

Chapter Comm 70

HISTORIC BUILDINGS

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Note: Chapter ILHR 70 as it existed on January 31, 1998 was renumbered Chapter Comm 70 under s. 13.93 (2m) (b) 1., Stats., and corrections made under s. 13.93 (2m) (b) 7., Stats., Register, January, 1998, No. 505.

Subchapter I — Purpose, Scope and Application

Comm 70.001 Authority. Chapter Comm 70 constitutes the historic building code and is promulgated under the authority of ss. 101.121 (3) and 101.13 (9), Stats.

History: Cr. Register, September, 1986, No. 369, eff. 10-1-86.

Comm 70.01 Purpose. The purpose of ch. Comm 70 is to:

- (1) Provide alternative building standards for preserving or restoring buildings or structures designated as historic buildings;
- (2) Facilitate the restoration of historic buildings so as to preserve their original or restored architectural elements and features;
- (3) Encourage energy conservation;
- (4) Permit a cost-effective approach to historic preservation and restoration;
- (5) Provide for the health, safety and welfare of occupants and visitors in qualified historic buildings;
- (6) Provide a process for the department to grant variances in order to permit the proper preservation or restoration of qualified historic buildings; and
- (7) Provide a reasonable means of access to historic buildings for people with physical disabilities.

History: Cr. Register, September, 1986, No. 369, eff. 10-1-86.

Comm 70.02 Scope. The provisions of ch. Comm 70 are not retroactive.

(1) **QUALIFIED BUILDINGS.** Chapter Comm 70 applies solely to qualified historic buildings:

(a) Listed on, or nominated by the state historical society for listing on, the national register of historic places in Wisconsin;

(b) Included in a district which is listed on, or nominated by the state historical society for listing on, the national register of historic places in Wisconsin, and which has been determined by the state historical society to contribute to the historic significance of the district;

(c) Listed on a certified municipal register of historic property; or

(d) Included in a district which is listed on a certified municipal register of historic property, and which has been determined by the municipality to contribute to the historic significance of the district.

(2) **NON-QUALIFIED BUILDINGS.** Chapter Comm 70 does not apply to the following:

- (a) Nursing homes as defined in s. 50.01 (3), Stats.;
- (b) Hospitals as defined in s. 50.33 (2) (a) and (c), Stats.;
- (c) Approved public or private treatment facilities for alcoholics as defined in s. 51.45 (2) (b) and (c), Stats.;
- (d) Community-based residential facilities as defined in s. 101.127, Stats.;
- (e) Educational occupancies specified in IBC section 305.1;
- (f) New additions to historic buildings;
- (g) New buildings constructed in an historic district;
- (h) Buildings that are reproduced; and
- (i) Other buildings as specified in s. Comm 61.02 (4).

History: Cr. Register, September, 1986, No. 369, eff. 10-1-86; correction in (2) (b) made under s. 13.93 (2m) (b) 7., Stats., Register, September, 2000, No. 537; **CR 01-110: am. (2) (e) and (i) Register June 2002 No. 558, eff. 7-1-02.**

Comm 70.03 Election of code. (1) **USE REMAINS UNCHANGED.** (a) *Preserved, renovated, repaired or restored.* If a qualified historic building is preserved, renovated, repaired or

restored to maintain the building in its original condition and the use remains unchanged from the time of original construction, the owner may elect to be subject to one of the following codes:

1. Chapter Comm 70;
2. The code in effect at the time of original construction;
3. Chapters Comm 75 to 79, existing building code, for buildings erected prior to October 9, 1914; or
4. The prevailing code.

(b) *Altered or remodeled.* When a qualified historic building is altered or remodeled and that portion being altered or remodeled affects the structural strength, fire hazard, exits, required natural lighting or replacement of major equipment, the owner may elect to be subject to one of the following:

1. Chapter Comm 70; or
2. The prevailing code.

(2) **OCCUPANCY CHANGES.** When a qualified historic building is changed to an occupancy different than what the building was originally constructed as, the owner may elect to be subject to this chapter or the prevailing code.

History: Cr. Register, September, 1986, No. 369, eff. 10-1-86; correction in (1) (a) 3. made under s. 13.93 (2m) (b) 7., Stats., Register, June, 1995, No. 474; am. (1) (a) 3., Register, September, 2000, No. 537, eff. 10-1-00; **CR 01-110: r. and recr. (2) Register June 2002 No. 558, eff. 7-1-02.**

Comm 70.04 Impact of other codes on qualified historic buildings. The owner of a qualified historic building who elects to be subject to this chapter is not required to comply with any provision of any other building code, including any county or municipal building code, or of any other local ordinance or regulation, if that provision concerns a matter dealt with in the historic building code.

History: Cr. Register, September, 1986, No. 369, eff. 10-1-86; **CR 01-110: r. and recr. Register June 2002 No. 558, eff. 7-1-02.**

Comm 70.05 Verification of a qualified historic building. When an owner elects to be subject to the requirements in this chapter, a verification of historic status form shall be completed and submitted to the department or an authorized representative with the plans and specifications as specified in s. Comm 70.07 (3). The verification of historic status form shall be signed by the state historic preservation officer or an authorized municipal official verifying the building is a qualified historic building.

Note: A copy of the verification of historic status form, SBD-7728, is available from the Safety and Buildings Division at P.O. Box 7162, Madison, WI 53707-7162, or at telephone 608/266-3151 and at 608/264-8777 (TTY), or at the Safety and Buildings' web site at www.commerce.state.wi.us.

History: Cr. Register, September, 1986, No. 369, eff. 10-1-86; **CR 01-110: r. and recr. Register June 2002 No. 558, eff. 7-1-02.**

Comm 70.06 Application of historic building code.

(1) **GENERAL.** Except as specified in sub. (2), when an owner elects to be subject to this chapter, it shall be applied as follows:

(a) A qualified historic building that is altered, remodeled, reproduced, or changed in occupancy shall comply with the requirements in subchs. IV to X.

(b) A qualified historic building that is preserved, reconstituted, repaired or restored shall comply with the requirements of subchs. V to X.

(2) **HISTORICAL EXHIBITS.** Any qualified historic building that is preserved and used solely as an historical exhibit shall comply with the requirements in subch. IX.

