IBC" means the *International Building Code®*.

(11) "National register of historic places in Wisconsin" means the places in Wisconsin that are listed on the national register of historic places maintained by the U.S. department of the interior.

(12) "Occupancy" means the purpose for which a building or structure is used or intended to be used as regulated in the prevailing code.

(13) "Prevailing code" means the current edition of chs. Comm 61 to 65, the Wisconsin Commercial Building Code.

Note: The Wisconsin Commercial Building Code, chs Comm 61 to 65, adopts by reference the *International Building Code®* (IBC), the *International Energy Conservation Code™* (IECC), the *International Mechanical Code®* (IMC) and the *International Fuel Gas Code®* (IFGC). Comm 14, Fire Prevention Code, may have rules that may affect the maintenance and use of a qualified historic building.

(14) "Qualified historic building" has the meaning given in s. 101.121 (2) (c), Stats.

Note: Under section 101.121 (2) (c), Stats., "qualified historic building" means a historic building which:

1. Is listed on, or has been nominated by the state historical society for listing on, the national register of historic places in Wisconsin or the state register of historic places;

2. Is included in a district which is listed on, or has been nominated by the state historical society for listing on, the national register of historic places in Wisconsin or the state register of historic places, and has been determined by the state historical society to contribute to the historic significance of the district;

2m. Is determined by the state historical society to be eligible for listing on the national register of historic places in Wisconsin or the state register of historic places;

3. Is listed on a certified local register of historic property; or

4. Is included in a district, which is listed on a certified local register of historic property, and has been determined by the city, village, town or county to contribute to the historic significance of the district.

Note: See s. 44.63, Stats., for criteria of significance for buildings to be considered for placement on the state register of historic places.

(15) "Repair" includes the replacement, cleanup, rebuilding or renewing of any portion of a qualified historic building for the purpose of its maintenance.

(16) "Seasonal use building" means a building that is only open from May 15 to September 15.

(17) "Thermal resistance" means a measure of the ability of materials to retard the transfer of heat.

Note: The higher R-value of a material, the more difficult it is for heat to flow through the material.

(18) "Thermal performance" means the design heat loss, excluding infiltration and ventilation, through above-grade gross walls and roof and attic assemblies facing the conditioned interior.

(19) "Vapor barrier" means a material, including paint, with a vapor transmission rate less than 1.00 perm.

(20) "Work area" includes that portion or portions of a building consisting of all reconfigured spaces as indicated on the construction documents. Work area excludes other portions of the building where incidental work associated with the intended work must be performed and portions of the building where work not initially intended by the owner is specifically required by this code.

Subchapter IV – Building Evaluation Method

Comm 70.20 Scope and application. This subchapter provides an alternative method for determining code compliance for an alteration or change of occupancy within a qualified historic building. When the building evaluation method is used, the method shall be applied to the entire qualified historic building to determine compliance.

Comm 70.21 Building evaluation method. (1) GENERAL. The building evaluation method evaluates the degree of life safety of a qualified historic building by comparing the 17 building safety parameters specified under s. Comm 70.22 with the requirements of the prevailing code. The degree of life safety shall be measured in terms of fire safety, means of egress and general safety in accordance with all of the following:

(a) *Fire safety.* The category of fire safety includes the building safety parameters affecting the structural fire resistance, automatic fire detection, fire alarm, and fire suppression features of a qualified historic building.

(b) *Means of egress.* The category of means of egress includes those building safety parameters affecting evacuation from a qualified historic building.

(c) *General safety.* The category of general safety includes all of the building safety parameters under fire safety and means of egress.

(2) DETERMINING NUMERICAL VALUES. A single numerical value shall be determined for each of the building safety parameters specified under s. Comm 70.22. After a numerical value has been determined for a building safety parameter, that value shall be entered for each of the applicable life safety categories in the corresponding row in Table 70.23. The values shall be entered in accordance with all of the following:

(a) A numerical value may not be interpolated and, except for zero, shall be listed with a positive or negative sign.

(b) When a building parameter does not apply, a value of zero shall be assigned.

