



State of Wisconsin \ Department of Commerce

RULES IN FINAL DRAFT FORM

Rule No.: Comm 2, 3, 5, 7, 9, 10, 14, 16, 30, 32, 34, 41, 45, 61 to 65, 71, 75, 81, 82, 84, 90, and 91

Relating to: Construction of Public Buildings and Places of Employment

Clearinghouse Rule No.: 01-139

**ORDER OF THE
DEPARTMENT OF COMMERCE**

CREATING RULES

The Wisconsin Department of Commerce proposes an order to repeal Comm 5.61 (1) Note 1, 14.03 (9) (c), 14.03 (10) (d), 14.28 (2) (d), 32.16 (9) and (21), 61.31 (3) (b) (title) and (c) (title), 61.51 (1) Note, 63.0602 (2), 63.0802 (3), 63.0901, 64.0202 (2) (b), 71.21 (7) (b) 3., 71.26 Note, 81.01 (209) Note, 82.31 (16) (d) 2. d. Note, and 82.40 (5) (a) Note;

to renumber Comm 14.03 (9) (d); 14.04; 14.31 (1) to (7); 61.31 (3) (intro.), (a), and (b); 61.51 (2) (e); 62.0100 (1) and (2); 62.0202 (1) (b) and (c) to (k); 62.1609 (intro.) and (1) to (4); 62.3300 (1) and (2); 63.0503 (2) (c) to (e); 63.0602 (3); 63.0802 (4) and (5); 64.0202 (2) (c); 64.0403 (3) to (6); 65.0305 (1) (intro.) and (a) and (b); and A-61.03 (4) (b);

to renumber and amend Comm 61.31 (3) (a) Note (2);

to amend Comm 2.31 (1) (a), (b), (b) Note, (g), (h), and (i); 2.31 (3) and (5); 2.51 (2); 2.52 (3) (title) and (a); 3.03 (5) (f) 2.; 5.34 (1) and (3) (a) (intro.); 5.35 (5) (a) (intro.); 5.50 (2); 5.56 (1); 5.61 (1); 7.41 (4) (d) Note; 9.24 (1); 9.28 (1) (a); 10.26 (2) (intro.); 14.03 (9) (b) Note; 16.04 (2) Note 3; 16.08 (1) Note; 16.17 (1) (b) and (2) (a) Note; 16.25 (1) (c); 16.41; 16.45 (3) Note and (4) (a) 1., 2., and 3. (intro.); 16.48 Note; 16.65 (2) (a) 1. and (4) (a) (intro.); 30.10 (7) Note; 30.145; 32.16 (19); 32.24 (1) (b) Note and (5) (c) 1.; 32.26 (1) Note; 34.23 (2) (a); 34.28; 34.31 (1) (a) Note; 34.36; 34.39; 34.40; 41.49 (5) (b); 45.18 (4) (b) 3. c.; 45.19 (8), (9), and (12) (b) 1. Note; 61.03 (6) (c), (7) (c), and (13) (a) 1. and 6.; Table 61.30-2 (title); 61.50 (1) (b) 1. a. and b.; 62.0904 (2) (b) 8.; 62.2900 (2); 62.2902 (2); 62.3100 (title) and 62.3100; 62.3406; 62.3500; 63.0900 Note; Figure 63.1005 Note; 63.1011 (3); 64.0401 (4) (b) 2.; Table 64.0403 footnote m; 64.0507; 64.1500; 65.0301; 65.0304 (3) (title) and (3); 65.0503 (1) (b); 65.0700; 71.21 (2), (5), and (6) (intro.); 71.24 (1) (d) 1.; 71.26; 71.30 (2); 75.001 (1) (e) Note; 81.01 (209); 82.10 (3); 82.36 (19) Note; 82.40 (5) (b) 5. Note and (c) Note; 84.20 (4) (b) 9. e. Note, and (5) (L) 3. Note and (o) 2. b. and 3.; 84.30 (4) (e) 2. Note; 90.16 (1); 90.17 (2); and 91.12 (1) (b) 3. and (5) Note;

to repeal and recreate Comm 41.28 (3) Note, Table 61.30-3, 63.0503 (2) (d), 63.0803 (2) (f) 3., 63.1029 (4), 64.0301 (2) (a) and (b), 64.0401 (4) (a) 3., 64.0403 (6), 64.0404 (1), 71.21 (7) (b) 2., and 82 Appendix A-82.40 (5);

and to create Comm 5.34 (3) (a) 4. Note and (5) (a) 4. Note; 14.03 (10) Note (1); 14.04 (1) and (2) (title); 14.08; 14.31 (1); 61.20 (1) Notes (2) and (3); 61.30 (2) (c) and Note; 62.0302; 62.0903 (2) Note (2); Comm 62.1609 (2); 62.2701; 62.2901; 62.3100 (2) and Note; 62.3500 Note; 63.0503 (2) (c); and 64.0403 (3), (5), and (7), relating to construction of public buildings and places of employment.

ANALYSIS OF PROPOSED RULES

Statutory Authority and Statutes Interpreted

Statutory Authority: ss. 101.02 (1) and (15), 101.055, 101.09 (3), 101.12 (3), 101.14 (1) and (4), 101.17, 101.175, 101.19, 101.82 (1), 101.973 (1), 145.02 (2), and 145.26, Stats.

Statutes Interpreted: ss. 101.02 (1) and (15), 101.055, 101.09 (3), 101.12 (3), 101.14 (1) and (4), 101.17, 101.175, 101.19, 101.82 (1), 101.973 (1), 145.02 (2), and 145.26, Stats.

Under the statutes cited, the Department protects public health, safety, and welfare by promulgating construction and fire safety requirements for public buildings and places of employment. Currently, these requirements are primarily contained in chapters Comm 50 to 64, 66, and 69. Through rules which were adopted by the Department on September 10, 2001, and which will become effective on July 1, 2002, those chapters are being replaced with chapters Comm 61 to 65.

Numerous other Commerce codes administered by the Department contain cross references to the construction and fire safety requirements in chapters Comm 50 to 64, 66, and 69. This rule package converts all of those cross references to chapters Comm 61 to 65, and is projected to have a simultaneous effective date of July 1, 2002.

This rule package also includes the following changes to chapters Comm 61 to 65, and several minor clarifications for chapters Comm 14 and 61 to 65:

1. Comm Table 61.30-3, which lists the fire protection systems that must receive plan approval from the Department or an authorized representative prior to installation, is expanded to include fire protection systems in (a) buildings exceeding 60 feet in height, (b) state-owned buildings except hospitals and nursing homes, and (c) mercantile buildings which combine retail areas with rack storage and which have floor areas exceeding 50,000 square feet.
2. Code text and informational notes in chapters Comm 62 to 65 that pertain to incorporation of several nationally recognized standards are modified to be consistent in each chapter.

File reference: Such As/Analysis Ir

SECTION 1. Comm 2.31 (1) (a), (b), (b) Note, (g), (h) and (i) are amended to read:

Comm 2.31 (1) (a) *General*. Fees relating to the submittal of all plans, submitted in accordance with the requirements of chs. Comm ~~50 to 64 and 66~~ 61 to 65, shall be determined in accordance with this section.

(b) *Plan review fees*. Fees relating to the submittal of all building plans, heating, ventilating and air conditioning (HVAC) plans, and fire protection system plans shall be computed on the basis of the total gross square footage of each building or affected area. The fees shall be determined in accordance with Table 2.31-1 for buildings not located in municipalities that have assumed building inspection responsibilities. The fees shall be determined in accordance with Table 2.31-2 for buildings located in agent municipalities and counties that have assumed the building inspection responsibilities specified under s. 101.12 (3) (g), Stats., and ch. Comm ~~50~~ 61.

Note: See ch. Comm ~~50~~ 61 for the types of buildings and components that must be submitted for review. Fees for component plans that are an integral part of the building project are included in the "Building Plans" or "HVAC Plans" fees provided they are submitted prior to final inspection. Also, see the Safety and Buildings Division's Plan Submittal Kit (SBD-8927) for detailed information on all submittal processes relating to component plans such as lighting and pre-engineered structural components.

