

SECTION 39. Comm 51.06 (6) (a) 3. b. is repealed.

SECTION 40. Comm 51.08 (2) is repealed and recreated to read:

Comm 51.08 (2) HAZARD ISOLATION. (a) *General*. 1. Fire hazards shall be stored or isolated in accordance with this section.

2. Fire-resistive rated construction specified in Table 51.08-2 and this section shall comply with ss. Comm 51.04 to 51.049.

3. Fire detection, prevention, suppression and isolation features required under an adopted NFPA standard referenced in this section shall be provided as specified in the standard.

4. a. Except as required under subd. 4. b., fuel-fired equipment that is used for processes directly related to the business and is normally in view of employees and under the control of employees while in operation is not required to be isolated.

b. If the adopted NFPA standard has isolation requirements, those requirements shall be followed.

Note: Examples of processes directly related to the business include cooking equipment at a restaurant, manufacturing process equipment, dryers at a commercial laundry, etc.

(b) *Fuel-fired heating equipment*. 1. Except as provided in subd. 2. and 3., fuel-fired heating equipment shall be provided with a fire-resistive rated enclosure as follows:

a. Gas- and oil-fired boilers, furnaces and water heaters shall be provided with a one-hour fire-resistive rated enclosure.

b. Solid fuel-fired boilers, furnaces and water heaters shall be provided with a two-hour fire-resistive rated enclosure.

c. For occupancies under ch. Comm 59, no openings other than self-closing doors are allowed within 18 inches of the floor in a required enclosure for fuel-fired heating equipment

2. Fuel-fired heating equipment may be used without a fire-resistive rated enclosure as follows:

a. For occupancies under chs. Comm 54, 55, 56, 57, 59, 60, 61, 62 and 66, a direct vent sealed combustion chamber appliance may be used without a rated enclosure.

b. Suspended equipment, where allowed under ss. Comm 64.21 and 64.22 may be used without a rated enclosure.

c. For occupancies under chs. Comm 54, 55, 56 and 58, gas-fired booster water heaters used exclusively for sanitizing dishes and cooking utensils may be used without a rated enclosure.

3. For occupancies under ch. Comm 56, the following equipment may be used without a rated enclosure in the shop area provided the shop area is separated from other areas of the building by 3-hour fire-resistive construction:

a. Vented gas or oil open flame infrared equipment with surface temperatures that exceed 1500 °F.

b. Unvented gas direct-fired make-up air units.

(c) *Clothes dryers*. 1. Except as allowed in subd. 2, all gas, oil or electric clothes dryers shall be isolated by 2-hour fire-resistive rated construction.

2. The following exceptions apply to occupancies under chs. 54, 55, 56, 57, 59 and 60:

a. The 2-hour fire-resistive rating is not required for the isolation of clothes dryers where the entire room containing the dryers is provided with automatic fire sprinkler protection and, for gas-fired dryers, each dryer is protected with an automatic shut-off valve that stops the gas flow if there is a sudden pressure drop in the fuel supply system.

b. The 2-hour fire-resistive rating is not required for the isolation of clothes dryers where no more than two dryers with a maximum rating of 37,000 Btu each are contained in the room, and for gas-fired dryers, each is protected with an automatic shut-off valve that stops the gas flow if there is a sudden pressure drop in the fuel supply system.

(d) *Generators*. 1. Fuel-fired generators shall be isolated with fire-resistive construction with hourly ratings in accordance with the fire enclosure requirements of Table 51.03-A, line 20.

2. Emergency generators required by ch. Comm 16, Table 16.46, shall be isolated as required in subd. 1, with no other equipment allowed in the room that is not an integral part of a required emergency power supply system.

(e) *Fire pumps*. Fire pumps shall be isolated with fire resistive construction with hourly ratings in accordance with the fire enclosure requirements of line 20, Table 51.03-A.

(f) *Flammable and combustible liquids*. Flammable and combustible liquids shall be stored and isolated in accordance with NFPA 30 and 30A.

(g) *Aerosols*. Aerosols shall be stored and isolated in accordance NFPA 30B.

(h) *Smokeless propellants*. Smokeless propellants shall be stored and isolated in accordance with NFPA 495.

(i) *Fireworks, black powder and explosive materials.* Fireworks, black powder and explosive materials shall be stored and isolated in accordance with ch. Comm 7.