(3) BUILDING SAFETY SCORE. (a) *Numerical values.* The numerical values entered in Table 70.23 shall be algebraically totaled within each life safety column, and the total shall be listed as a safety score under each column.

(b) *Total safety score.* 1. Where the total safety score in each life safety column is equal to or greater than zero, the qualified historic building is in compliance with this chapter.

2. When the total safety score in any of the life safety columns is less than zero, the building is not in compliance with this chapter, for the proposed alteration or change of occupancy. Additional safety measures may be proposed by the owner to bring any negative total safety score to a value which is equal to or greater than zero.

Comm 70.22 Building safety parameters. A qualified historic building shall be evaluated in accordance with the building safety parameters specified in subs. (1) to (17).

(1) NUMBER OF STORIES. The allowable number of stories shall be determined in accordance with the prevailing code. The allowable height will not be evaluated as specified in IBC Table 503. A single numerical value for the number of stories of the building shall be established from Table 70.22-1.

Note: See IBC chapter 6 as adopted in the prevailing code for types of construction requirements.

Note: See s. Comm 62.0500 and IBC chapter 5 as adopted in the prevailing code for allowable number of stories.

Table 70.22-1
Number of Stories

Number of Stories	**Numerical Value (per story)**
Each story above the maximum number of stories allowed	-5
Building is at the maximum number of stories under the prevailing code	0
Each story below the maximum number of stories	+5 (maximum value of +10)

(2) BUILDING AREA. The allowable building area shall be determined in accordance with the prevailing code. A single numerical value shall be established from Table 70.22-2.

Note: See s. Comm 62.0500 and IBC chapter 5 as adopted in the prevailing code for allowable building area, which contains provisions for both aggregate and per story limitations.

Table 70.22-2
Building Area

Building Area	**Numerical Value**
More than 150% of the allowable area	-5
131% - 150% of the allowable area	-4
121% - 130% of the allowable area	-3
111% - 120% of the allowable area	-2
90% to 110% of the allowable area	0
80% - 89% of the allowable area	+2
70% - 79% of the allowable area	+3
50% - 69% of the allowable area	+4
Less than 50% of the allowable area	+5

(3) FIRE-RESISTANCE RATING BASED ON FIRE SEPARATION DISTANCE. The fire-resistance rating requirements for exterior walls based on the fire separation distance shall be determined in accordance with the prevailing code. A single numerical value, using the worst fire separation condition, shall be established from Table 70.22-3.

Note: See s. Comm 62.0702 and IBC section 702 for definition of fire separation distance, s. Comm 62.0704 and IBC section 704 for exterior wall construction and rating, and IBC section 602 for fire-resistance rating requirements for building elements, as adopted in the prevailing code.

Table 70.22-3
Building Fire-Resistance Rating Based on Fire Separation Distance

Building Fire-resistance Rating Based on Fire Separation Distance	Numerical Value
Rating less than allowed under the prevailing code	-2
Complies with prevailing code	0
Rating greater than the prevailing code	+2

(4) ATTIC DRAFTSTOPPING. The attic area shall be evaluated in accordance with the attic draftstopping requirements specified in the prevailing code. A single numerical value shall be established from Table 70.22-4.

Note: See IBC section 716.4 as adopted in the prevailing code for attic draftstopping requirements.

Table 70.22-4
Attic Draftstopping and Compartmentalization

Attic Draftstopping and Compartmentalization	Numerical Value
No compartments provided but required	-5
Compartments are not more than 10% over the code permitted areas	-3
Complies with prevailing code	0
Compartments are less than 25% of the code permitted areas	+3

(5) FIREBLOCKING. The fireblocking requirements shall be determined in accordance with the prevailing code. A single numerical value, using the worst fireblocking condition, shall be established from Table 70.22-5.

Note: See IBC section 716.2 as adopted in the prevailing code for fireblocking requirements.