(g) *Second class city*. A second class city that is certified to perform the expanded plan examinations specified in s. Comm ~~50.21 (5)(b) or 66.24 (5)(b)~~ 61.70 (5) (b) shall submit to the department the fee specified in Table 2.31-3 for each building or structure reviewed which exceeds the limits specified in s. Comm ~~50.21 (5)(e) or 66.24 (5)(e)~~ 61.70 (5) (c).

(h) *Appointed agent*. An agent that is appointed by the department under s. Comm ~~50.22 or 66.24 (8)~~ 61.71 to perform plan examinations shall submit to the department the fees specified in Table 2.31-3 for each building or structure reviewed under s. Comm ~~50.22 or 66.24 (8)~~ 61.71.

(i) *Notice fee*. The fee for notifying the department of electing to use a registered individual for building design and supervision in lieu of departmental plan approval, under s. Comm ~~50.12 (1t) or 66.14 (1t)~~ 61.30 (1) (b) 3., shall be \$20.00 for the building plans and related components, \$20.00 for the heating, ventilating and air conditioning plans and related components, \$20.00 for the fire alarm system plans and \$20.00 for the fire suppression system plans.

SECTION 2. Comm 2.31 (3) and (5) are amended to read:

Comm 2.31 (3) PRIORITY PLAN REVIEW. An appointment may be made with the department to facilitate the examination of plans. The plans shall comply with the provisions of s. Comm ~~50.12~~ 61.31. The fee for this type of plan submittal shall be determined at twice the normal rate, based on the appropriate category of plan specified under this section.

(5) COMPLETION STATEMENT. A fee of \$10.00 shall be assessed for any project where the department has issued orders for a completion statement to be submitted as required by s. Comm ~~50.10~~ 61.50.

SECTION 3. Comm 2.51 (2) is amended to read:

Comm 2.51 (2) The fee for a special inspection of an installation of a material, equipment or product for which an experimental approval has been issued in accordance with s. Comm 20.18, ~~50.19 or 66.25~~ or 61.60 shall be determined in accordance with s. Comm 2.04 (2).

SECTION 4. Comm 2.52 (3) (title) and (a) are amended to read:

Comm 2.52 (3) PETITIONS FOR VARIANCE ON RULES UNDER CHS. COMM 50 TO 64, BUILDING AND HEATING, VENTILATING AND AIR CONDITIONING CODE, AND CH. COMM 66, UNIFORM MULTIFAMILY DWELLING CODE 61 TO 65, WISCONSIN COMMERCIAL BUILDING CODE. (a) The fee for reviewing petitions for variance on rules under chs. Comm ~~50 to 64 and 66~~ 61 to 65 shall be \$500.00 per petition.

SECTION 5. Comm 3.03 (5) (f) 2. is amended to read:

Comm 3.03 (5) (f) 2. If a petition for variance is submitted with a request for a plan review under either s. Comm ~~50.12~~ 61.31 or ~~83.07 and 83.08~~ 83.22, the processing times of this subsection for the petition and the processing times of ss. Comm ~~50.12 (5)~~ 61.31 (3) (a) and ~~83.07 (1) (d)~~ 83.22 (3) (a) for the plan review shall run consecutively, with the petition being processed first.

SECTION 6. Comm 5.34 (1) and (3) (a) (intro.) are amended to read:

Comm 5.34 (1) GENERAL. No person may perform structural welding under ss. ~~Comm 34.39 and 53.53~~ chs. Comm 34 and 61 to 65 unless the person holds a registration issued by the department as a registered welder.

(3) (a) The person applying for a welder registration shall have taken and passed, not more than one year before the date the application is received by the department, one or more tests in accordance with the following standards as ~~adopted by reference~~ referenced in chs. Comm ~~50 to 64~~ 61 to 65:

SECTION 7. Comm 5.34 (3) (a) 4. Note is created to read:

Comm 5.34 (3) (a) 4. Note: Copies of American Welding Society standards can be obtained from the American Welding Society, 550 N.W. LeJeune Road, Miami, FL 33126.

SECTION 8. Comm 5.35 (5) (a) (intro.) is amended to read:

Comm 5.35 (5) (a) Ensure that the welding tests, the testing facilities and testing equipment conform with the following appropriate standard or standards as ~~adopted by reference~~ referenced in chs. Comm ~~50 to 64~~ 61 to 65:

SECTION 9. Comm 5.35 (5) (a) 4. Note is created to read:

Comm 5.35 (5) (a) 4. **Note:** Copies of American Welding Society standards can be obtained from the American Welding Society, 550 N.W. LeJeune Road, Miami, FL 33126.

SECTION 10. Comm 5.50 (2) is amended to read:

Comm 5.50 (2) No person may conduct the annual activities relative to inspection and testing of an existing automatic fire sprinkler system and components as required by ~~s. Comm 51.23 (6) ch. Comm 14~~ unless the person holds a license or registration issued by the department as a licensed automatic fire sprinkler contractor, a licensed journeyman sprinkler fitter, a registered automatic fire sprinkler system apprentice, a registered automatic fire sprinkler contractor-maintenance, a registered automatic fire sprinkler fitter-maintenance or a registered automatic fire sprinkler system tester.

SECTION 11. Comm 5.56 (1) is amended to read:

Comm 5.56 (1) GENERAL. A person who holds a registration issued by the department as a registered automatic fire sprinkler system tester may conduct the annual activities relative to inspection and testing of an existing automatic fire sprinkler system and components as required by ~~s. Comm 51.23 (6) ch. Comm 14~~ and NFPA 25.

SECTION 12. Comm 5.61 (1) is amended to read:

Comm 5.61 (1) GENERAL. A person who holds a certification issued by the department as a certified commercial building inspector may conduct inspections of public buildings and places of employment for the purpose of administering and enforcing ~~ch. Comm 50 to 64, 66, 69 or chs. Comm 61 to 65, 70 and 75 to 79.~~

SECTION 13. Comm 5.61 (1) Note 1 is repealed.

SECTION 14. Comm 7.41 (4) (d) Note is amended to read:

Comm 7.41 (4) (d) **Note:** See chs. Comm ~~50-64~~ 61 to 65 for complete building and heating, ventilating and air conditioning requirements. Complete requirements for automatic fire suppression systems are also contained in these chapters.

SECTION 15. Comm 9.24 (1) is amended to read:

Comm 9.24 (1) ALL BUILDINGS. Means of egress in all buildings shall comply with applicable requirements of chs. ~~ILHR 50 to 64~~ Comm 61 to 65.

SECTION 16. Comm 9.28 (1) (a) is amended to read:

Comm 9.28 (1) (a) Except as provided in par. (b), portable fire extinguishers shall be provided in all buildings according to the requirements in chs. ~~ILHR 50 to 64~~ Comm 61 to 65.

SECTION 17. Comm 10.26 (2) (intro.) is amended to read:

Comm 10.26 (2) (intro.) **BUILDING ELEMENTS.** Chapters Comm ~~50-64~~ 61 to 65 in lieu of the following NFPA standards:

SECTION 18. Comm 14.03 (9) (b) Note is amended to read:

Comm 14.03 (9) (b) Note: Open burning is also subject to the rules of the department of natural resources and to local ordinances and regulations. Burning outside the incorporated limits of cities and villages is regulated by the department of natural resources under ch. NR 30—Forest Fire Control and ss. 26.11 to 26.13, Stats.

SECTION 19. Comm 14.03 (9) (c) is repealed.

SECTION 20. Comm 14.03 (9) (d) is renumbered Comm 14.03 (9) (c).

SECTION 21. Comm 14.03 (10) (d) is repealed.

SECTION 22. Comm 14.03 (10) Note (1) is created to read:

Comm 14.03 (10) Note (1): Bonfires may be subject to local ordinances and regulations.

SECTION 23. Comm 14.04 is renumbered Comm 14.04 (2), and Comm 14.04 (2) (title), as renumbered, is created to read:

Comm 14.04 (2) (title) MEANS OF EGRESS.

SECTION 24. Comm 14.04 (1) is created to read:

Comm 14.04 (1) SELF-CLOSING DEVICES. Substitute the following wording for the requirements in NFPA 1 section 4-1.11.1: Self-closing devices shall be maintained to remain in compliance with chs. Comm 61 to 65.

SECTION 25. Comm 14.08 is created to read:

Comm 14.08 Seating. Substitute the following wording for the requirements in NFPA 1 section 8-1.2.8.1: In assembly occupancies, seats in an assembly seating area that accommodates more than 200 persons shall comply with the following:

(1) All seats in balconies and galleries shall be securely fastened to the floor, except in places of religious worship or as permitted in sub. (3).