(j) *Flammable and combustible gases.* 1. 'Liquefied petroleum gas.' Liquefied petroleum gas shall be stored and isolated in accordance with ch. Comm 40.

2. 'Gases for welding, cutting and allied processes.' Gases for welding, cutting and allied processes shall be stored and isolated in accordance with NFPA 51.

(k) *Spray applications.* Flammable or combustible materials used in spray applications shall be isolated and protected in accordance with NFPA 33.

(L) *Coating or dipping applications.* Flammable or combustible materials used in coating or dipping applications shall be stored and isolated in accordance with NFPA 34.

(m) *Liquid and solid oxidizers.* Liquid and solid oxidizers shall be stored and isolated in accordance with NFPA 430.

(n) *Organic peroxides.* Organic peroxides shall be stored and isolated in accordance with NFPA 432.

(o) *Laboratory chemicals.* Laboratory chemicals falling under the scope of NFPA 45 shall be stored and isolated in accordance with NFPA 45.

(p) *Hazardous areas.* Hazardous areas, including trash collection rooms, recycling areas, woodworking areas, maintenance shops and similar areas determined by the department shall be isolated in accordance with Table 51.08-2.

SECTION 41. Comm 51.08-2, Table 51.08-2 is repealed and recreated to read:

Table 51.08-2

HAZARD ISOLATION

Occupancy	Minimum Fire -Resistive Rating In Hours ¹		Exceptions
	< 3 stories	> 3 stories	
Ch 54	2	2	1-hour isolation permitted for 1-story bldgs <3,000 ft ²
Ch 55	3	3	2-hour isolation permitted for bldgs with a capacity of < 300 people
Ch 56	4	4	2-hour isolation permitted for 1-story bldg
Ch 57	1	2	
Ch 58	2	3	
Ch 59	2	2	
Ch 60	1	2	
Ch 61	Not Applicable	Not Applicable	
Ch 62 Open parking structures & assembly seating facilities	2	2	
Ch 62 Greenhouses	1	Not Applicable	
Ch 62 Mini-storage Buildings	2	2	1-hour isolation permitted for 1-story bldgs <3,000 ft ²

¹Fire-resistive ratings may be reduced in accordance with s. Comm 51.02 (22).

SECTION 42. Comm 51.08 (3) is renumbered (3) (a) and amended to read:

Comm 51.08 (3) (a) Openings in occupancy separations or ~~hazard enclosures~~ shall be protected by fire-door assemblies as specified in s. Comm 51.047 or by fire-window assemblies as specified in s. Comm 51.048 or as specified in s. Comm 51.049.

SECTION 43. Comm 51.08 (3) (b) is created to read:

Comm 51.08 (3) (b) Openings in hazard enclosures shall be protected with self-closing fire door assemblies as specified in s. Comm 51.047 or by fire-window assemblies as specified in s. Comm 51.048 or as specified in s. Comm 51.049.

SECTION 44. Comm 51.167 (1) Note is repealed.

SECTION 45. Comm 51.20 (1) is repealed and recreated to read:

Comm 51.20 (1) GENERAL. (a) Location. Fire escapes shall lead directly to a street, alley or open court connected with a street.

(b) Adjacent openings. All openings within 6 feet horizontally of any tread, landing or platform of the fire escape shall be protected with a fire-resistive rated door assembly complying with s. Comm 51.047 or a fire window assembly complying with s. Comm 51.048 as follows:

1. Buildings of 3 stories or less, shall use either a door or window assembly having a minimum fire-resistive rating of 3/4 hour.
2. Buildings of more than 3 stories shall use a door having a minimum fire-resistive rating of 1 1/2 hours.

SECTION 46. Comm 51.21 (1) Note is repealed.

SECTION 47. Comm 51.21(1) is repealed and recreated to read:

Comm 51.21 (1) All standpipe and hose systems shall meet the requirements of NFPA 14 and the requirements of this section.

SECTION 48. Comm 51.21 (3) (i) is repealed.

SECTION 49. Comm 51.21 (8) is repealed and recreated to read:

Comm 51.21 (8) MAINTENANCE. (a) All standpipe and hose systems shall be inspected, tested and maintained in accordance with NFPA 25.

(b) The requirements of par. (a) shall also apply to all systems in existence on the effective date of this section.