Table 70.22-5
Fireblocking

Fireblocking	Numerical Value
No fireblocking provided	-5
Fireblocking provided at basement and attic levels and wherever accessible	-3
Complies with prevailing code	0

(6) MIXED OCCUPANCIES. The separation of different occupancies shall be evaluated in accordance with the prevailing code. A single numerical value, using the worst separation condition, shall be established from Table 70.22-6.

Note: See IBC section 302.3 as adopted in the prevailing code for separation of occupancy requirements.

Table 70.22-6
Occupancy Separation

Occupancy Separation	Numerical Value
No separation provided, but required	-5
Provided, but 2 hours less than required	-4
Provided, but 1 hour less than required	-2
Complies with prevailing code for fire resistive ratings or no separation is required	0
Provided and 1 or more hours greater than required	+2

(7) VERTICAL OPENINGS. (a) *Fire-resistance ratings.* Except as specified in par. (b), the fire-resistance rating of enclosures of stairway exits, hoistways and other shafts or openings between 2 or more floors shall be evaluated in accordance with the prevailing code. An accumulative numerical value, using the worst vertical opening condition, shall be established from Table 70.22-7.

Note: See IBC sections 707 and 1005.3 as adopted in the prevailing code for shaft and vertical exit enclosure requirements.

(b) *Exception.* The construction of an atrium in a qualified historic building shall comply with the prevailing code.

Table 70.22-7
Vertical Openings

Vertical Openings	Numerical Value (per shaft or opening)
No enclosure, but required	-3
Enclosure provided with no rating	-2
Enclosure provided but 1 hour below the required protection level	-1
Complies with prevailing code or no enclosure required	0
1 hour required, but 2 hour provided	+1

(8) HEATING, VENTILATING, AND AIR CONDITIONING. The existing heating, ventilating and air conditioning (HVAC) system shall be evaluated in accordance with the prevailing code for the ability of the system to limit the movement of smoke and fire beyond the point of origin. A single numerical value shall be established from Table 70.22-8.

Note: See IBC section 715 as adopted in the prevailing code for ducts and air transfer openings.

Table 70.22-8
HVAC Systems

HVAC Systems	Numerical Value
Existing ducts and air transfer openings serving 3 or more stories do not comply with the fire and smoke damper requirements in the prevailing code	-10
Combustibles located in existing air plenums or existing corridors used as air plenums	-5
Existing ducts and air transfer openings serving 3 or more stories are provided with fire or smoke dampers complying with the prevailing code	-5
Existing ducts and air transfer openings serving not more than 2 stories do not comply with the fire and smoke damper requirements in the prevailing code	-2
Existing ducts and air transfer openings serving 2 stories are provided with fire or smoke dampers complying with the prevailing code	0
Complies with prevailing code	0
Duct system serving one story, or a central boiler or chiller system without ductwork connecting 2 or more stories	+5

(9) SMOKE DETECTION. The smoke detection system shall be evaluated in accordance with the prevailing code. A single numerical value shall be established from Table 70.22-9.

Note: See s. Comm 62.0907 and IBC section 907 as adopted in the prevailing code for fire alarm and detection systems.

Table 70.22-9
Smoke Detection

Smoke Detection	Numerical Value
Complies with prevailing code	0
Elevator lobby only and not required by prevailing code	+1
HVAC return only and not required by prevailing code	+2
HVAC return and elevator lobby and not required by prevailing code	+3
Total coverage provided, in addition to that required by the prevailing code	+5

(10) FIRE ALARMS. The fire alarm system shall be evaluated in accordance with the prevailing code. A single numerical value shall be established from Table 70.22-10.

Note: See s. Comm 62.0907 and IBC section 907 as adopted in the prevailing code for fire alarm and detection systems.

Table 70.22-10
Fire Alarms

Fire Alarms	Numerical Value
Manual fire alarm system required, but not provided	-5
Manual fire alarm system required and provided, but does not comply with prevailing code	-2
System complies with the prevailing code	0
Manual fire alarm system provided but not required[a]	+1
Manual fire alarm and voice alarm or manual fire alarm with public address system provided, but not required[b]	+3
Fire alarm system connected to a central control station[c]	+4
Fire alarm system connected to a central control station, which is interconnected to a remote control station that is permanently monitored[c]	+5

[a] If a numerical value of (+5) is taken under par. (9) smoke detection, the numerical value for this section is zero.