History: Cr. Register, September, 1986, No. 369, eff. 10-1-86; **CR 01-110: r. and recr. Register June 2002 No. 558, eff. 7-1-02.**

Subchapter II — Administration and Enforcement

Comm 70.07 Plan examination. (1) PLAN SUBMITTAL. If a qualified historic building is altered, remodeled, or changed to a new occupancy, plans and specifications shall be submitted to the department or an authorized representative as specified in s. Comm 61.30.

(2) **BUILDINGS EXEMPT FROM DEPARTMENT PLAN SUBMITTAL.** (a) *Preserved, renovated, repaired, or restored buildings.* Plans and specifications are not required to be submitted to the department for qualified historic buildings that are preserved, renovated, repaired or restored and the use remains unchanged from the time of original construction.

(b) *Totally preserved buildings used as historical exhibits.* If a qualified historic building complies with subch. XI for a totally preserved building used as an historical exhibit, plans and specifications are not required to be submitted to the department or its authorized representative for examination and approval.

(3) **PLANS, SPECIFICATIONS AND DATA.** Plans and specifications shall be submitted and prepared in accordance with ss. Comm 61.30 and 61.31.

(4) **STRUCTURAL REPORT.** When plans and specifications are required to be submitted to the department or its authorized representatives a structural report as specified in subch. VI which identifies the structural condition of the building shall be submitted with the plans.

(5) **APPROVAL APPLICATION FORMS.** (a) *Plan approval application.* A plan approval application form SB-118 shall be submitted along with the plans and specifications as required in sub. (3).

(b) *Verification form.* A verification of historic status form as specified in s. Comm 70.05 shall be submitted to the department or an authorized representative with plans and specifications required in sub. (3).

(c) *Building evaluation form.* When the building evaluation method is used, a completed building evaluation form as specified in s. Comm 70.23 shall be submitted to the department or an authorized representative with plans and specifications required in sub. (3).

Note: Copies of the department plan approval application form SBD-118, verification of historic status form SBD-7728, and building evaluation form SDB-10725-E are available from the Safety and Buildings Division at P.O. Box 7162, Madison, WI 53701-7162, or at telephone 608/264-1818 and 608/264-8777 (TTY). Some of the department forms are also available at the Safety and Buildings' web site at www.commerce.state.wi.us.

History: Cr. Register, September, 1986, No. 369, eff. 10-1-86; am. (1) (a) and (b), Register, September, 2000, No. 537, eff. 10-1-00; correction in (3) (b) made under s. 13.93 (2m) (b) 7., Stats., Register, June, 2001, No. 546; **CR 01-110: r. and recr. (1) and (3) Register June 2002 No. 558, eff. 7-1-02.**

Comm 70.08 Approvals. The department or an authorized representative shall review and make a determination on an application for plan review in accordance with s. Comm 61.31.

History: Cr. Register, September, 1986, No. 369, eff. 10-1-86; **CR 01-110: r. and recr. Register June 2002 No. 558, eff. 7-1-02.**

Comm 70.09 Evidence of plan approval. The architect, engineer, designer, builder, or owner shall keep at the building site one set of plans bearing the stamp of conditional approval and a copy of the specifications. The plans shall be open to inspection by the department or its authorized representative.

History: Cr. Register, September, 1986, No. 369, eff. 10-1-86.

Comm 70.10 Revocation of approval. The department may revoke any approval issued under the provisions of ch. Comm 70 for any false statements or misrepresentation of facts on which the approval was based.

History: Cr. Register, September, 1986, No. 369, eff. 10-1-86.

Comm 70.11 Expiration of plan approval. Plan approval by the department or its authorized representative shall expire one year after the date indicated on the approved plans if construction has not commenced within that year or if there has been a break in significant construction activity of more than one year.

Note: According to s. 66.05 (1) (a), Stats., the local governmental body or building inspector may order the razing of buildings or structures, or portions thereof, where there has been a cessation of normal construction for more than 2 years.

History: Cr. Register, September, 1986, No. 369, eff. 10-1-86.

Comm 70.12 Inspections. Inspections shall be conducted by the department or its authorized representative to ascer-

tain whether the construction or installations conform to the conditionally approved plans, the conditional approval letter, and provisions of ch. Comm 70.

History: Cr. Register, September, 1986, No. 369, eff. 10-1-86.

Comm 70.13 Fees. (1) **DEPARTMENT FEES.** Fees for plan examination and inspection as specified in ch. Comm 2 and fees for petitions for variances, as specified in s. Comm 2.52 shall be submitted to the department with the appropriate completed application form and the plans and specifications.

(2) **MUNICIPAL FEES.** Municipalities providing plan examination and building inspection services may establish, by ordinance, fees to cover expenses for plan examination and inspection. Fees shall be submitted to the municipality in accordance with the municipal regulations and ordinances.

History: Cr. Register, September, 1986, No. 369, eff. 10-1-86; corrections in (1) made under s. 13.93 (2m) (b) 7., Stats., Register, June, 1995, No. 474.

Comm 70.14 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 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 that meets the intent of the rule being petitioned. Chapter Comm 3 also requires the department to process regular petitions within 30 business days and priority petitions within 10 business days.

Note: Form SBD-9890 is available from the Safety and Buildings Division at P.O. Box 7162, Madison, WI 53701-7162, or at telephone 608/266-1818 and 608/264-8777 (TTY). Some of the department forms are also available at the Safety and Buildings' web site at www.commerce.state.wi.us.

History: Cr. Register, September, 1986, No. 369, eff. 10-1-86; r. and recr. Register, September, 2000, No. 537, eff. 10-1-00.

Comm 70.15 Penalties. Penalties for violations of ch. Comm 70 shall be assessed in accordance with s. 101.02, 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.

History: Cr. Register, September, 1986, No. 369, eff. 10-1-86.

Subchapter III — Definitions

Comm 70.17 Definitions. In this chapter:

(1) "Altered" or "alterations" means to modify a qualified historic building which affects the structural strength, fire hazard, access for the disabled, energy conservation, heating and ventilating, or electrical systems yet retains some original or restored architectural elements or features.

(2) "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.

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

(4) "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.

(5) "Changed in occupancy" means the process of adapting a building to an occupancy other than that for which it was originally designed.

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

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

(8) "Historic aspect" means the particular features of the historic site, building or structure that gives it its historic significance.

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

(10) "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.

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

(12) "Original material" means those features or elements of a qualified historic building or structure that have some historic significance.