SECTION 50. Comm 51.22 (1) is amended to read:

Comm 51.22 (1) GENERAL. All ~~required~~ fire extinguishers shall comply with the provisions of NFPA No. 10.

SECTION 51. Comm 51.22 (3) is renumbered (3) (a) 1. and amended to read:

Comm 51.22 (3) (title) MAINTENANCE AND REPLACEMENT. (a) 1. All portable fire extinguishers, ~~whether required by chs. Comm 54 to 62 or not,~~ shall be inspected, tested, maintained in operable condition, and replaced as specified in NFPA No. 10.

SECTION 52. Comm 51.22 (3) (a) 2. and Note are created to read:

Comm 51.22 (3) (a) 2. For fire extinguishers that are first installed after [**the effective date of this section REVISOR INSERTS DATE**] and anytime a fire extinguisher is replaced thereafter, the new or replacement extinguisher shall comply with NFPA 10.

Note: NFPA 10 requires portable fire extinguishers that serve commercial cooking equipment, such as deep fat fryers, to be classified as Type K.

SECTION 53. Comm 51.22 (3) (b) is created to read:

Comm 51.22 (3) (b) The requirements of par. (a) shall also apply to all buildings in existence on the effective date of this section.

SECTION 54. Comm 51.23 (1) (a) is repealed and recreated to read:

Comm 51.23 (1) (a) 1. Unless otherwise specifically permitted in this code, where a sprinkler as defined in NFPA 13 is installed to provide fire protection, the system that all sprinklers are connected to shall comply with NFPA 13 or NFPA 13R as applicable, in accordance with the scope of the standard or rule.

2. The water supply for all systems that supply sprinklers shall comply with either sub. (2) or s. Comm 51.236 as applicable.

SECTION 55. Comm 51.23 (2) (a) is amended to read:

Comm 51.23 (2) (a) An approved water supply shall be provided for all automatic fire sprinkler systems. Approved ~~automatic~~ water supplies as recognized by the department are listed below:

1. ~~City water main;~~ Municipal water system.
2. Gravity or pressure tank;
3. Ground storage reservoir; ~~or~~

4. Natural bodies of water approved by the department (~~lakes, rivers, streams, etc.~~).

5. Indoor swimming pools as approved by the department.

SECTION 56. Comm 51.23 (2) (b) is amended to read:

Comm 51.23 (2) (b) ~~If the water supply has inadequate pressure, an approved fire pump or tank shall be provided.~~ The design and installation of water supply facilities for gravity tanks, fire pumps, reservoirs or pressure tanks, and underground piping shall conform to NFPA No. 22, NFPA No. 20, and NFPA No. 24.

SECTION 57. Comm 51.23 (6) (a) is amended to read:

Comm 51.23 (6) (a) *Maintenance*. All installed automatic sprinkler systems, ~~whether required by this code or not,~~ shall be properly inspected, tested and maintained for efficient service pursuant to in accordance with NFPA 25. Owners or operators shall be responsible for the condition of their sprinkler system and shall ~~use due diligence in keeping~~ maintain the system in good operating condition. Records of inspections, tests, and maintenance as specified in NFPA 25 shall be kept and shall be made available, upon request, to the department or its authorized deputies. The local fire department shall be notified whenever the automatic fire sprinkler system is shut down or impaired and when it is placed back in service. The owner shall arrange for immediate and continual servicing or repair of the automatic fire sprinkler system until it is placed back in operation.

SECTION 58. Comm 51.23 (6) (b) is amended to read:

Comm 51.23 (6) (b) The requirements of par. (a) shall also apply to all buildings systems in existence on the effective date of this section ~~and to those buildings constructed thereafter.~~

SECTION 59. Comm 51.23 (7) (b) is amended to read:

Comm 51.23 (7) (b) The connection is equipped with an approved indicating valve with a monitor or an approved locking device ~~and a check valve;~~

SECTION 60. Comm 51.23 (7) (d) Note is repealed.

SECTION 61. Comm 51.23 (8) is repealed.

SECTION 62. Comm 51.235 is created to read:

Comm 51.235 Alternate fire suppression systems. (1) Where approved by the department, alternate fire suppression systems may be used in lieu of an automatic fire sprinkler system in areas where the use of water would have limited effect, could create a hazard or could cause unusual damage to property.