[b] Voice alarm and public address systems shall be activated from a location, which is occupied by an employee during all periods of building occupancy.

[c] Fire department may require systems to be interconnected with the fire department.

(11) SMOKE CONTROL. The ability of a natural or mechanical venting, exhaust or pressurization systems to control the movement of smoke from a fire shall be determined in accordance with the prevailing code for the entire building based on the worst smoke control condition. If a building is 2 stories or less in height, the numerical value is zero. A single numerical value shall be established from Table 70.22-11.

Note: See s. Comm 62.0909 and IBC section 909 as adopted in the prevailing code for smoke control requirements.

Table 70.22-11
Smoke Control

Smoke Control	Numerical Value
Smoke control system required and provided in accordance with prevailing code	0
Operable windows required and provided in accordance with prevailing code	0
Operable windows, that are operable without special keys or tools, are provided throughout the entire building, but not required	+2
Automatic smoke vents provided throughout entire building, but not required.	+3
One smokeproof stairway enclosure provided and building has operable windows throughout, but neither required	+5
All stairways are pressurized in accordance with the prevailing code, but not required	+7
Engineered smoke control and removal system provided that covers the entire building, but not required	+10

(12) EXITS. The minimum number of means of egress and the minimum egress width for the applicable occupancy shall be provided as specified in the prevailing code. A single numerical value for additional exits or improving exit conditions shall be established from Table 70.22-12.

Note: See ss. Comm 62.1003 to Comm 62.1006 and IBC chapter 10 as adopted in the prevailing code for means of egress requirements.

Table 70.22-12
Exits

Exits	Numerical Value
Complies with prevailing code	0
Horizontal exits are provided in addition to the required exits[a]	+2

Exits to grade or enclosed stairways exceed the minimum number of exits[b]	+3
Fire escape is eliminated and a code complying enclosed exit stairway serving 3 or more levels is provided	+5

[a] No more than one-half the exits may be horizontal exits.
[b] Exits shall be at least 20 feet apart.

(13) DEAD ENDS. The length of exit access travel distance where the building occupants are confined to a single direction of egress shall be evaluated in accordance with Table 70.22-13. A single numerical value shall be established from Table 70.22-13.

Table 70.22-13
Dead Ends

Dead Ends	**Numerical Value**
Dead ends exceed the maximum permitted distance in prevailing code	-5
Complies with prevailing code	0

(14) MAXIMUM TRAVEL DISTANCE TO AN EXIT. (a) *General.* Except as specified in par. (b), the length of exit access travel and common path of egress travel shall be determined in accordance with the prevailing code. A single numerical value, using the worst travel distance condition, shall be established from Table 70.22-14.

Note: See IBC section 1004 as adopted in the prevailing code for travel distance requirements.

(b) *Exception.* Travel distances that are 25% above the maximum limitations are not permitted.

Table 70.22-14
Maximum Travel Distance

Maximum Travel Distance	**Numerical Value**
111% - 125% of limit allowed	-5
90% - 110% of prevailing code limit	0
50% - 89% of limit allowed[a]	+3
Less than 50% of limit allowed[a]	+5

[a] For residential occupancies no credit may be taken for reduced exit distance.

(15) ILLUMINATION EMERGENCY POWER. The availability of illumination emergency power for means of egress shall be evaluated in accordance with the prevailing code. A single numerical value shall be established from Table 70.22-15.

Note: See IBC section 1003.2.11 as adopted in the prevailing code for illumination emergency power systems.

Table 70.22-15
Illumination Emergency Power

Illumination Emergency Power	Numerical Value
Illumination emergency power required, but not provided	-5
Complies with prevailing code	0
Emergency power provided, but not required	+2

(16) ELEVATOR CONTROL. Except as provided in s. Comm 70.34, the elevator equipment and controls shall be evaluated in accordance with Table 70.22-16. A single numerical value shall be established from Table 70.22-16.