(2) All seats not included in sub. (1) shall be securely fastened to the floor, except where fastened together in groups of not less than three or except as permitted by sub. (3) or NFPA 1 section 8-1.2.8.2.

(3) Seats not secured to the floor are permitted for companions of a person with a disability.

SECTION 26. Comm 14.31 (1) to (7) are renumbered Comm 14.31 (2) to (8).

SECTION 27. Comm 14.31 (1) is created to read:

Comm 14.31 (1) MAINTENANCE OF MEMBRANE STRUCTURES. Substitute the following wording for the requirements in NFPA 1 section 31-2.4: Tensioned-membrane, air-supported and air-inflated structures shall be maintained to remain in compliance with chs. Comm 61 to 65.

SECTION 28. Comm 14.48 (2) (d) is repealed.

SECTION 29. Comm 16.04 (2) Note (3) is amended to read:

Comm 16.04 (2) Note (3): Section Comm ~~66.04 (1) (a)~~ 61.03 (4) (b) prohibits any municipality from adopting an ordinance establishing restrictions on the electrical construction of multifamily dwellings covered by the Uniform Multifamily Dwelling Code as defined in s. Comm 62.0202.

SECTION 30. Comm 16.08 (1) Note is amended to read:

Comm 16.08 (1) Note: The federal and state Fair Housing Acts, the federal Americans with Disabilities Act and the Wisconsin Commercial Building Code (Chs. Comm ~~50 to 64~~ 61 to 65) contain requirements relating to making buildings accessible to and usable by people with disabilities. Some of those requirements apply to the installation of various electrical devices. For example, in the federal fair housing accessibility guidelines, devices such as light switches, electrical outlets, thermostats and other environmental controls would meet the requirements if operable parts of the controls are located no higher than 48 inches, and no lower than 15 inches, above the floor. If the reach is over an obstruction between 20 and 25 inches in depth, the maximum height is reduced to 44 inches for forward approach; or 46 inches for side approach, provided the obstruction is no more than 24 inches in depth. Complete copies of the federal Fair Housing Accessibility Guidelines or the federal Americans with Disabilities Act Accessibility Guidelines can be obtained from the Superintendent of Documents, New Orders, P.O. Box 371954, Pittsburgh, PA 15250-7954.

SECTION 31. Comm 16.17 (1) (b) and (2) (a) Note are amended to read:

Comm 16.17 (1) (b) "Floors" means stories as specified in chs. Comm 50 to 64 and 66 61 to 65.

(2) (a) Note: See s. Comm 51.04 chs. Comm 61 to 65 for fire-resistive standards.

SECTION 32. Comm 16.25 (1) (c) is amended to read:

Comm 16.25 (1) (c) This is a department rule in addition to the requirements of NEC 230-2 (b): For rowhouse construction as defined in ch. Comm 66 a building which is not more than 3 stories in height and which contains only 3 or more attached, vertically separated, side-by-side or back-to-back dwelling units, with each dwelling unit served by an individual exterior exit within 6 feet of the exit discharge grade, a separate service drop or lateral shall be permitted for each 2 attached units.

SECTION 33. Comm 16.41 is amended to read:

Comm 16.41 Wiring methods [NEC 518-4]. (1) WIRING METHODS [NEC 518-4]. Substitute the following wording for NEC 518-4 Exception No. 1: Exception No. 1. Nonmetallic-sheathed cable, Type AC cable, electrical nonmetallic tubing, and rigid nonmetallic conduit shall be permitted to be installed in those buildings that are classified as Type 7 or 5 construction in accordance with s. Comm 51.03 chs. Comm 61 to 65.

(2) OCCUPANCY CLASSIFICATION [NEC 518-4]. This is a department rule in addition to the requirements of NEC 518-4: The wiring methods required by this section shall apply to the entire area within each assembly hall occupancy classification as specified in ch. Comm 55 chs. Comm 61 to 65 and to places of assembly in connection with ch. Comm 56 occupancies schools and other places of instruction.

SECTION 34. Comm 16.45 (3) Note and (4) (a) 1., 2. and 3. (intro.) are amended to read:

Comm 16.45 (3) Note: ~~Section Comm 52.01 requires~~ Chapters Comm 61 to 65 require an on-premise fuel supply for high-rise buildings.

(4) (a) 1. Emergency illumination shall include all required exit lights and emergency lighting required by the Illumination Code, ch. Comm 73, Part G chs. Comm 61 to 65.

2. When standby emergency power is required by s. Comm 16.46 chs. Comm 61 to 65, the required exit lights and emergency lighting shall be supplied from the standby source.

3. When standby emergency power is not required by s. Comm 16.46 chs. Comm 61 to 65, required exit lights shall be supplied by one of the sources of power specified in NEC 700-12, or shall be permitted to be supplied from a separate switch or circuit breaker in a branch circuit panelboard, under the following conditions:

SECTION 35. Comm 16.48 Note is amended to read:

Comm 16.48 Note: ~~Section Comm 52.01 requires~~ Chapters Comm 61 to 65 require an on-premise fuel supply for high-rise buildings.

SECTION 36. Comm 16.65 (2) (a) 1. and (4) (a) (intro.) are amended to read:

Comm 16.65 (2) (a) 1. New construction, additions, alterations and changes of use of public buildings and places of employment requiring submittal of building plans under ~~ss. Comm 50.03 and 50.12~~ s. Comm 61.30 for the classes of occupancies specified under sub. (4) (a).

(4) (a) *Specific inspections.* The department may inspect all electrical wiring in new construction, additions, alterations and change of use of public buildings and places of employment requiring submittal of building plans under ~~ss. Comm 50.03 and 50.12~~ s. Comm 61.30 in all of the following occupancies that are not within the boundaries of municipalities exercising jurisdiction:

SECTION 37. Comm 30.10 (7) Note is amended to read:

Comm 30.10 (7) Note: ~~Fire~~ Under ch. Comm 14, fire extinguishers ~~should~~ are to be maintained as specified in NFPA 10, ~~as incorporated by reference in chs. Comm 50 to 64~~ Standard for Portable Fire Extinguishers.

SECTION 38. Comm 30.145, as created by Clearinghouse Rule No. 01-044, is amended to read:

Comm 30.145 Facility safety. Fire department buildings and facilities shall comply with chs. Comm 32 and ~~50 to 64~~ 61 to 65.

SECTION 39. Comm 32.16 (9) is repealed.

SECTION 40. Comm 32.16 (19) is amended to read:

Comm 32.16 (19) ~~Chapters Comm 50 to 64, Building and Heating, Ventilating and Air Conditioning~~ 61 to 65, Wisconsin Commercial Building Code.

SECTION 41. Comm 32.16 (21) is repealed.

SECTION 42. Comm 32.24 (1) (b) Note is amended to read:

Comm 32.24 (1) (b) Note: See chs. Comm ~~50 to 64~~ 61 to 65 for complete plan submittal and ventilation requirements.

SECTION 43. Comm 32.24 (5) (c) 1. is amended to read:

Comm 32.24 (5) (c) 1. All fuel-fired kilns located inside of a building shall be enclosed in a fire-resistive enclosure as specified in s. ~~Comm 51.08~~ chs. Comm 61 to 65.

SECTION 44. Comm 32.26 (1) Note is amended to read:

Comm 32.26 (1) Note: See chs. ~~Comm 50 to 64~~ 61 to 65 for complete plan submittal and ventilation requirements.

SECTION 45. Comm 34.23 (2) (a) is amended to read:

Comm 34.23 (2) (a) Permanent foundations for amusement rides, attractions and structures shall comply with ~~ch. ILHR 53~~ chs. Comm 61 to 65.

SECTION 46. Comm 34.28 is amended to read:

Comm 34.28 Design and construction of tents. The design and construction of tents shall comply with the requirements specified in ~~ch. ILHR 62, subch. III~~ chs. Comm 61 to 65.

SECTION 47. Comm 34.31 (1) (a) Note is amended to read:

Comm 34.31 (1) (a) Note: See s. ~~Ind 70.06 (1)~~ DWD 270.06 for additional information.