(13) "Preserved" means maintaining a qualified historic building in its present condition or as originally constructed.

(14) "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.

(15) "Qualified historic building" means a building which is:

(a) Listed on, or nominated by the state historical society for listing on, the national register of historic places in Wisconsin;

(b) 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, and has been determined by the state historical society to contribute to the historic significance of the district;

(c) Listed on a certified municipal register of historic property; or

(d) Included in a district which is listed on a certified municipal register of historic property, and has been determined by the municipality to contribute to the historic significance of the district.

(16) "Reconstituted" means a qualified historic building that is reassembled piece-by-piece on the same site or new site.

(17) "Relocated" means any qualified historic building or a portion of a qualified historic building that will be moved to a new location.

(18) "Remodel" has the meaning given in s. 101.132 (1) (h), Stats.

Note: Section 101.132 (1) (h), Stats. reads: "'Remodel' means to substantially improve, alter, extend or otherwise change the structure of a building or change the location of exits, but does not include maintenance, redecoration, reroofing or alteration of mechanical or electrical systems."

(19) "Renovated" means to make sound again any structure by cleanup and replacement of deteriorated detail or structure.

(20) "Repaired" means to replace, cleanup, rebuild or renew any portion of a qualified historic building for the purpose of its maintenance.

(21) "Reproduced" means the process of rebuilding an entirely non-existent structure to its original appearance through archival and archeological investigation.

(22) "Restored" means the process of accurately recovering, by the removal of later work or the replacement of missing earlier work, as it appeared at a particular period of time.

(23) "Structural deterioration" means a decline in the original strength of a structural element caused by fire, water, wind, snow, insects, age or excessive loading, which result in cracks, distortions, deflections, misalignments, abrasion, erosion or corrosion to the structure.

(24) "Test-of-time" means a structure that has over a period of time withstood the combined service loads and environmental

stresses imposed upon it and shows no sign of serious deterioration.

History: Cr. Register, September, 1986, No. 369, eff. 10-1-86; correction in (6) made under s. 13.93 (2m) (b) 6., Stats., Register, January, 1998, No. 505; am. (2), Register, September, 2000, No. 537, eff. 10-1-00; correction in (4) made under s. 13.93 (2m) (b) 7., Stats., Register, September, 2000, No. 537; **CR 01-110: am. (2), (5), (14) and (18), r. (11), renum. (9) and (10) to be (10) and (11), cr. (9) Register June 2002 No. 558, eff. 7-1-02.**

Subchapter IV — Building Evaluation Method

Comm 70.20 Scope and application. This subchapter provides an alternative method for determining code compliance for a qualified historic building being remodeled, altered or changed in occupancy. When the building evaluation method is used, the method shall be used in its entirety to evaluate a qualified historic building.

History: Cr. Register, September, 1986, No. 369, eff. 10-1-86; **CR 01-110: am. Register June 2002 No. 558, eff. 7-1-02.**

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 in s. Comm 70.22 with the requirements of the prevailing code. The degree of life safety is measured in terms of fire safety, means of egress and general safety as follows:

(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 safe 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 in 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 Comm 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) Where a building parameter does not apply, a value of zero shall be assigned.

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

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

(c) Where the 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 occupancy. Additional safety measures may be proposed by the owner to bring any negative safety score to a value which is equal to or greater than zero.

History: Cr. Register, September, 1986, No. 369, eff. 10-1-86; **CR 01-110: r. and recr. Register June 2002 No. 558, eff. 7-1-02.**

Comm 70.22 Building safety parameters. A qualified historic building shall be evaluated in accordance with all of the following building safety parameters:

(1) NUMBER OF STORIES. (a) *Determining types of construction.* The type of construction shall be determined by comparing the actual building elements to those specified in the prevailing

code. The type of construction shall be based on that which most closely represents the type of construction described in the prevailing code. A single numerical value shall be established from Table Comm 70.22-1 and entered in Table Comm 70.23 as specified in s. Comm 70.21.

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

(b) *Different types of construction.* Buildings with different types of construction shall be separated with a type of construction separation specified in the prevailing code unless the lowest type of construction is used as the basis for the evaluation.

(c) *Allowable number of stories.* The allowable number of stories for the type of construction shall be determined in accordance with the prevailing code.

Note: See s. Comm 62.0500 and IBC chapter 5 as adopted in the prevailing code for allowable height and areas.

**TABLE 70.22-1
Number of Stories**

Number of Stories	Numerical Value (per story)
Each story above the maximum number of stories allowed	-5
Complies with prevailing code	0
Each story below the maximum number of stories	+5 (maximum value, +10)

(2) BUILDING AREA. (a) *Allowable area.* Except as specified in par. (b), the allowable building area shall be determined in accordance with the prevailing code. A single numerical value shall be established from Table Comm 70.22-2 and entered in Table Comm 70.23 as specified in s. Comm 70.21.

Note: See s. Comm 62.0500 and IBC chapter 5 as adopted in the prevailing code for allowable building area.

(b) *Number of stories.* When the building has more stories than permitted by the prevailing code, the maximum number of stories allowed for that type of construction shall be used to determine the maximum allowable area requirements for the building.

**TABLE 70.22-2
Building Area**

Building Area	Numerical Value
More than 150% of the allowed area	-5
111% - 120% of allowed	-2
90% to 110% of allowed area, or where code does not have area limitations	0
80% - 89% of allowed	+2
70% - 79% of allowed	+3
50% - 69% of allowed	+4
Less than 50% of the area allowed	+5

(3) FIRE RESISTANCE RATING AND 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 case condition, shall be established from Table Comm 70.22-3 and entered in Table Comm 70.23 as specified in s. Comm 70.21.

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 Separation Distance**

Building Fire Separation Distance	Numerical Value
Distance and rating less than allowed under the prevailing code	-2
Complies with prevailing code	0
Greater than the prevailing code	+2

(4) ATTIC COMPARTMENTALIZATION. 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 Comm 70.22-4 and entered in Table Comm 70.23 as specified in s. Comm 70.21.

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

**TABLE 70.22-4
Attic Compartmentalization**

Attic 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 AND DRAFTSTOPPING. The fireblocking and draftstopping requirements shall be determined in accordance with the prevailing code. If the existing wall material is removed and the wall cavity is exposed, fireblocking and draftstopping shall be provided in accordance with the prevailing code. A single numerical value, using the worst case condition, shall be established from Table Comm 70.22-5 and entered in Table Comm 70.23 as specified in s. Comm 70.21.