Note: See chapter Comm 18 for description of Phase I, emergency recall operation, and Phase II, emergency in-car operation.

Table 70.22-16
Elevator Control

Elevator Control	Numerical Value
No elevator in buildings 3 stories or more in height	-4
Buildings 3 stories or more in height containing an elevator without Phase I emergency recall operation or Phase II emergency in-car operation	-2
No elevator in buildings less than 3 stories in height	0
Buildings less than 3 stories in height containing an elevator without Phase I emergency recall operation or Phase II emergency in-car operation	0
Buildings less than 3 stories in height containing an elevator with Phase I emergency recall operation	+1
Buildings less than 3 stories in height containing an elevator with Phase I emergency recall operation and Phase II emergency in-car operation	+1
Buildings 3 stories or more in height containing an elevator with Phase I emergency recall operation	+2
Buildings 3 stories or more in height containing an elevator with Phase I emergency recall operation and Phase II emergency in-car operation	+4

(17) SPRINKLERS. Automatic sprinkler systems shall be evaluated in accordance with the prevailing code. A single numerical value shall be established from Table 70.22-17.

Note: See ss. Comm 62.0901 to Comm 62.0909 and IBC chapter 9 as adopted in the prevailing code for sprinkler requirements.

Note: See ss. Comm 70.33 and 70.34 for conditions where an automatic sprinkler system is required based on change of use to certain occupancies.

Table 70.22-17
Sprinklers

Sprinklers	Numerical Value
Sprinkler system is required but not provided	-5
Sprinkler coverage is provided as required but the sprinkler system does not comply with the prevailing code[a]	-3
Sprinkler system is not required and not provided	0
Sprinkler system is required and provided in accordance with the prevailing code[a]	0
Sprinkler system is required and equipped with quick response sprinklers where these sprinklers are not required	+2
Complete sprinkler system complying with the prevailing code and provided throughout entire building, but not required[a]	+7

[a]Sprinklers may be omitted in combustible concealed spaces that are not accessible

Comm 70.23 Building evaluation form. The numerical values determined in s. Comm 70.22 shall be entered in Table 70.22-23.

Table 70.22-23
Building Evaluation Form

Building Safety Parameters	Life Safety Categories		
	Fire Safety	Means of Egress	General Safety
1. Number of stories			
2. Building area			
3. Building setback		NA	
4. Attic compartmentalization		NA	
5. Fireblocking and draftstopping		NA	
6. Mixed occupancies		NA	
7. Vertical openings			
8. HVAC systems			
9. Smoke detection			
10. Fire alarms			
11. Smoke control	NA		
12. Exits	NA		
13. Dead ends	NA		
14. Maximum travel distance	NA		

15. Illumination emergency power	NA		
16. Elevator control			
17. Sprinklers			
Total safety score			

NA as used in this Table means "Not applicable."

Subchapter V – Miscellaneous Building Requirements

Comm 70.27 Roof coverings. (1) EXISTING ROOFS. Existing roof coverings not in conformance with the ratings specified in the prevailing code may be allowed to remain on the building.

(2) REPAIRS. Repairs may be made up to 50% of the entire roof surface with materials that match the existing roof coverings. If more than 50% of the entire roof surface needs to be repaired, the roof covering shall conform to the requirements of the prevailing code.

(3) WOOD SHINGLES. Where wood shingles are used to preserve the historic features, the shingles shall be of a fire treated type and of a class C rating.

Note: See IBC section 1507 as adopted in the prevailing code for roof covering requirements.

Comm 70.29 Fire escapes. When a qualified historic building undergoes a change of occupancy, all existing fire escapes intended to be used as a required exit shall be inspected, structurally analyzed or load tested prior to use. A written report from the engineer or architect stating the results of the inspection and structural analysis or load test shall be submitted to the department. The report shall document the physical condition of the fire escape, condition of the attachment of the fire escape to the exterior wall and capacity of the fire escape to support imposed loads.