SECTION 48. Comm 34.36 is amended to read:

Comm 34.36 Flammable and combustible liquids and gases. Storage, dispensing and use of flammable and combustible liquids and liquefied petroleum gases shall comply with requirements of chs. Comm 10 and ~~Comm 44~~ 40.

SECTION 49. Comm 34.39 and 34.40 are amended to read:

Comm 34.39 Welding. Welding of structural members and other critical parts of amusement rides and attractions shall comply with the requirements of s. ~~ILHR 53.53~~ chs. Comm 61 to 65.

~~Note: See Appendix for reprint of s. ILHR 53.53.~~

Comm 34.40 Air compressors and equipment. Air compressors, air compressor tanks and related equipment shall be constructed, tested, maintained and inspected as specified in ~~chs. ILHR 41 and 42~~ ch. Comm 41.

SECTION 50. Comm 41.28 (3) Note is repealed and recreated to read:

Comm 41.28 (3) **Note:** Chapters Comm 61 to 65 may have other requirements relating to the installation, alteration or repair of a boiler or pressure vessel, such as requirements relating to enclosures, location, safety controls, combustion air, and venting.

Wisconsin Administrative Codes may be obtained by contacting the State Department of Administration, Document Sales and Distribution, P.O. Box 7840, Madison, Wisconsin 53707, telephone 608/266-3358, or on the Internet at www.legis.state.wi.us/rsb/code/.

SECTION 51. Comm 41.49 (5) (b) is amended to read:

Comm 41.49 (5) (b) Welded repairs to the boiler shall be made by welders qualified in accordance with s. Comm ~~53.53~~ 5.34 or the ASME Code section IX.

SECTION 52. Comm 45.18 (4) (b) 3. c. is amended to read:

Comm 45.18 (4) (b) 3. c. Personnel density and means of egress are in compliance with chs. ~~ILHR-50 to 64~~ Comm 61 to 65;

SECTION 53. Comm 45.19 (8), (9) and (12) (b) 1. Note are amended to read:

Comm 45.19 (8) GAS FUEL EQUIPMENT. Gas fuel devices and equipment used with refrigerating systems shall be installed in accordance with chs. ~~ILHR-50 to 64~~ Comm 61 to 65.

(9) AIR DUCT INSTALLATION. Air duct systems of air-conditioning equipment for human comfort using refrigerating systems shall be installed in accordance with chs. ~~ILHR-50 to 64~~ Comm 61 to 65. Air ducts passing through a machinery room shall be of tight construction and shall have no openings in such rooms.

(12) (b) 1. **Note:** See the Commercial Building Code, chs. ~~ILHR-50 to 64~~ Comm 61 to 65, for means of egress requirements.

SECTION 54. Comm 61.03 (6) (c), (7) (c), and (13) (a) 1. and 6. are amended to read:

Comm 61.03 (6) (c) The date ~~the alteration~~ construction is initiated, where pars. (a) and (b) do not apply.

(7) (c) The date the ~~replacement~~ alteration is initiated, where pars. (a) and (b) do not apply.

(13) (a) 1. Design and construction-related requirements shall apply that are addressed in IFC section 102.6; IFC chapters 2 to ~~5~~ 4; IFC sections 501 to 502 and 504 to 510; IFC sections 601 to 605 and 607 to 609; IFC chapters 7 and 8; IFC sections 901.1 to 901.4.2, 901.4.4 to

909.18.9, and 909.20 to 913; and IFC chapters 10, 12 to 21, 23 to 29, 31, 32, 36, 37, and 39 to 44.

6. Use and operation provisions shall apply which are a contingency of design and construction-related requirements and which are addressed in IFC chapters 2 to 5 4; IFC sections 501 to 502 and 504 to 510; IFC sections 601 to 605 and 607 to 609; and IFC chapters 7 to and 8; IFC sections 901.1 to 901.4.2, 901.4.4 to 909.18.9, and 909.20 to 913; and IFC chapters 10, 12 to 21, 23 to 29, 31, 32, 36, 37, and 39 to 44 shall apply.

SECTION 55. Comm 61.20 (1) Notes (2) and (3) are created to read:

Comm 61.20 (1) Note (2): Section 101.12 (3) (h), Stats., prohibits local issuance of permits or licenses for construction or use of public buildings or places of employment until required drawings and calculations have been examined and approved by the department.

Note (3): Section 145.195 (1), Stats., prohibits local issuance of a building permit for construction of any structure requiring connection to a private domestic sewage treatment and disposal system unless a system satisfying all applicable regulations already exists to serve the proposed structure or all permits necessary to install such a system have been obtained.

SECTION 56. Comm Table 61.30-2 (title) is amended to read:

Table 61.30-2
(title) Buildings Exempt from Plan Review if Registered

SECTION 57. Comm 61.30 (2) (c) and Note are created to read:

Comm 61.30 (2) (c) Public mausoleum structures.

Note: Section 157.061 (9), Stats., reads as follows: "Mausoleum" means a building, structure or part of a building or structure that is used or intended to be used for the burial of human remains.

SECTION 58. Comm Table 61.30-3 is repealed and recreated to read:

Table 61.30-3
Building Components and Systems

Building Component or System	Building Type or Occupancy
Pre-manufactured and Pre-engineered Structural Components	Public Buildings or Places of Employment
Heating, Ventilating and Air Conditioning System	Public Buildings or Places of Employment
Fire Protection System	Atria Public Building or Places of Employment
	Public Buildings Exceeding 60 Feet in Height
	Educational Group E
	Institutional Group I-1, I-3
	Mercantile Group M Buildings That Combine Retail Areas With Rack Storage and Have Floor Areas Exceeding 50,000 Square Feet
	Residential Group R-1
	State-Owned Buildings Except Hospitals and Nursing Homes

SECTION 59. Comm 61.31 (3) (intro.), (a), and (b) are renumbered Comm 61.31 (3) (a) to (c), Comm 61.31 (3) (b) (title) and (c) (title), as renumbered, are repealed, and Comm 61.31 (3) (a) Note (2), as renumbered, is amended to read:

Comm 61.31 (3) (a) **Note (2):** Also refer to the Safety and Buildings Division's *Plan Submittal Kit Commercial Building Code Submittal Guide* (SBD-8927-P) for forms and other helpful information on how to successfully submit plans for approval.

SECTION 60. Comm 61.50 (1) (b) 1. a. and b. are amended to read:

Comm 61.50 (1) (b) 1. a. The building ~~does not exceed~~ contains less than 50,000 cubic feet in total volume.

b. An addition to an existing building does not cause the entire building to contain or exceed a volume of 50,000 cubic feet.

SECTION 61. Comm 61.51 (1) Note is repealed.

SECTION 62. Comm 61.51 (2) (e) is renumbered Comm 61.51 (3).

SECTION 63. Comm 62.0100 (1) and (2) are renumbered Comm 62.0100 and 62.0115.

SECTION 64. Comm 62.0202 (1) (b) and (c) to (k) are renumbered Comm 62.0202 (2) (c) and 62.0202 (1) (b) to (j).

SECTION 65. Comm 62.0903 (2) Note (2) is created to read:

Comm 62.0903 (2) Note (2): See Appendix A for a listing of municipalities that the department believes have preexisting stricter sprinkler ordinances, and a listing of thresholds those municipalities may apply which are more restrictive than in Table 62.0903.

SECTION 66. Comm 62.0904 (2) (b) 8. is amended to read:

Comm 62.0904 (2) (b) 8. The connection of a manual-wet sprinkler system to a plumbing water supply system shall be protected against backflow conditions in accordance with s. ch. Comm 82.41 82.

SECTION 67. Comm 62.1609 (intro.) and (1) to (4) are renumbered Comm 62.1609 (1) and (1) (a) to (d):

SECTION 68. Comm 62.1609 (2) is created to read:

Comm 62.1609 (2) WIND LOAD FOR LOW-RISE BUILDINGS. (a) Substitute the following wording for the requirements in footnote d in IBC Table 1609.6.2.1(1): "Max. Horizontal Wall Loads" are only for the design of wall elements which also support roof framing. As part of the MWFS, these elements shall be designed for the interaction of vertical and horizontal loads or have independent mechanisms for each load. For interaction design of walls as MWFRS, the vertical roof loads shall be the "Vertical Loads" from Table 1609.6.2.1(1), and the horizontal loads shall be the "Max. Horizontal Wall Loads." The zone loads shall be applied as shown in Figure 1609.6(1) and as follows: 1E to the Windward Wall End Zone, 4E to the Leeward Wall End Zone, 1 to the Windward Wall Interior Zone, and 4 to the Leeward Wall Interior Zone.