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

**TABLE 70.22-5
Fireblocking and Draftstopping**

Fireblocking and draftstopping	Numerical Value
No verification of fireblocking or draftstopping	-5
Fireblocking and draftstopping 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 case condition, shall be established from Table Comm 70.22-6 and entered in Table Comm 70.23 as specified in s. Comm 70.21.

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

**TABLE 70.22-6
Occupancy Separation**

Occupancy Separations	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 ¹	0
Provided and 1 or more hours greater than required	+2

¹Where a 3-hour separation is required and a 4-hour separation is provided, the value shall be zero.

(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. A single numerical value, using the worst case condition, shall be established from Table Comm 70.22-7 and entered in Table Comm 70.23 as specified in s. Comm 70.21.

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

(b) *Exception.* Atriums from 3 levels to not more than 8 levels may not be considered in the evaluation of vertical openings, but shall comply with s. Comm 70.26.

**TABLE 70.22-7
Vertical Openings**

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

(8) HEATING, VENTILATING, AND AIR CONDITIONING. The number of floors served by an individual heating, ventilating, and air conditioning (HVAC) system shall be determined in accordance with the prevailing code. A single numerical value shall be established from Table Comm 70.22-8 and entered in Table Comm 70.23 as specified in s. Comm 70.21.

Note: See IMC section 607 as adopted in the prevailing code for ducts and air transfer openings.

**TABLE 70.22-8
HVAC Systems**

HVAC Systems	Numerical Value
Greater than 5-floor levels served by undampened duct system, combustibles in air plenums, or corridors used as air plenums.	-5
3 to 5-floor levels served by undampened duct system	-2
2-floor levels served by undampened duct system	-1
Complies with prevailing code or provided with fire dampers	0
Multi-level buildings having 1-floor level HVAC system or central system with no ducts serving other floor levels	+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 Comm 70.22-9 and entered in Table Comm 70.23 as specified in s. Comm 70.21.

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
All corridors, in addition to those required by the code, including elevator lobbies ¹	+4
Total space with interconnection of smoke detectors and building fire alarm system and not required by prevailing code	+5

¹If required detectors meet the requirements for corridor protection, enter zero.

(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 Comm 70.22-10 and entered in Table Comm 70.23 as specified in s. Comm 70.21.

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
Complies with the prevailing code	0
Manual fire alarm system provided but not required ¹	+1
Manual fire alarm and voice alarm or manual fire alarm with public address system provided, but not required ²	+3
Central control station ³	+4
Central control station and interconnected to a remote control station which is permanently monitored ³	+5

¹ If a numerical value of (+5) is taken under (9) smoke detection, the numerical value for this section is zero.

² Voice alarm and public address system shall be activated from a location, which is occupied by an employee during all periods of building occupancy.

³ 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 Table 70.22-11 for the entire building based on the worst case 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 Comm 70.22-11 and entered in Table Comm 70.23 as specified in s. Comm 70.21.

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
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 provided are pressurized, but not required	+7
Engineered smoke control and removal system provided that covers the entire building, but not required	+10

(12) EXIT CAPACITY. (a) *General.* Except as specified in par. (b), the means of egress by number and capacity of exits shall be determined in accordance with the prevailing code. If exiting differs on various floor levels, the worst case floor shall be used. A single numerical value shall be established from Table Comm 70.22-12 and entered in Table Comm 70.23 as specified in s. Comm 70.21.

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.

(b) *Exceptions.* The minimum number of exits shall be provided as specified in the prevailing code for the applicable occupancy classification.

**TABLE 70.22-12
Exit Capacity**

Exit Capacity	Number Value (per exit)
Complies with prevailing code	0
Horizontal exits are provided in addition to the required exits ¹	+2
Exits to grade or enclosed stairways exceed the minimum number of exits ²	+3
Eliminate a fire escape exit and provide a code complying enclosed stairway exit serving 3 or more levels	+5

¹ No more than one-half the exits may be horizontal exits.

² Exits shall be at least 20 feet apart.

(13) DEAD ENDS. The length of exit access travel distance in which 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 Comm 70.22-13 and entered in Table Comm 70.23 as specified in s. Comm 70.21.

**TABLE 70.22-13
Dead Ends**

Dead Ends	Numerical Value (per dead end)
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 travel to a required exit shall be determined in accordance with the prevailing code. A sin-

gle numerical value shall be established from Table Comm 70.22-14 and entered in Table Comm 70.23 as specified in s. Comm 70.21.

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

(b) *Exceptions.* Travel distances that exceed 25% above the required 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 ¹	+3
Less than 50% of limit allowed ¹	+5

¹For residential occupancies no credit may be taken for reduced exit distance.

(15) **EMERGENCY POWER.** The availability of emergency power for emergency lighting shall be evaluated in accordance with the prevailing code and ch. Comm 16. A single numerical value shall be established from Table Comm 70.22-15 and entered in Table Comm 70.23 as specified in s. Comm 70.21.

Note: See IBC section 2702 as adopted in the prevailing code for emergency and standby power systems.

**TABLE 70.22-15
Emergency Power**

Emergency Power	Numerical Value
Emergency power required, but not provided	-5
Complies with prevailing code	0
Emergency power provided, but not required ¹	+2

¹Does not apply to buildings 2 stories or less in height.

(16) **ELEVATOR CONTROL.** The elevator equipment and controls that are available to the fire department to rescue building occupants from upper floors during a fire shall be evaluated in accordance with ch. Comm 18. A single numerical value shall be established from Table Comm 70.22-16 and entered in Table Comm 70.23 as specified in s. Comm 70.21.

**TABLE 70.22-16
Elevator Control**

Elevator Control	Numerical Value
No elevators in buildings 3 stories or more in height	-3
Buildings 3 stories or more in height containing elevators without Phase I emergency recall operation	-2
Buildings 2 stories or less in height containing elevators without Phase I emergency recall operation	-1
No elevators in buildings 2 stories or less in height	0

Buildings 2 stories or less in height containing elevators with Phase I emergency recall operation	+1
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Buildings 3 stories or more in height containing elevators with Phase I emergency recall operation	+4
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Buildings 3 stories or more in height containing elevators with Phase I emergency recall operation and Phase II in-car emergency operation	+5
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(17) **SPRINKLERS.** (a) *General.* Except as specified in par. (b), the sprinkler system shall be evaluated in accordance with the prevailing code. A single numerical value shall be established from Table Comm 70.22-17 and entered in Table Comm 70.23 as specified in s. Comm 70.21.