Comm 70.30 Means of egress. (1) STAIRWAY RISER AND TREADS. (a) *10 or less people.* Existing stairways serving 10 or less people may have riser and tread dimensions not to exceed a 45º angle with the horizontal.

(b) *More than 10 people.* All existing required exit stairways serving more than 10 people shall have a uniform rise of not more than 7-3/4 inches and a uniform tread not less than 9-1/2 inches, measured form riser to riser and tread to tread.

(2) DOORS. (a) *General* Except as specified in par. (b), exit door size and swing shall comply with the prevailing code.

(b) *Exceptions.* 1. When approved by the department or an authorized representative, existing front means of egress 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.

2. Double means of egress doors may be used with a door leaf less than 32 inches in width provided the total door width measures at least 36 inches.

(3) TRANSOMS. (a) *General.* Except as specified in par. (b), when a qualified historic building undergoes a change of occupancy to Group R occupancy and the corridor walls are required to be fire-resistance rated to provide a dwelling unit separation, existing transoms may be maintained if fixed in the closed position, and fixed wired glass set in a steel frame or other approved glazing is installed on one side of the transom.

(b) *Exception.* In a fully sprinklered building involving an occupancy of Group R-2, existing transoms in corridors and other fire-resistance-rated walls may be maintained if fixed in the closed position. A sprinkler shall be installed on each side of the transoms.

Comm 70.31 Guardrails. (1) GENERAL. When a qualified historic building is changed in occupancy, the requirements in sub. (2) shall apply to guards from the work area floor to the level of exit discharge but shall be confined to the egress path of any work area.

(2) MINIMUM REQUIREMENTS. Every open portion of a stair, landing, or balcony that is more than 30 inches above the floor or grade below and is not provided with guards, or those portions in which existing guards are judged to be in danger of collapsing, shall be provided with guards. New guards shall comply with the applicable requirements referenced under the prevailing code.

Comm 70.33 A-2 occupancies. An approved automatic sprinkler system in a qualified historic building shall be provided as described in IBC section 903 when the existing building or structure or a portion of existing building or structure is changed to an A-2 occupancy.

Note: See IBC chapter 9 and ch. Comm 62 for requirements relating to automatic sprinkler systems.

Comm 70.34 High-rise buildings with R-occupancies. When a qualified historic building that is greater than 60 feet in height is changed to include a Group R occupancy, the building or portion of the building shall comply with all of the following:

(1) An approved automatic sprinkler system complying with the prevailing code shall be provided in all work areas.

(2) A standpipe system complying with the prevailing code shall serve all work areas.

(3) When an elevator serves a work area, at least one elevator shall be provided with Phase I and II emergency controls complying with ch. Comm 18.

Note: See s. Comm 70.17 (21) for definition of "work areas."

Comm 70.39 Structural requirements. (1) ADDITIONS, ALTERATIONS AND CHANGE OF OCCUPANCY. Except as specified in subs. (2) and (3), when an addition, alteration or change of occupancy imposes additional vertical or lateral loads on the structure of a qualified historic building, the areas of the building affected by the addition, alteration or change of occupancy shall comply with the prevailing code.

(2) FLOOR LIVE LOADS. (a) *Reductions.* The following floor live load reductions may be used in all occupancies, except for storage areas and assembly occupancies, in lieu of augmenting the structure to accommodate the required loading specified in the prevailing code:

1. The live load specified in the prevailing code may be reduced by 15% for flexure, if 3 or more wood structural members are spaced less than 24 inches on center and are joined by a load-distributing element. This live load reduction may not be applied to the supports or if the existing design used repetitive allowable stresses.

2. The live load specified in the prevailing code may be reduced by 10% if the existing structure provides a 2-hour fire-resistive rating. This reduction may be applied to steel and concrete systems only.

3. The permitted reductions specified in subds. 1. and 2. are not to be used cumulatively.

(b) *Posting.* If the actual live load capability is less than the required live load specified in the prevailing code, the actual live capability load shall be conspicuously posted and no greater load may be imposed upon the building.