(b) This is a department footnote for the vertical loads in the end zone of a windward roof, in IBC Table 1609.6.2.1(1): Footnote e. Note that there are two load conditions between 20° and 30°. Negative pressure from 20° to 30° shall be interpolated using a pressure value of 0 for 30°. Positive pressures between 25° and 30° shall be interpolated using a pressure value of 0 for 25°.

SECTION 69. Comm 62.2701 is created to read:

Comm 62.2701 Electrical code. This is a department informational note to be used under IBC section 2701.1:

Note: As defined in s. Comm 62.0202 (1) (d), "ICC Electrical Code" means ch. Comm 16.

SECTION 70. Comm 62.2900 (2) is amended to read:

Comm 62.2900 (2) SERVICE SINK. In every building where a service sink is required by IBC Table 2902.1, the service sink shall be located in a service closet or room that is provided with the supplies necessary for the sanitary upkeep of the toilet rooms.

SECTION 71. Comm 62.2901 is created to read:

Comm 62.2901 Plumbing code. This is a department informational note to be used under IBC section 2901.1:

Note: As defined in s. Comm 62.0202 (1) (i) and (j), "IPC and International Plumbing Code" and "IPSC and International Private Sewage Code" mean chs. Comm 81 to 87.

SECTION 72. Comm 62.2902 (2) is amended to read:

Comm 62.2902 (2) LAVATORIES FOR TOILET ROOMS. This is a department rule in addition to the requirements in IBC section 2902.1: At least one lavatory shall be provided in each toilet room or in a ~~sex-designated~~ gender-designated lounge adjacent to the toilet room. If a multiple-use lavatory is provided, 24 lineal inches of wash sink, or 20 inches measured along the edge of a circular basin will be considered equivalent to one lavatory.

SECTION 73. Comm 62.3100 (title) and 62.3100 are amended to read:

Comm 62.3100 (title) ~~Assembly seating facilities.~~ Special construction. This is a These are department rule rules in addition to the requirements in IBC chapter 31:

(1) ASSEMBLY SEATING FACILITIES. Every bleacher, grandstand, or other assembly seating facility that is intended primarily to support persons for the purpose of spectator seating shall be inspected at least annually. Any loose connections and any defective or broken members shall be repaired before the facility is used. All repairs and maintenance shall conform with this code.

SECTION 74. Comm 62.3100 (2) and Note are created to read:

Comm 62.3100 (2) PUBLIC MAUSOLEUMS. Public mausoleum structures shall be designed, constructed and maintained in accordance with this code. Mausoleums shall be classified as a Group S-1 storage occupancy and shall be constructed of reinforced concrete or other materials of similar durability.

Note: Section 157.12 (2) (d), Stats., reads as follows: "A mausoleum shall be constructed to last as long as possible, taking into consideration the technology and economics applicable to mausoleum construction at the time of construction."

SECTION 75. Comm 62.3300 (1) and (2) are renumbered Comm 62.3300 and 62.3307.

SECTION 76. Comm 62.3406 is amended to read:

Comm 62.3406 Historic buildings. Substitute the following wording for the requirements in IBC section 3406.1: The construction, repair, alteration, addition, restoration, movement, and change of occupancy of historic ~~structures~~ buildings shall comply with ch. Comm 70.

SECTION 77. Comm 62.3500 is amended to read:

Comm 62.3500 (1) Substitute the following NFPA standards for the corresponding standards listed in IBC chapter 35: NFPA 13-1999, 13R-1999, 30-2000, 33-2000, 34-2000, and 72-1999.

(2) This is a department rule in addition to the requirements in IBC chapter 35: The following NFPA ~~standard is standards~~ are hereby incorporated by reference into this code: NFPA 30A-2000, Code for Motor Fuel Dispensing Facilities and Repair Garages, and 750-1996, Standard on Water Mist Fire Protection Systems.

SECTION 78. Comm 62.3500 Note is created to read:

Comm 62.3500 Note: NFPA standards may be purchased from the National Fire Protection Association, One Batterymarch Park, P.O. Box 9101, Quincy, MA 02269-9101.

Copies of the standards adopted under this section are on file in the offices of the department, the secretary of state and the revisor of statutes.

SECTION 79. Comm 63.0503 (2) (c) to (e) are renumbered Comm 63.0503 (2) (d) to (f).

SECTION 80. Comm 63.0503 (2) (c) is created to read:

Comm 63.0503 (2) (c) Low-pressure duct systems. Substitute the following wording for the requirements in IECC section 503.3.3.4.2: Low-pressure duct systems shall comply with all of the following:

1. Sections of supply and return ducts not located entirely within the conditioned space, and the unconditioned side of enclosed stud bays or joist cavities or spaces that are used to transport air shall be sealed.

2. Sealing shall be accomplished using welds, gaskets, mastics, mastic-plus-embedded-fabric systems or tapes installed in accordance with the manufacturer's instructions.

3. Insulation that provides a continuous air barrier may be used in lieu of sealing metal ducts.

4. Tapes and mastics used with rigid fibrous glass ducts shall be listed and labeled as complying with UL 181A.

5. Tapes and mastics used with flexible air ducts shall be listed and labeled as complying with UL 181B.

6. Tapes with rubber-based adhesives may not be used.

Note: Standard duct tape has a rubber-based adhesive and does not comply with the requirements under this section.

SECTION 81. Comm 63.0503 (2) (d) is repealed and recreated to read:

Comm 63.0503 (2) (d) *Sealing required.* Substitute the following wording for the requirements in IECC section 503.3.3.4.3: High- and medium-pressure ducts shall be sealed in accordance with s. Comm 63.1029 (4).

SECTION 82. Comm 63.0602 (2) is repealed.

SECTION 83. Comm 63.0602 (3) is renumbered Comm 63.0602 (2).

SECTION 84. Comm 63.0802 (3) is repealed.

SECTION 85. Comm 63.0802 (4) and (5) are renumbered Comm 63.0802 (3) and (4).

SECTION 86. Comm 63.0803 (2) (f) 3. is repealed and recreated to read:

Comm 63.0803 (2) (f) 3. 'Joints, longitudinal and transverse seams, and connections.' Joints, longitudinal and transverse seams, and connections in ductwork shall be sealed in accordance with s. Comm 63.1029 (4).

SECTION 87. Comm 63.0900 Note is amended to read:

Comm 63.0900 **Note:** ASHRAE standards may be purchased from the American Society of Heating, Refrigerating and Air Conditioning Engineers, Inc., 1791 Tullie Circle, NE, Atlanta, GA 30329.

ASTM standards may be purchased from the American Society for Testing and Materials, 1916 Race Street, Philadelphia, PA 19103.

NCMA Evaluation Procedures may be obtained from the National Concrete Masonry Association, 2302 Horse Pen Road, Herndon, Virginia VA 20171-3499.

Copies of the standards adopted under this section are on file in the offices of the department, the secretary of state and the revisor of statutes.

SECTION 88. Comm 63.0901 is repealed.

SECTION 89. Comm Figure 63.1005 Note is amended to read:

Comm Figure 63.1005 **Note:** Information taken Reprinted from: Fig 7-38, the IES Lighting Handbook, 1984, Reference courtesy of the Illuminating Engineering Society of North America.

SECTION 90. Comm 63.1011 (3) is amended to read:

Comm 63.1011 (3) AIR LEAKAGE REQUIREMENTS FOR EXTERIOR ENVELOPE. Openings and penetrations in the building envelope shall be sealed or gasketed in accordance with s. Comm 63.0802 (4) (3).

SECTION 91. Comm 63.1029 (4) is repealed and recreated to read:

Comm 63.1029 (4) ADDITIONAL DUCT SEALING. (a) *General.* Except as specified in par. (b), ductwork and plenums shall be sealed in accordance with Table 63.1029-1, and shall meet the duct seal classes specified in Table 63.1029-2.

(b) *Exception.* Ductwork and plenums confined within individual dwelling units shall comply with s. Comm 63.0503 (2) (c).