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

(b) *Exceptions.* If the building area evaluation was based on sprinkler protection as allowed by sub. (2), the numerical value under this section is zero.

**TABLE 70.22-17
Sprinklers**

Sprinklers	Numerical Value
System required but not provided ¹	-5
Existing sprinkler system is required but does not meet prevailing code ²	-1
Sprinkler system is not required and not provided	0
Sprinkler system required and provided in accordance with the prevailing code	0
Existing sprinkler system is not required and does not meet prevailing code ²	+1
Sprinklers provided in exit access, but not required	+3
Partial sprinkler system is provided throughout at least 75% of the building, but not required	+5
If sprinkler system is required, and regular sprinkler heads are replaced with quick response heads	+5
Complete sprinkler system provided throughout entire building, but not required	+7
Complete sprinkler system complying with NFPA 13 for quick response heads is provided throughout the entire building, but not required ³	+10

¹ If -5 was entered under sub. (2), numerical value is zero.

² Does not apply to partial systems.

³ If -5 was entered under sub. (2), numerical value is +5.

History: Cr. Register, September, 1986, No. 369, eff. 10-1-86; correction in (16) (a) made under s. 13.93 (2m) (b) 7., Stats., Register, June, 1995, No. 474; correction in (17) (a) made under s. 13.93 (2m) (b) 7., Stats., Register, September, 2000, No. 537; **CR 01-110: r. and recr. Register June 2002 No. 558, eff. 7-1-02; correction in (17) (b) made under s. 13.93 (2m) (b) 7., Stats., Register June 2002 No. 558.**

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

TABLE 70.23
Building Evaluation Form

Building Safety Parameters	Life Safety Categories			Comments
	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. Exit Capacity	NA			
13. Dead Ends	NA			
14. Maximum Travel Distance	NA			
15. Emergency Power	NA			
16. Elevator Control				
17. Sprinklers				
TOTAL SAFETY SCORE				

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

History: Cr. Register, September, 1986, No. 369, eff. 10-1-86; CR 01-110: am. Table Register June 2002 No. 558, eff. 7-1-02.

Subchapter V — Miscellaneous Building Requirements

Comm 70.25 Purpose. The purpose of this subchapter is to provide alternative building standards for qualified historic buildings.

History: Cr. Register, September, 1986, No. 369, eff. 10-1-86.

Comm 70.26 Atriums. Where the use of a qualified historic building is changed to a new use and an atrium exists, the atrium may remain subject to the following:

(1) **THREE LEVELS OR LESS.** Except as provided in sub. (3), atriums in a qualified historic building serving 3 levels or less may remain as constructed; however, the atrium will be considered an unenclosed shaft under s. Comm 70.22 (7).

(2) **MORE THAN THREE LEVELS.** Atriums in a qualified historic buildings serving more than 3 levels, but not exceeding 8 levels, may be permitted subject to the requirements in the prevailing code or the alternate atrium standards specified in sub. (3).

(3) **ALTERNATE ATRIUM STANDARDS.** (a) *Separations.* The atrium opening shall be separated at each floor by non-rated partitions or glazing.

(b) *Doors.* Doors shall be provided in the openings separating the atrium from the floor.

- Existing doors may be non-rated.

2. New doors shall be of a solid wood core type or particle-board core type door and may have glazing. Door frames may be of wood.

3. All doors shall be automatic self-closing in accordance with the prevailing code. The hold-open device shall be activated by a product of combustion detector which responds to products of combustion other than heat.

(c) *Smoke detection.* A smoke detection system, interconnected to a building fire alarm system, shall be provided on each floor at the atrium perimeter.

(d) *Mechanical smoke exhaust.* A mechanical smoke exhaust system shall comply with the prevailing code.

Note: See IBC section 910.4 as adopted in the prevailing code for mechanical smoke exhaust requirements.

(e) *Exiting.* At least one exit shall be provided from each space on each floor level that is independent of any exit located in or through the atrium.

(4) **NEW ATRIUMS.** Atriums constructed on or after January 1, 1986, shall comply with the requirement of the prevailing code.

History: Cr. Register, September, 1986, No. 369, eff. 10-1-86; CR 01-110: r. and recr. (3) (d) Register June 2002 No. 558, eff. 7-1-02.

Comm 70.27 Roof coverings. Existing roof coverings not in conformance with the ratings specified in the prevailing code may be allowed to remain on the building. 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. Where wood shingles are utilized 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.

History: Cr. Register, September, 1986, No. 369, eff. 10-1-86; CR 01-110: am Register June 2002 No. 558, eff. 7-1-02.

Comm 70.28 Illuminated exit signs. Exit signs shall be provided in accordance with the prevailing code.

Note: See IBC section 1003.2.10 as adopted in the prevailing code for exit sign requirements.

History: Cr. Register, September, 1986, No. 369, eff. 10-1-86; CR 01-110: am Register June 2002 No. 558, eff. 7-1-02.

Comm 70.29 Fire escapes. (1) PERMITTED AS EXITS. (a) *General.* Except as specified in par. (b), existing fire escapes complying with the code in effect when the building was approved may be used as an exit.

(b) When the occupancy of an existing building is changed to a new occupancy, fire escapes may not be used as an exit in accordance with the prevailing code.

(2) **HEIGHT ABOVE GRADE.** Existing fire escapes are restricted as follows:

(a) *Building approved prior to 1914.* Buildings having fire escapes constructed prior to September 14, 1914, shall be permitted to remain as built.

(b) *Buildings approved on or after September 15, 1914, but prior to 1942.* Fire escapes used on buildings constructed after September 15, 1914, but prior to January 1, 1942 shall not exceed 60 feet in height, except that fireproof buildings may have fire escapes up to 90 feet in height.

(c) *Buildings approved on or after January 1, 1942.* Fire escapes used on buildings constructed after January 1, 1942 may not exceed 55 feet in height or 5 stories.

(3) **STRUCTURAL ANALYSIS.** 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. The report shall

outline what corrective action is necessary, if any, and shall be submitted to the department.