(2) Where an alternate fire suppression system is installed, it shall comply with the appropriate national standard as follows:

(a) NFPA 11, Standard for Low-Expansion Foam.

(b) NFPA 11A, Standard for Medium- and High-Expansion Foam Systems.

(c) NFPA 12, Standard on Carbon Dioxide Extinguishing Systems.

(d) NFPA 12A, Standard on Halon 1301 Fire Extinguishing Systems.

(e) NFPA 15, Standard for Water Spray Fixed Systems for Fire Protection.

(f) NFPA 16, Standard for the Installation of Foam-Water Sprinkler and Foam-Water Spray Systems.

(g) NFPA 17, Standard for Dry Chemical Extinguishing Systems.

(h) NFPA 17A, Standard for Wet Chemical Extinguishing Systems.

(i) NFPA 750, Standard on Water Mist Fire Protection Systems.

(j) NFPA 2001, Standard on Clean Agent Fire Extinguishing Systems.

(3) Inspection, testing and maintenance requirements in the standards listed in sub. (2) apply to all new alternate fire suppression systems and to all alternate fire suppression systems in existence on the effective date of this section.

SECTION 63. Comm 51.236 is created to read:

Comm 51.236 Manual-wet sprinkler system. (1) WHERE ALLOWED. A manual-wet sprinkler system may not be installed in a building unless all of the following conditions are met:

(a) There is no municipal water system available to serve the property.

(b) There is no provision under this code that requires the building to have an automatic fire sprinkler system.

(c) The municipality where the building is to be located has an adopted ordinance that requires the installation of manual-wet sprinkler systems and requires these systems to meet the provisions of this subsection.

(2) GENERAL REQUIREMENTS. (a) A building protected with a manual-wet sprinkler system shall be considered unsprinklered regarding all other code provisions.

(b) Each manual-wet sprinkler system shall be provided with a fire department connection. The fire department connection shall be installed in an accessible location acceptable to the fire chief.

(c) All above ground system piping throughout the building shall be labeled as a "manual-wet sprinkler system". Labels shall be placed at all of the following locations:

1. On the piping at intervals of not more than 25 feet and at each side where the piping passes through a wall, floor or roof.
2. At the fire department connection.
3. At all valves and hose outlets.

(d) The manual-wet sprinkler system design and installation shall comply with the automatic fire sprinkler system requirements of the adopted edition of NFPA 13, or NFPA 13R as applicable, except that the system comprised of the pilot line, fire department connection and fire department apparatus is considered as the approved water supply for the system.

(e) A manual-wet sprinkler system shall be supplied with water through the fire department connection using fire department apparatus.

(f) The plumbing well, water service and pressure tank shall be of a size and capacity to supply the hydraulically most remote sprinkler with the required waterflow and pressure for a minimum of 10 minutes.

(g) A pilot line shall be connected from the manual-wet sprinkler system to the plumbing water supply system at the well pressure tank. The pilot line shall be of a size that is adequate to supply the hydraulically most remote sprinkler in the system.

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

(i) The actuation of any sprinkler in the system shall operate the waterflow indicating device, which shall initiate a fire alarm within the building.

(j) Upon actuation of the building fire alarm, a fire alarm signal shall be sent automatically to the fire department providing fire protection to the building.

(3) INSTALLER QUALIFICATIONS. The installation of a manual-wet sprinkler system shall be performed by a licensed individual as specified for the installation of an automatic fire sprinkler system in Ch. Comm 5, Subchapter V.

(4) INSPECTION, TESTING AND MAINTENANCE. All manual-wet sprinkler systems shall be inspected, tested and maintained as specified for an automatic fire sprinkler system in NFPA 25, except the quarterly main drain test is not required.

Note: This section does not limit the owners options for providing other means of fire protection. See s. Comm 50.02 for additional information.

SECTION 64. Comm 51.24 (intro.) is amended to read:

Comm 51.24 (intro.) ~~Interior~~ All fire alarm systems required under ss. 54.17, 56.19, and 57.17 shall be designed and constructed in conformity accordance with NFPA 72 and the following requirements:

SECTION 65. Comm 51.24 (10) is renumbered (10) (a) and amended to read:

Comm 51.24 (10) MAINTENANCE. (a) All fire alarm systems shall be inspected, tested and maintained in accordance with NFPA 72.