**Table 63.1029-1
Minimum Duct Seal Level^a**

Duct Location	Duct Type			
	Supply		Exhaust	Return
	≤ 2 in. w.c. ^b (500 Pa)	> 2 in. w.c. ^b (500 Pa)		
Outdoors ^c	A	A	C	A
Unconditioned Spaces	B	A	C	B
Conditioned Spaces	C	B	B	C

^a See Table Comm 63.0803-2 definition of Seal Class.

^b Duct design static pressure classification.

^c Includes indirectly conditioned spaces, such as return air plenums.

**Table 63.1029-2
Duct Seal Classes**

Duct Seal Class	Sealing Requirements ^a
A	All transverse joints, longitudinal seams, and duct wall penetrations. Pressure sensitive tape shall not be used as the primary sealant.
B	All transverse joints and longitudinal seams. Pressure sensitive tape shall not be used as the primary sealant.
C	Transverse joints only.
^a Longitudinal seams are joints oriented in the direction of airflow. Transverse joints are connections of two-duct sections and are oriented perpendicular to airflow. Duct wall penetrations are openings made by any screw fastener, pipe, rod or wire. Spiral lock seams in round and flat oval duct need not be sealed. All other connections are considered transverse joints, including but not limited to spin-ins, taps and other branch connections, access door frames and jambs, and duct connections to equipment.	

SECTION 92. Comm 64.0202 (2) (b) is repealed.

SECTION 93. Comm 64.0202 (2) (c) is renumbered Comm 64.0202 (2) (b).

SECTION 94. Comm 64.0301 (2) (a) and (b) are repealed and recreated to read:

Comm 64.0301 (2) (a) *General*. All appliances regulated by this chapter shall be listed and labeled as specified in this chapter, unless approved by the department in accordance with par. (b) or the product approval criteria in s. Comm 61.60.

(b) *Unlisted equipment*. The department may approve an installation of unlisted equipment after receipt of all of the following:

1. A statement from the equipment manufacturer indicating the national standard with which the equipment complies.
2. The results of a test conducted by a Wisconsin registered engineer on the output and safety controls in accordance with the national standard used by the manufacturer.

SECTION 95. Comm 64.0401 (4) (a) 3. is repealed and recreated to read:

Comm 64.0401 (4) (a) 3. If an outside air intake is located in an areaway, the areaway shall have a horizontal cross section equal to or greater than the free area of the outside air intake opening.

SECTION 96. Comm 64.0401 (4) (b) 2. is amended to read:

Comm 64.0401 (4) (b) 2. Unless a greater distance is specified by the manufacturer, exhaust openings of for 100 cfm or less discharge shall be located at least 12 inches, measured in any direction, from doors or openable windows.

SECTION 97. Comm 64.0403 (3) to (6), as modified by Clearinghouse Rule Number 01-135, are renumbered Comm 64.0403 (4), (6), (8) and (9).

SECTION 98. Comm 64.0403 (3) and (5) are created to read:

Comm 64.0403 (3) RECIRCULATION PROHIBITED. Substitute the following wording for exception 3 in IMC section 403.2.1: Where mechanical exhaust is required by Table 64.0403, recirculation of air from such spaces is prohibited. All air supplied to such spaces shall be exhausted, including any air in excess of that required by Table 64.0403.

(5) TRANSFER AIR. Substitute the following wording for the requirements in IMC section 403.2.2: Except where recirculation from such spaces is prohibited by Table 64.0403, air transferred from occupied spaces is not prohibited from serving as makeup air for required exhaust systems in such spaces as kitchens, baths, toilet rooms, elevators and smoking lounges. The amount of transfer air and exhaust air shall be sufficient to provide the flow rates as specified in IMC sections 403.3 and 403.3.1. The required outdoor air rates specified in Table 64.0403 shall be introduced directly into such spaces or into the occupied spaces from which air is transferred or a combination of both.

SECTION 99. Comm 64.0403 (6), as renumbered above, is repealed and recreated to read:

Comm 64.0403 (6) VENTILATION RATE. Substitute the following wording for the requirements and exceptions in IMC section 403.3:

(a) Ventilation rate determination. 1. Except as provided in pars. (c) and (d), ventilation systems shall be designed to have the capacity to supply the minimum outdoor airflow rate determined in accordance with Table 64.0403 based on the occupancy of the space, the occupant load and a minimum of 7.5 cfm of outside air per person, or other parameters stated in Table 64.0403.

2. a. Except as provided in subpars. b. to d., the occupant load utilized for design of the ventilation system shall not be less than the number determined from the estimated maximum occupant load rate indicated in Table 64.0403.

b. The estimated maximum occupant load rate may be determined using other means with justification acceptable to the department to show that a different number of occupants is reasonable.

c. Where there is no value indicated for the net square feet per person in Table 64.0403, the actual number of occupants shall be used to determine the required amount of outside air.

d. Ventilation rates for occupancies not represented in Table 64.0403 shall be determined by an approved engineering analysis, or by using the most similar occupancy in the table.

3. The ventilation system shall be designed to supply the required rate of ventilation air continuously during the period the building is occupied, except as otherwise stated in other provisions of this chapter.

Note: See Table 64.0403 for specific occupancies.

(b) *Adjacent spaces with differing ventilation requirements.* 1. Except as provided in subd. 2., spaces with different ventilation requirements shall be provided with a complete solid separation, or the most stringent ventilation requirement shall apply to all unseparated areas.

2. The separation as specified in subd. 1. is not required where an engineered ventilation design system will prevent the concentration of contaminants from exceeding that obtainable by providing a physical separation.

(c) *Exceptions for certain occupancies.* 1. 'Toilet rooms.' A toilet room that has only one water closet or urinal and no bathtub or shower may be provided with either natural ventilation via a window or louvered opening with at least 2 square feet of area openable directly to the outside or mechanical exhaust ventilation as specified in Table 64.0403.

2. 'Janitor closets.' A janitor closet that has only one service sink may be provided with either natural ventilation via a window or louvered opening with at least 2 square feet of area openable directly to the outside or mechanical exhaust ventilation as specified in Table 64.0403.

3. 'Locker and shower rooms.' An adjoining locker room, shower room and toilet room shall be exhausted at the rate specified in Table 64.0403 based on the largest amount of exhaust required for any of the three rooms. A negative pressure relationship shall be maintained in the shower and toilet rooms with respect to the locker room.

4. 'Chemical or septic toilets.' Chemical or septic toilets and composting privies are prohibited in spaces under negative pressure. Toilet rooms with chemical or septic toilets shall be provided with natural ventilation via a window, louver or skylight with at least 2 square feet of area openable directly to the outside. The opening shall be provided with a screen to limit the passage of insects and vermin.

5. 'Pool ventilation.' In a natatorium, the volume of supply air and exhaust air may be reduced to a minimum of 1 cfm per square foot of pool surface provided automatic humidity controls perform so as not to create accelerated building material deterioration from moisture condensation.

6. 'Health care facilities.' Recirculation and flow of air in health care facilities shall comply with the requirements in Table 2 or Table 6, as applicable, of AIA Guidelines for Design and Construction of Hospital and Health Care Facilities.

(d) *Outside air requirements waived.* 1. If a mechanical air supply system is provided and the requirement for outdoor air determined in accordance with Table 64.0403 is less than 5% of the minimum required air changes per hour, the requirement for outside air may be eliminated.

2. The requirement for outside air or percent of openings specified in Table 64.0403 may be omitted in large volume spaces containing 5,000 or more cubic feet per occupant. Required exhaust ventilation and makeup air shall not be omitted.

SECTION 100. Comm 64.0403 (7) is created to read:

Comm 64.0403 (7) SYSTEM OPERATION. Substitute the following wording for the requirements in IMC section 403.3.1: The minimum flow rate of outdoor air that the ventilation system must be capable of supplying during its operation may be based on the rate per person indicated in Table 64.0403 and the actual number of occupants present.

SECTION 101. Comm Table 64.0403 footnote m is amended to read:

Comm Table 64.0403 footnote m. For air ventilation requirements in healthcare facilities, use American Institute of Architects (AIA) guidelines, (R673, AIA Guidelines for Design and Construction of Hospital and Health Care Facilities).