History: Cr. Register, September, 1986, No. 369, eff. 10-1-86; **CR 01-110: r. and recr. (1), r. (3), renum. (4) to be (3) Register June 2002 No. 558, eff. 7-1-02.**

Comm 70.30 Stairway requirements. Except for the following, existing required exit stairways shall comply with the prevailing code:

(1) **WIDTH.** Minimum stairway width shall be at least 3 feet – 0 inches.

(2) **RISER AND TREADS.** (a) *Ten or less people.* Existing stairways serving 10 or less people may have riser and tread dimensions not to exceed a 45° angle with the horizontal.

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

(3) **HANDRAILS.** Except for the following, handrails shall comply with the prevailing code.

(a) *Extensions.* The 12–inch handrail extension as specified in the prevailing code at the bottom and top of stairways does not apply to existing stairways.

Note: See IBC section 1003.3.3.11.5 as adopted in the prevailing code for handrail requirements.

(b) *Openings below top rail.* Existing handrails protecting the open sides of stairways and ramps may have an opening no larger than 12 inches between the rails.

History: Cr. Register, September, 1986, No. 369, eff. 10-1-86.

Comm 70.31 Guardrails. Except for the following, guardrails shall comply with the prevailing code.

(1) **HEIGHT.** If the height of a guardrail is less than 36 inches, an additional rail shall be provided to the top of the rail to increase the overall height to 42 inches.

(2) **OPENINGS BELOW TOP RAIL.** Additional rails provided in accordance with sub. (1) shall be installed such that the distance between the 2 top rails do not allow the passage of an object with a diameter larger than 12 inches.

History: Cr. Register, September, 1986, No. 369, eff. 10-1-86.

Comm 70.32 Doors. Exit door size and swing shall comply with the prevailing code. Double doors may be used with a door leaf less than 32 inches in width provided the total door width measures at least 36 inches.

History: Cr. Register, September, 1986, No. 369, eff. 10-1-86.

Comm 70.33 Sanitary facilities. Sanitary facilities shall be provided in accordance with the prevailing code.

History: Cr. Register, September, 1986, No. 369, eff. 10-1-86.

Subchapter VI — Alternate Structural Requirements

Comm 70.35 Purpose. The purpose of this subchapter is to ensure that qualified historic buildings are structurally sound, while allowing the significant historic fabric of the building to remain.

History: Cr. Register, September, 1986, No. 369, eff. 10-1-86.

Comm 70.36 Scope. All qualified historic buildings shall meet the loading requirements specified in this subchapter.

History: Cr. Register, September, 1986, No. 369, eff. 10-1-86.

Comm 70.37 Application. (1) ALTERNATE STRUCTURAL REQUIREMENTS. Except as provided in sub. (2), this subchapter applies to historic buildings being:

- (a) Reconstituted;
- (b) Repaired;
- (c) Remodeled; or
- (d) Changed in occupancy.

(2) **NON-HISTORIC ADDITIONS AND ALTERATIONS.** (a) *Structurally separated.* New additions which are structurally separated from the existing qualified historic structure shall comply with the loading requirements of prevailing code.

Note: See IBC chapter 16 as adopted in the prevailing code for loading requirements.

(b) *Affect existing structure.* New additions or alterations which impose vertical or lateral loads on an existing qualified historic building are not permitted unless the supporting structure of the qualified historic building is capable of supporting the imposed load or unless the structure is augmented to meet the additional imposed loads.

History: Cr. Register, September, 1986, No. 369, eff. 10-1-86; **CR 01-110: am. (1) (d) and (2) (a) Register June 2002 No. 558, eff. 7-1-02.**

Comm 70.38 Structural report. (1) WHEN REQUIRED. A structural report shall be prepared on historic structures in accordance with the following:

(a) *Less than 25%.* When a qualified historic building is remodeled or changed in occupancy, which affects less than 25% of the total area of the building, a structural analysis shall be performed on that portion being remodeled.

(b) *25% or more.* When a qualified historic building is remodeled or changed in occupancy, which affects 25% or more of the total area of the building, a complete structural analysis shall be performed on the entire building.

(c) *Reconstituted building.* Prior to reconstituting any vacant qualified historic building, a structural analysis of the entire building shall be performed.

(d) *Repairs and replacements.* If any part of an historic building is repaired or replaced, a structural analysis shall be performed on that portion being repaired or replaced showing that the repair or replacement equals or exceeds the structural capability of the part being repaired or replaced.

(2) **VISUAL EXAMINATION.** A visual examination shall be made by an engineer or architect to determine if the building structure has cracks, distortions, sagging, excessive deflections, significant misalignment, signs of leakage and peeling of finishes caused by fire, wind, water or snow.

(3) **ANALYSIS.** A structural analysis shall be prepared by a Wisconsin registered engineer or architect which describes the structural condition of the building.

(a) The analysis shall demonstrate that the building structure can support the imposed live loads.

(b) An analysis shall be made of the floors to determine the actual load carrying capacity.

(c) An analysis shall be made of the roof to determine the actual load carrying capacity or, the architect or engineer shall submit a statement, signed and sealed that the roof structure has stood the test of time [s. Comm 70.39 (2)].

(d) An analysis shall be made to determine if the structural frame can carry all combined loads.

History: Cr. Register, September, 1986, No. 369, eff. 10-1-86; **CR 01-110: am. (1) (a) and (b) Register June 2002 No. 558, eff. 7-1-02.**

Comm 70.39 Alternative standards. The alternative standards for loading and materials may be used in lieu of those in the prevailing code.

(1) **FLOOR LIVE LOADS.** (a) *Reductions.* Except for storage areas and assembly occupancies, the following floor live loads may be used in all 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 original 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 subs. 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 load capability shall be conspicuously posted and no greater load may be imposed upon the building.

(2) **TEST OF TIME STANDARD.** The test of time standard may be applied in lieu of meeting the design load requirements for roof dead load, live load and wind load specified in the prevailing code where no change of loading will occur, providing:

(a) The historic building has been determined to support the imposed roof loads; and

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

History: Cr. Register, September, 1986, No. 369, eff. 10-1-86; CR 01-110: r. (1) (a) 2., **renum.** (1) (a) 3. and 4. to be (1) (a) 2. and 3. and **am.** 3., **am.** (2) (a) Register June 2002 No. 558, eff. 7-1-02.