SECTION 66. Comm 51.24 (10) (b) is created to read:

Comm 51.24 (10) (b) The requirements of par. (a) shall also apply to all systems in existence on the effective date of this section.

SECTION 67. Comm 51.245 (2) is repealed and recreated to read:

Comm 51.245 (2) INSTALLATION. (a) Unless otherwise specified in this code, all smoke detectors and smoke alarms shall be installed in accordance with NFPA 72.

(b) Smoke detectors installed in ducts shall follow the provisions of NFPA 72 and NFPA 90A.

SECTION 68. Comm 51.245 (3) (a) to (d) are renumbered (3) (b) to (e).

SECTION 69. Comm 51.245 (3) (intro.) is renumbered (3) (a) and amended to read:

Comm 51.245 (3) MAINTENANCE. (a) ~~Smoke~~ All smoke detectors and system components shall be inspected, tested and maintained in accordance with NFPA 72 and all of the following requirements :

SECTION 70. Comm 51.245 (3) (f) is created to read:

Comm 51.245 (3) (f) The requirements of pars. (a) to (e) also apply to all buildings in existence on the effective date of this section.

SECTION 71. Comm 51.25, Table 51.25-10, lines 59. and 60. are repealed.

SECTION 72. Comm 51.25, Table 51.25-10, lines 61. to 64. are renumbered 59. to 62.

SECTION 73. Comm 51.25, Table 51.25-17 is amended to read:

Table 51.25-17

NFPA National Fire Protection Association
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Standard Reference Number	Title
1. 10 - 1998	Standard for Portable Fire Extinguishers.
2. 11 - 1998	<u>Standard for Low-Expansion Foam.</u>
3. 11A - 1999	<u>Standard for Medium- and High-Expansion Foam Systems.</u>
4. 12 - 1998	<u>Standard on Carbon Dioxide Extinguishing Systems.</u>
5. 12A - 1997	<u>Standard on Halon 1301 Fire Extinguishing Systems.</u>
2. <u>6.</u> 13 - 1996 <u>1999</u>	Standard for the Installation of Sprinkler Systems.
3. <u>7.</u> 13R - 1996 <u>1999</u>	Standard for the Installation of Sprinkler Systems in Residential Occupancies up to and Including Four Stories in Height.

8. 14 - 1996 Standard for the Installation of Standpipe and Hose Systems.
- ~~4.~~ 9. 15 - 1996 Standard for Water Spray Fixed Systems for Fire Protection.
10. 16 - 1999 Standard for the Installation of Foam-Water Sprinkler and Foam-Water Spray Systems.
11. 17 - 1998 Standard for Dry Chemical Extinguishing Systems.
12. 17A - 1998 Standard for Wet Chemical Extinguishing Systems.
- ~~5.~~ 13. 20 - ~~1996~~ 1999 Standard for the Installation of Centrifugal Fire Pumps.
- ~~6.~~ 14. 22 - 1998 Standard for Water Tanks for Private Fire Protection.
- ~~7.~~ 15. 24 - 1995 Standard for the Installation of Private Fire Service Mains and Their Appurtenances.
- ~~8.~~ 16. 25 - 1998 Standard for the Inspection, Testing, and Maintenance of Water Based Fire Protection Systems.
17. 30 - 1996 Flammable and Combustible Liquids Code.
18. 30A - 1996 Automotive and Marine Service Station Code.
19. 30B - 1998 Manufacture and Storage of Aerosol Products.
- ~~9.~~ 20. 31 - 1997 Standard for the Installation of Oil-Burning Equipment.
21. 33 - 1995 Standard for Spray Application Using Flammable or Combustible Materials.
22. 34 - 1995 Standard for Dipping and Coating Processes Using Flammable or Combustible Liquids.
23. 45 - 1996 Fire Protection for Laboratories Using Chemicals.
24. 51 - 1997 Standard for the Design and Installation of Oxygen-Fuel Gas Systems for Welding, Cutting, and Allied Processes.
- ~~10.~~ 25. 54 - ~~1996~~ 1999 National Fuel Gas Code.
- ~~11.~~ 26. 72 - ~~1996~~ 1999 National Fire Alarm Code.
27. 80 - 1999 Standard for Fire Doors and Fire Windows.