(3) LIVE, DEAD AND WIND LOADS. The roof dead load, live load and wind load of a qualified historic building are considered to comply with the prevailing code provided all of the following conditions are met:

(a) The structure has met the combined service loads and environmental stresses imposed upon it or at least 20 years.

(b) The structure has stood for more than 20 years with no visible signs of deterioration.

Comm 70.40 Use of archaic materials. (1) STRUCTURAL CHANGES. Structural changes to a qualified historic building that is altered or repaired may be made with the same materials of which the existing building or structure was constructed in order to maintain the historical fabric of the building.

(2) FIRE-RESISTANT PROPERTIES. (a) *Determination of fire-resistance.* 1. Except as specified in subd. 2., the fire-resistance rating of archaic or existing building materials, elements or assemblies shall be determined in accordance with the prevailing code.

Note: See s. Comm 62.0703 and IBC section 703.3 as adopted in the prevailing code for fire-resistance rating requirements.

2. Fire-resistance rating may be determined by an actual testing of the material by an approved testing laboratory, or by other methods or standards recognized by the department.

(b) *New materials.* The fire-resistance of any new materials, elements or assemblies shall comply with the prevailing code.

Comm 70.48 Energy conservation requirements. (1) APPLICATION. Except as specified in sub. (2), the energy conservation requirements specified in s. Comm 70.51 or the prevailing code shall be applied to a qualified historic building when it is altered or undergoes a change of occupancy and the energy consumption is increased.

(2) EXEMPTIONS. Qualified historic buildings used as exhibit buildings and seasonal use buildings are exempt from the energy conservation requirements.

Comm 70.51 Alternate energy conservation requirements. (1) *Thermal performance.* Qualified historic buildings shall meet the minimum thermal performance values specified in the prevailing code or the requirements in this section.

(2) INFILTRATION. (a) *Windows and doors.* 1. All exterior windows and doors shall be gasketed or weatherstripped.

2. When existing windows are replaced with factory manufactured windows, the replacement windows shall be double glazed or equipped with interior or exterior storm windows.

(b) *Chimney flues.* Flues, which are no longer in use, shall be closed off and sealed against infiltration.

(c) *Exterior openings.* All of the following openings in the exterior building envelope shall be caulked, gasketed or otherwise sealed:

1. At exterior joints around window and doorframes.

2. At penetrations of utility services through walls, floors and roofs.

3. Between the foundation and box sill.

(3) EXTERIOR ENVELOPE. (a) *Attics.* Where accessible, insulation that has a thermal resistance value of at least R-19 shall be installed in the attic. Ventilation shall be provided above the ceiling or attic insulation. The free area of ventilation shall be at least 1/300 of the horizontal area. Vapor barriers shall be installed on the warm side of all insulation materials present in the attic. Access panels or doors to attics shall be provided with insulation that has a thermal resistance value of at least R-5 if vertical or a value of at least R-19 if horizontal.

(b) *Exterior walls.* Where accessible, insulation that has a thermal resistance value of at least R-11 shall be provided in all exterior wall cavities or the wall cavities shall be completely filled with insulation. Where accessible, a vapor barrier shall be installed on the warm side of the insulation, facing the conditioned space. Where masonry walls are insulated from the interior, the walls shall be provided with insulation that has a thermal resistance value of at least R-10.

(c) *Box sills.* Where accessible, insulation that has a thermal resistance value of at least R-19 shall be installed in box sills.

(d) *Doors.* Exterior doors, which are not of the original material, shall be insulated, double-glazed or equipped with a storm door. Where no vestibule exists, exterior doors which are not of the original material or are not replicas designed to be compatible with the historic aspects of the structure shall be insulated, double glazed or equipped with a storm door.

(e) *Floors over crawl spaces.* Where accessible, insulation that has a thermal resistance value of at least R-11 shall be installed in floors over crawl spaces.

(f) *Moisture control in crawl spaces.* Ventilation shall be provided in unheated crawl spaces with insulated ceilings. The area of ventilation shall be at least 1/300 of the floor space. The area of ventilation shall be distributed equally to provide cross-ventilation. Where accessible, a vapor barrier shall be applied to cover any exposed earth.