SECTION 102. Comm 64.0404 (1) is repealed and recreated to read:

Comm 64.0404 (1) ENCLOSED PARKING GARAGES. Substitute the following wording for the requirements in IMC section 404.1: Mechanical ventilation systems for enclosed parking garages are not required to operate continuously where the system meets all of the following:

- (a) The system is arranged to operate automatically upon detection of carbon monoxide at a level of 35 parts per million (ppm) by automatic detection devices.
- (b) If diesel fuel vehicles are stored, the system is arranged to operate automatically upon detection of nitrogen dioxide at a level of one part per million (ppm) by automatic detection devices.
- (c) The system includes automatic controls for providing exhaust ventilation at a rate of 1/2 cfm per square foot for at least five hours in each 24-hour period.
- (d) The system maintains the garage at negative or neutral pressure relative to other spaces.

SECTION 103. Comm 64.0507 is amended to read:

Comm 64.0507 Capacity of hoods. Substitute the following wording for the requirements introductory paragraph in IMC section 507.13: A kitchen exhaust hood shall be provided with a capture velocity to effectively capture the grease vapors effectively and may be designed through engineering analysis, or based on this section and the requirements in IMC sections 507.13.1 through 507.13.4. where:

SECTION 104. Comm 64.1500 is amended to read:

Comm 64.1500 Referenced standards. (1) Substitute the following NFPA standard standards for the corresponding standard standards listed in IMC chapter 15: NFPA 13-1999, 31-2001 and NFPA 72-1999.

(2) These are This is a department rules rule in addition to the requirements in IMC chapter 15: The following standard is hereby incorporated by reference into this code: American Institute of Architects (AIA), R673-1996-97, AIA Guidelines for Design and Construction of Hospital and Health Care Facilities, The American Institute of Architects, Order Department, 9 Jay Gould Court, P.O. Box 753, Waldorf, MD 20601 1996-97.

Note: NFPA standards may be purchased from the National Fire Protection Association, One Batterymarch Park, P.O. Box 9101, Quincy, MA 02269-9101.

AIA guidelines may be purchased from the American Institute of Architects, Order Department, 9 Jay Gould Court, P.O. Box 753, Waldorf, MD 20601.

Copies of the adopted standards adopted under this section are on file in the offices of the department, the secretary of state and the revisor of statutes. Copies may be purchased through the respective organizations as listed in the IMC.

Note: The tables in this section provide a comprehensive listing of all of the standards adopted by reference in this chapter. For requirements or limitations in how these standards are to be applied, refer to the code section that requires compliance with the standard.

SECTION 105. Comm 65.0301 is amended to read:

Comm 65.0301 General regulations. Substitute the following wording for the requirements in IFGC section 304.3: 301.3: The requirements as specified in s. Comm 64.0301 (2) (b) shall apply.

SECTION 106. Comm 65.0304 (3) (title) and (3) are amended to read:

Comm 65.0304 (3) (title) ALL AIR FROM INSIDE THE BUILDING SPACES WITHOUT OPENINGS TO THE OUTSIDE. This is a department rule in addition to the requirements in IFGC section 304.10 304.9: When the space providing air for combustion, ventilation and dilution of flue gases has a minimum volume of 250 cubic feet per 1,000 Btu per hour combined input rating of all appliances, the use of inside air for combustion shall be allowed.

SECTION 107. Comm 65.0305 (1) (intro.) and (a) and (b) are renumbered Comm 65.0305 (intro.) and (1) and (2).

SECTION 108. Comm 65.0503 (1) (b) is amended to read:

Comm 65.0503 (1) (b) All vertical exit terminals of a gas appliance mechanical draft system shall be located in accordance with IMC section 804.3.5, items 3 and 6.

SECTION 109. Comm 65.0700 is amended to read:

Comm 65.0700 Referenced standards. This is a department rule in addition to the requirements in IFGC chapter 7: The following standard is hereby incorporated by reference into this code: ANSI Z223.1/NFPA 54-1999, National Fuel Gas Code.

Note: NFPA standards may be purchased from the National Fire Protection Association, One Batterymarch Park, P.O. Box 9101, Quincy, MA 02269-9101.

Copies of the ~~adopted standards~~ standard adopted under this section are on file in the offices of the department, the secretary of state and the revisor of statutes. ~~Copies may be purchased through the respective organizations as listed in the IMC.~~

~~**Note:** The tables in this section provide a comprehensive listing of all of the standards adopted by reference in this chapter. For requirements or limitations in how these standards are to be applied, refer to the code section that requires compliance with the standard.~~

SECTION 110. Comm A-61.03 (4) (b) is renumbered Comm A-61.03 (4) (b) and 62.0903 (2).

SECTION 111. Comm 71.21 (2), (5) and (6) (intro.) are amended to read:

Comm 71.21 (2) MATERIAL TESTS AND STANDARDS. The installation of, as well as all materials used in the construction of, solar energy systems shall meet the applicable requirements specified in chs. ~~ILHR Comm 20 to 25, 50 to 64~~ 61 to 65, and ~~Comm 82 to 87~~ 81 to 87 and this chapter. Where different chapters specify different requirements, the most restrictive material test and installation standard shall apply.

(5) SMOKE DETECTORS. All dwellings that contain air systems with wood-frame collectors shall be provided with smoke detectors as specified in s. ~~ILHR Comm~~ 21.09.

(6) FIRE PROTECTION. The design and installation of the solar energy system and components shall provide a level of fire safety consistent with chs. ~~ILHR Comm 20 to 25 for one- and 2-family dwellings, or chs. ILHR 50 to 64~~ Comm 61 to 65 for commercial buildings.

SECTION 112. Comm 71.21 (7) (b) 2. is repealed and recreated to read:

Comm 71.21 (7) (b) 2. Wind, snow and seismic. The collector, including any mounting hardware and building components, shall be designed and constructed to resist the wind and snow loads specified in chs. Comm 20 to 25 for one- and 2-family dwellings, or the wind, snow and seismic loads specified in chs. Comm 61 to 65 for commercial buildings.

SECTION 113. Comm 71.21 (7) (b) 3. is repealed.

SECTION 114. Comm 71.24 (1) (d) 1. is amended to read:

Comm 71.24 (1) (d) 1. 'Interior ducts.' Interior ducts shall comply with s. ILHR 23.08 chs. Comm 20 to 25 for one- and 2-family dwellings or ss. ILHR 64.31 to 64.35 and 64.41 chs. Comm 61 to 65 for commercial buildings.

SECTION 115. Comm 71.26 is amended to read:

Comm 71.26 Electrical requirements. All electrical work shall conform to the requirements of the Wisconsin Electrical Code, Volume 2, ch. Comm 16.

SECTION 116. Comm 71.26 Note is repealed.

SECTION 117. Comm 71.30 (2) is amended to read:

Comm 71.30 (2) ELECTRICAL REQUIREMENTS. All electrical wiring, installation, equipment and materials used in the construction and installation of photovoltaic solar energy systems shall comply with the requirements of the Wisconsin Electrical Code, Vol. 2, ch. Comm 16.

SECTION 118. Comm 75.001 (1) (e) Note is amended to read:

Comm 75.001 (1) (e) **Note:** The owner of a qualified historic building may select which code will apply to the building. The options include (1) complying with ch. Comm 70 - Historic Building Code; (2) complying with chs. Comm 50 to 64 - Building and Heating, Ventilating and Air Conditioning Code 61 to 65 - Wisconsin Commercial Building Code; (3) complying with the Building and Heating, Ventilating and Air Conditioning Code that was in effect at the time of the last approved addition, alteration, or change in use, provided the building and use have remained unchanged since then; or (4) complying with these orders, provided the building was constructed prior October 9, 1914, and continues to have the same use as on that date.

SECTION 119. Comm 81.01 (209) is amended to read:

Comm 81.01 (209) "Row house Rowhouse" has the meaning specified under s. Comm 51.01 (114a) means a building which is not more than 3 stories in height and which contains only 3 or more attached, vertically separated, side-by-side or back-to-back dwelling units, with each dwelling unit served by an individual exterior exit within 6 feet of the exit discharge grade.

SECTION 120. Comm 81.01 (209) Note is repealed.