Comm 70.40 Use of archaic materials. This section establishes alternative standards that may be used to evaluate the performance of archaic materials and assemblies in qualified historic buildings.

(1) **ALLOWABLE STRESSES AND CONSTRUCTION REQUIREMENTS.** Allowable stresses and construction requirements for archaic materials may be assigned on the basis of comparison with similar conventional codified materials or tests or both.

(a) *Archaic codes.* Whenever possible, allowable stresses and construction requirements shall be assigned on the basis of the code in effect at the time of construction.

(b) The allowable stresses may be determined as follows:

1. **Wood.** Unless wood is laboratory tested, the allowable stress shall not exceed the lowest allowable stress for that particular species and grade. If the grade and species can not be determined, the allowable stress for the lowest grade and species may be used.

2. **Masonry.** Allowable stresses for masonry may be determined by laboratory results.

3. **Steel.** The allowable stresses for steel may be determined using earlier editions of steel design manuals for the period when the steel was fabricated.

4. **Concrete.** The allowable stresses for concrete may be determined using earlier editions of concrete design manuals.

(2) **STRUCTURAL CHANGES.** Structural changes to buildings that are restored, altered or repaired may be made with the same materials of which the existing building or structure was constructed in order to maintain historical integrity.

(3) **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) *Penetrations.* All penetrations in the building element, or assembly, for electrical, plumbing and heating, ventilating and air conditioning systems shall be packed with noncombustible cementitious materials and so fixed that the packing material will not fall out due to shrinkage from drying.

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

History: Cr. Register, September, 1986, No. 369, eff. 10-1-86; CR 01-110: r. and recr. (3) Register June 2002 No. 558, eff. 7-1-02.

Subchapter VII — Alternate Accessibility Requirements

Comm 70.41 Purpose. The purpose of this subchapter is to ensure that qualified historic buildings provide access for people with physical disabilities, while maintaining the significant historic fabric or historic aspects of such buildings.

History: Cr. Register, September, 1986, No. 369, eff. 10-1-86.

Comm 70.42 Accessibility requirements. All qualified historic buildings being altered, remodeled, added to or changed in occupancy shall comply with the requirements of the prevailing code.

Note: See s. Comm 62.3408 and IBC section 3408 as adopted in the prevailing code for existing building requirements.

History: Cr. Register, January, 1998, No. 505, eff. 2-1-98; CR 01-110: **am.** Register June 2002 No. 558, eff. 7-1-02.

Subchapter VIII — Alternate Energy Conservation Requirements

Comm 70.46 Purpose. The purpose of this subchapter is to provide alternative standards for qualified historic buildings for conserving energy, while maintaining the significant historic fabric or historic aspects of such buildings.

History: Cr. Register, September, 1986, No. 369, eff. 10-1-86.

Comm 70.47 Scope. The prevailing code for energy conservation applies to all qualified historic buildings, except as provided in ss. Comm 70.48 to 70.51.

History: Cr. Register, September, 1986, No. 369, eff. 10-1-86.

Comm 70.48 Application. (1) **APPLICABLE BUILDINGS.** Except as provided in sub. (2), this subchapter shall apply to:

- (a) Qualified historic buildings undergoing remodeling;
- (b) Qualified historic buildings that are changed in occupancy and increase the energy consumption; or
- (c) Replacement of heating and cooling equipment and lighting systems within qualified historic buildings.

(2) **EXEMPT BUILDINGS AND STRUCTURES.** The following buildings and structures are exempt from the provisions of the prevailing energy conservation code as well as the alternative energy conservation requirements of this subchapter:

- (a) Preserved buildings used as historical exhibits; and
- (b) Seasonal use buildings.

History: Cr. Register, September, 1986, No. 369, eff. 10-1-86; CR 01-110: **am.** (1) (b) and (2) (a) Register June 2002 No. 558, eff. 7-1-02.

Comm 70.49 Definitions. In this subchapter:

(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. Cavities under floors, or unfinished attic areas are considered accessible.

(2) "Thermal resistance (R)" means a measure of the ability of materials to retard the transfer of heat. The R-value is the reciprocal of a heat transfer coefficient or thermal transmittance, expressed by U; $R=1/U$.

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

(3) "Thermal transmittance (U)" means the coefficient of heat transmission expressed in units of Btu per square foot per degree F per hour. It is the time rate of heat transfer. The U-value applies to combinations of different materials used in series along the path

of heat transfer and also to single materials that comprise a building section, and includes cavity air spaces and surface air films on both sides.

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

(4) "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.

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

History: Cr. Register, September, 1986, No. 369, eff. 10-1-86.

Comm 70.51 Alternative energy conservation requirements. Except as specified in subs. (3) and (4), the alternative energy conservation requirements as specified in this subchapter may be applied to a qualified historic building where strict compliance with the prevailing code would destroy the historic fabric of the building.

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

2. If the existing windows are replaced with factory manufactured windows, the 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.* The following openings in the exterior building envelope shall be caulked, gasketed or otherwise sealed:

1. Exterior joints around window and door frames;
2. At penetrations of utility services through walls, floors and roofs; and
3. Between the foundation and box sill.

(2) THERMAL PERFORMANCE OF THE EXTERIOR ENVELOPE. Historic buildings shall meet the minimum thermal performance values specified in the prevailing code shall or the prescriptive energy conservation measures specified in this subsection.

(a) *Attics.* Where accessible, insulation shall be installed in the attic to a level of R38. Minimum ventilation shall be provided above the ceiling or attic insulation. The free area of ventilation shall be at least 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 insulated to a level of R5 if vertical or to a level of R19 if horizontal.

1. When adding insulation to existing attic insulation, do not use a material with an integral vapor barrier or install a vapor barrier between layers of insulation material; otherwise, condensation problems may result.

2. If cellulose insulation materials are used, the cellulose should be fire-proofed with chemicals other than sulfate compounds. Sulfate compounds may form sulfuric acid when in contact with moisture which could cause or accelerate structural deterioration.

(b) *Exterior walls.* All accessible exterior wall cavities shall be insulated to a level of R11 or 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 insulated to at least R10.

(c) *Box sills.* Where accessible, insulation shall be installed in box sills to a level of R19.

(e) *Doors.* 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.

(f) *Floors over crawl spaces.* If accessible, insulation with an R-value of 11 or greater shall be installed in floors of crawl spaces.