(4) AIR HANDLING DUCT INSULATION. Where accessible, all existing ducts, plenums and similar enclosures serving qualified historic buildings shall be insulated as specified in the prevailing code.

(5) PIPE INSULATION. Where accessible, all existing piping within qualified historic buildings shall be thermally insulated to the levels specified in the prevailing code.

(6) WATER HEATING. The replacement of water heating equipment in qualified historic buildings shall comply with the provisions of the prevailing code for energy conservation.

Comm 70.56 Mechanical requirements. (1) EXISTING EQUIPMENT. Alterations to existing mechanical equipment in qualified historic buildings shall comply with the applicable portions of the prevailing code.

(2) HEATING AND COOLING EQUIPMENT. The replacement of heating and cooling equipment, which serves qualified historic buildings, shall comply with the provisions of the prevailing code.

(3) INSIDE DESIGN TEMPERATURES AND VENTILATION. When a qualified historic building undergoes a change of occupancy, the inside design temperatures and ventilation requirements for the new use shall be maintained in accordance with the prevailing code.

(4) SEASONAL USE BUILDINGS. Mechanical heating, ventilation or natural light is not required in qualified historic buildings that are seasonal use buildings.

Subchapter VI –Exhibit Buildings

Comm 70.63 Exhibit buildings. (1) GENERAL OCCUPANCY REQUIREMENTS. Qualified historic buildings to be used as exhibit buildings shall comply with all of the following requirements:

(a) The building shall be open to the public only under the supervision of a tour guide.

(b) The building may not be lived in, slept in or worked in, except for the purpose of demonstrating to the public how people lived in a particular era.

(c) Smoking is prohibited in the building.

(d) Open flame equipment may not be used in the building, except for fire places and other mechanical equipment original to the building.

(2) FIRE PROTECTION SYSTEMS**.** (a) *Fire extinguishers.* Fire extinguishers shall be installed in exhibit buildings and may be located in a nonconspicuous location but accessible to the occupants.

(b) *Smoke detectors.* 1. At least one smoke detector shall be provided for each 1,200 square feet of floor area with a minimum of one smoke detector per floor level.

2. a. Except as specified in subd. b., where electricity is provided in the exhibit building, the smoke detectors shall be connected to the electrical power.

b. Where no electrical power is provided to an exhibit building, the smoke detectors shall be of a battery type.

3. Smoke detectors shall be tested weekly.

(3) MEANS OF EGRESS. (a) *Number of means of egress.* Exhibit buildings provided with only one means of egress shall be restricted to a total capacity of 12 people, and not more than 6 people may be located above or below the first floor at any one time.

(b) *Stairways.* Stairways without 6-foot, 4-inch vertical headroom clearance shall have signs posted warning occupants of the headroom clearance available.

(c) *Exit signs.* Exit signs shall be provided in accordance with the prevailing code in exhibit buildings occupied prior to ½ hour before sun rise and ½ hour after sun set and in all areas not provided with natural lighting.

(4) SANITARY REQUIREMENTS. Toilet facilities in exhibit buildings shall be made available in accordance with the prevailing code. The facilities may be located on the site and serve more than one historic exhibit.

(5) ACCESSIBILITY REQUIREMENTS. Exhibit buildings shall comply with the applicable requirements in the prevailing code relating to accessibility for people with disabilities.

Note: See IBC chapter 34 for accessibility requirements for historic buildings.

(6) STRUCTURAL. Exhibit buildings shall comply with the floor live load requirements in accordance with s. Comm 70.39.

(7) MECHANICAL HEATING AND VENTILATION. Mechanical heating, ventilation or natural light is not required in exhibit buildings.

END

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EFFECTIVE DATE

Pursuant to s. 227.22 (2) (intro.), Stats., these rules shall take effect on the first day of the month following publication in the Wisconsin Administrative Register.

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File reference: Historic rewrite/Comm 70 adoption draft