SECTION 121. Comm 82.10 (3) is amended to read:

Comm 82.10 (3) To fulfill the basic needs of sanitation and personal hygiene, each dwelling connected to a ~~private onsite wastewater treatment system or public sewer, POWTS or other treatment system~~ shall be provided with at least the following plumbing fixtures prior to occupancy: one water closet, one wash basin lavatory, one kitchen sink and one bathtub or shower, except a system or device recognized under ch. Comm 91 or s. Comm 82.37 may be substituted for the water closet. All other structures intended for human occupancy shall be equipped with sanitary facilities in sufficient numbers as specified in chs. Comm 50 to 64 ~~61 to 65 and 90~~.

SECTION 122. Comm 82.31 (16) (d) 2. d. Note is repealed.

SECTION 123. Comm 82.36 (19) (a) Note is amended to read:

Comm 82.36 (19) (a) Note: See s. ~~Comm 53.11 (4) (d)~~ chs. Comm 61 to 65 as to provisions relating to the structural design of the roof for controlled flow drain systems.

SECTION 124. Comm 82.40 (5) (a) Note is repealed.

SECTION 125. Comm 82.40 (5) (b) 5. Note and (c) Note are amended to read:

Comm 82.40 (5) (b) 5. Note: See s. ~~Comm 63.29~~ A-82.40 (5) for pipe insulation requirements.

(c) Note: Water heaters are to be installed in accordance with the requirements specified in chs. Comm 50 to 64 ~~61 to 65 and chs.~~ Comm 20 to 25 with respect to energy efficiency, enclosures and venting.

SECTION 126. Comm 82 Appendix A-82.40 (5) is repealed and recreated to read:

A-82.40 (5) PIPING INSULATION. The following is a reprint of s. Comm 63.1029 (1) and (2) and Table 63.1029.

Comm 63.1029 Insulation, materials and construction. (1) GENERAL. Insulation required by subs. (2) and (3) shall be suitably protected from damage. Insulation shall be installed in accordance with practices acceptable to the department. The department accepts MICA Commercial and Industrial Insulation Standards as an insulation installation practice.

(2) PIPING INSULATION. Except as provided in pars. (a) to (c), recirculating plumbing system piping, plumbing piping in the first 8 feet from storage tanks for noncirculating systems, any piping served by a self-regulating electric heating cable, HVAC system piping, and related HVAC fluid conveying conduit, such as heat exchanger bodies, shall be thermally insulated in accordance with Table 63.1029 or equivalent. The following piping or conduit is exempted from this subsection:

(a) Factory-installed piping or conduit within HVAC equipment tested and rated in accordance with s. Comm 63.1020;

(b) Piping or conduit for which no insulation is specified in Table 63.1029.

(c) Where it can be shown that the heat gain or heat loss to or from piping or conduit without insulation will not increase building energy use.

Table 63.1029
Plumbing and HVAC Piping Minimum Insulation [in. ^a (R-value)]

Fluid Design Operating Temp. Range, °F	Insulation Conductivity ^a		Nominal Pipe Diameter [in. (R-value)]					
	Conductivity Range Btu in./ (h ft ² °F)	Mean Rating Temp. °F	Runouts ^b up to 2	1 and less	1-1/4 to 2	2-1/2 to 4	5 & 6	8 & up
Heating systems (Steam, Steam Condensate, and Hot Water)								
Above 350	0.32-0.34	250	1.5(R-4.4)	1.5(R-4.4)	2.5(R-7.4)	3.0(R-8.8)	3.5(R-10.3)	3.5(R-10.3)
251-350	0.29-0.31	200	1.5(R-4.8)	1.5(R-4.8)	2.5(R-8.1)	2.5(R-8.1)	3.5(R-11.3)	3.5(R-11.3)
201-250	0.27-0.30	150	1.0(R-3.3)	1.0(R-3.3)	1.5(R-5.0)	2.0(R-6.7)	2.0(R-6.7)	3.5(R-11.7)
141-200	0.25-0.29	125	0.5(R-1.8)	0.5(R-1.8)	1.5(R-5.2)	1.5(R-5.2)	1.5(R-5.2)	1.5(R-5.2)
105-140	0.24-0.28	100	0.5(R-1.8)	0.5(R-1.8)	1.0(R-3.6)	1.0(R-3.6)	1.0(R-3.6)	1.5(R-5.4)
Domestic and Service Hot Water systems^c								
105 and greater	0.24-0.28	100	0.5(R-1.8)	1.0(R-3.6)	1.0(R-3.6)	1.5(R-5.4)	1.5(R-5.4)	1.5(R-5.4)
Cooling systems (Chilled water, brine, and refrigerant)^d								
40-55	0.23-0.27	75	0.5(R-1.9)	0.5(R-1.9)	0.75(R-2.8)	1.0(R-3.7)	1.0(R-3.7)	1.0(R-3.7)
Below 40	0.23-0.27	75	1.0(R-3.7)	1.0(R-3.7)	1.5(R-5.6)	1.5(R-5.6)	1.5(R-5.6)	1.5(R-5.6)

^a For insulation outside the state conductivity range, the minimum thickness (T) shall be determined as follows:
 $T = PR [(1 + t/PR)^{K/k} - 1]$, where T = minimum insulation thickness for material with conductivity K, in.; PR = actual outside radius of pipe, in.; t = insulation thickness, in.; K = conductivity of alternate material at mean rating temperature indicated for the applicable fluid temperature; and k = the lower value of the conductivity range listed for the applicable fluid temperature.

^b Runouts to individual terminal units not exceeding 12 ft. in length.

^c Applies to recirculating sections of service or domestic hot water systems and first 8 ft. from storage tank for nonrecirculating systems.

^d The required minimum thickness does not consider water vapor transmission and condensation.

SECTION 127. Comm 84.20 (4) (b) 9. e. Note, and (5) (L) 3. Note and (o) 2. b. and 3. are amended to read:

Comm 84.20 (4) (b) 9. e. **Note:** Chapters Comm 50 to 64 61 to 65 and 90 contain provisions for toilet rooms and sanitary facilities; for public buildings and places of employment, including provisions concerning toilet facilities for the handicapped people with disabilities, fixture compartments, number of fixtures for the different types of occupancies, and toilet room finishes.

(5) (L) 3. **Note:** ~~Section Comm 52.60 (5) (a) specifies~~ Chapters Comm 61 to 65 specify slip-resistant requirements for shower rooms and compartments in public buildings and places of employment.

(o) 2. b. Hinged, closed-front seats, without covers, which are encased with a continuous plastic sleeve capable of providing a clean surface for every user and for which a specific material approval under s. Comm 50.19 61.60 has been issued.

3. Water closets which are required to be provided in day care centers or individual living units or sleeping units of residential occupancies within the scope of ~~either ch. chs. Comm 57 or 61 to 65~~ 61 to 65 may be of a round-bowl type with a hinged, closed front seat with or without a cover.

SECTION 128. Comm 84.30 (4) (e) 2. Note is amended to read:

Comm 84.30 (4) (e) 2. **Note:** Portions of a water supply system that supply water to a water-based fire sprinkler protection system are to also conform to ~~the requirements specified in s. Comm 51.23 chs. Comm 61 to 65.~~

SECTION 129. Comm 90.16 (1) is amended to read:

Comm 90.16 (1) GENERAL REQUIREMENTS. All pools shall be provided with conveniently located dressing, shower and toilet facilities except as stated in sub. (2). All applicable building requirements of chs. Comm 50 to 54, ~~63 and 64~~ 61 to 65 apply to the construction of indoor pool housing and bathhouses.

SECTION 130. Comm 90.17 (2) is amended to read:

Comm 90.17 (2) LIGHTING. All pools and adjacent associated paved areas that are intended to be used after daylight hours shall be provided with area lighting. There shall be ~~enough lights~~ adequate lighting of the appropriate design and in the proper locations to illuminate the pool and associated areas in accordance with ~~eh-Comm 73~~ chs. Comm 61 to 65. Submarine lighting may be used.

SECTION 131. Comm 91.12 (1) (b) 3. and (5) Note are amended to read:

Comm 91.12 (1) (b) 3. Privies for public use shall meet the requirements of this section and ~~s. Comm 52.63~~ chs. Comm 61 to 65.

(5) **Note:** The requirements of the commercial building code, chs. Comm 50-64 61 to 65, apply to the structures built over those privies serving public buildings and places of employment.

(END)

EFFECTIVE DATE

Pursuant to s. 227.22 (2)(b), Stats., these rules shall become effective on July 1, 2002.

File Reference: SR:h/IBC/Such As/rules lr2