(g) *Moisture control in crawl spaces.* Minimum 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 the exposed earth.

(3) 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.

(a) *Alternative air handling duct insulation.* All ducts, plenums and similar enclosures serving qualified historic buildings shall be insulated as specified in the prevailing code.

(b) *Alternative pipe insulation.* All piping within qualified historic buildings shall be thermally insulated to the levels specified in the prevailing code where they may be made accessible.

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

History: Cr. Register, September, 1986, No. 369, eff. 10-1-86.

Subchapter IX — Alternate Mechanical Requirements

Comm 70.55 Purpose. The purpose of this subchapter is to ensure that qualified historic buildings are properly heated, ventilated and air conditioned, while allowing the significant historic fabric of the building to remain.

History: Cr. Register, September, 1986, No. 369, eff. 10-1-86.

Comm 70.56 Application. (1) ALTERNATE MECHANICAL REQUIREMENTS. Except for historic exhibits and seasonal use buildings, used during the period of May 15 through September 15, all qualified historic buildings shall be provided with a heating system.

(a) The building shall be equipped with heating equipment that equals or exceeds the transmission losses and ventilation of infiltration losses, whichever are greater. The heat loss shall be based on the design criteria for outside temperatures and interior design temperatures for the specific use specified in the prevailing code.

(b) If the existing heating equipment output equals or exceeds the heat loss, the heating equipment may be used provided all the safety devices are in working order or the defective safety devices are replaced.

(c) If room sizes are increased and the heating equipment serving the room has sufficient capacity to meet the increased heat loss, the equipment may be used provided:

1. The equipment has sufficient capacity to meet the new heat loss and the equipment can operate safely at the increased temperature or pressure; and

2. Safety devices are repaired or replaced to operate at the increased temperature or pressure.

(d) If room sizes are increased and the heating equipment serving the room does not have sufficient capacity to meet the increased heat loss:

1. Additional equipment shall be added to meet the new heat loss; or

2. New heating equipment shall be provided to offset the additional heat loss.

(e) If rooms are reduced in size such that the resulting heat loss is less than that provided to the space, the existing equipment may be altered by reducing the heat to that space if reducing the heat does not affect the safety devices regulating the system.

(f) Any alteration or remodeling of existing heating equipment or systems shall conform to the prevailing code for that portion being remodeled or altered. Unless replaced with a like kind, the replacement shall conform to the prevailing code.

(2) **LIGHT AND VENTILATION.** Except for historic exhibits, all qualified historic buildings shall be provided with natural light and ventilation as specified in the prevailing code.

(3) **AIR CONDITIONING.** Existing air conditioning systems may be allowed to remain. Any alteration made to an existing air conditioning system shall conform to the prevailing code.

History: Cr. Register, September, 1986, No. 369, eff. 10-1-86.

Subchapter X — Alternate Electrical Requirements

Comm 70.58 Purpose. The purpose of this subchapter is to ensure that qualified historic buildings are properly wired while allowing the significant historic fabric of the building to remain.

History: Cr. Register, September, 1986, No. 369, eff. 10-1-86.

Comm 70.59 Application. (1) **QUALIFIED HISTORIC BUILDINGS.** Except for historic buildings complying with sub. (2), all other qualified historic buildings shall be serviced with electricity as follows:

(a) *Changed in occupancy.* If a qualified historic building is changed in occupancy, a load calculation of the building shall be performed for the proposed occupancy. If the load calculation exceeds the actual service provided, the service shall be upgraded to meet the new load.

(b) *Reconstituted.* If a qualified historic building is without electrical service and is going to be reconnected to electrical service, the existing wiring shall be inspected at the service panels, outlets, switches and where exposed to determine the physical condition of the wire and equipment.

(c) *Alterations and repairs.* Any alterations, repair or replacement to an existing conductor, outlet, switch and equipment in a qualified historic building shall be made in accordance with the prevailing electrical code for that portion being altered, repaired or replaced.

(d) *Existing building.* Existing qualified historic buildings may use the existing electrical system without upgrading the electrical system to the prevailing code.

(2) **HISTORIC EXHIBITS.** Qualified historic buildings used as historic exhibits do not require electrical service.

History: Cr. Register, September, 1986, No. 369, eff. 10-1-86; **CR 01-110: am. (1) (a) Register June 2002 No. 558, eff. 7-1-02.**

Subchapter XI — Preserved Buildings Used As Historical Exhibits

Comm 70.62 Scope. This subchapter establishes alternative standards for a qualified historic building that is open to the

public and used solely as an historic exhibit. Repairs may be made without conformity to the prevailing code to restore the building to the original condition.

History: Cr. Register, September, 1986, No. 369, eff. 10-1-86.

Comm 70.63 Historic exhibits. (1) Exempt. Except as specified in sub. (2), a qualified historic building used as an historic exhibit is exempt from complying with the requirements of the prevailing code or other sections of ch. Comm 70.

(2) Minimum safety requirements. The following minimum safety requirements shall be complied with:

(a) The historic building is open to the public only under the supervision of a tour guide;

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

(c) No smoking is allowed in the building;

(d) No open flame equipment is installed in the building, other than fireplaces and original equipment;

(e) Fire extinguishers are provided, but may be located in a nonconspicuous location on the premise;

(f) At least one smoke detector is provided for each 1,200 square feet of area with a minimum of one detector per floor level. Where electricity is available, the smoke detectors shall be connected to the electrical power. Where no electrical power is available, the smoke detector may be of a battery type. Smoke detectors shall be tested weekly;

(g) Access for the disabled is provided in accordance with subch. VII;

(h) The capacity of the floor system shall be determined by a registered architect or engineer and any changes that are necessary shall be made prior to the building being open to the public;

(i) Historic buildings provided with only one exit shall be restricted to a total capacity of 12 persons of which not more than 6 persons may be located above the first floor at any one time;

(j) Signs shall be posted in the building identifying and warning of stairs and headroom clearance that do not conform to the prevailing code; and

(k) Exit signs shall be provided in accordance with the prevailing code in buildings occupied prior to 1/2 hour before sun rise and 1/2 hour after sun set and in all areas not provided with natural lighting.

History: Cr. Register, September, 1986, No. 369, eff. 10-1-86.

Comm 70.64 Sanitary requirements. Toilet facilities 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.

History: Cr. Register, September, 1986, No. 369, eff. 10-1-86.