- ~~12.~~ 28. 90A – ~~1996~~ 1999 Standard for the Installation of Air Conditioning and Ventilating Systems
- ~~13.~~ 29. 96 – 1998 Standard for the Installation of Equipment for the Removal of Smoke and Grease-Laden Vapors from Commercial Cooking Equipment.
- ~~14.~~ 30. 211 – 1996 Standard for Chimneys, Fireplaces, Vents, and Solid Fuel-Burning Appliances.
31. 230 - 1999 Standard for the Fire Protection of Storage.
- ~~15.~~ ~~231~~ – 1998 Standard for General Storage.
- ~~16.~~ ~~231C~~ – 1998 Standard for Rack Storage of Materials.
32. 430 - 1995 Code for the Storage of Liquid and Solid Oxidizers.
33. 432 - 1997 Code for the Storage of Organic Peroxide Formulations.
34. 495 - 1996 Explosive Materials Code.
35. 750 - 1996 Standard on Water Mist Fire Protection Systems.
36. 2001 - 1996 Standard on Clean Agent Fire Extinguishing Systems.
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SECTION 74. Comm 52.01 (1) (c) and Notes are repealed.

SECTION 75. Comm 52.011 (4) is amended to read:

Comm 52.011 (4) SYSTEM DEFINITION AND STANDARD. The automatic fire sprinkler systems specified in this subchapter shall conform to the definition specified in s. Comm 51.01 (7a) and shall comply with the requirements specified in the applicable standards listed in ~~s. Comm 51.27 (7) (b), (c), (cm), (d), (e), (f), (r) and (s)~~ Table 51.25-17.

SECTION 76. Comm 52.013 (6) (b) 1. is renumbered (6) (b).

SECTION 77. Comm 52.013 (6) (b) 2. and Note are repealed.

SECTION 78. Comm 52.013 (6) (c) is repealed and recreated to read:

Comm 52.013 (6) (c) The automatic fire sprinkler system protection required under this subsection shall be in accordance with NFPA 13 and NFPA 230.

SECTION 79. Comm 52.013 (7) (b) is amended to read:

Comm 52.013 (7) (b) When approved by the department, alternate ~~types of fire protection or suppression systems as may be~~ appropriate for the particular hazard may be provided.

SECTION 80. Comm 53.63 (1) is repealed.

SECTION 81. Comm 54.01 (2) (c) is repealed.

SECTION 82. Comm 55.09 (title) is amended to read:

Comm 55.09 (title) Stairways and shafts.

SECTION 83. Comm 55.09 (4) is created to read:

Comm 55.09 (4) Except as provided in sub. (1), stairways, shafts and other vertical openings shall be enclosed as specified in s. Comm 51.02 (11).

SECTION 84. Comm 57.01 (2) (a) is amended to read:

Comm 57.01 (2) (a) Each living unit, except rowhouse units as specified in s. Comm ~~51.01 (114a) 57.19~~, shall be separated from other living units, common use areas and from the exit access by construction protected with at least the equivalent of one layer of 5/8-inch Type X gypsum wallboard with taped joints.

SECTION 85. Comm 57.16 (1) (b) 5. is created to read:

Comm 57.16 (1) (b) 5. Inside each individual bedroom or sleeping room.

SECTION 86. Comm 57.16 (1) (d) is amended to read:

Comm 57.16 (1) (d) Smoke detectors shall be installed and maintained in accordance with ~~s. 101.145 (2), Stats.~~ this section and s. Comm 51.245.

[NOTE TO REVISOR: Please number the existing note after s. Comm 57.16 (1) (d) as Note 1. Please add Note 2 as follows:] Note 2: Section 101.145 (4), Stats., addresses retroactivity requirements for buildings constructed prior to the effective date of this section. This statute section states: *"The owner of a residential building the initial construction of which is commenced before, on or after May 23, 1978, shall install and maintain a functional smoke detector in the basement and at the head of any stairway on each floor level of the building and shall install a functional smoke detector either in each sleeping room of each unit or elsewhere in the unit within 6 feet of each sleeping area and not in a kitchen."*

SECTION 87. Comm 57.16 (2) is repealed.

SECTION 88. Comm 58.22 is repealed.

SECTION 89. Comm 59.12, Table 59.12-1 Footnote is amended to read:

Comm 59.12, Table 59.12-1 Footnote * Streets shall be within 50 feet of the adjacent building side with no obstructions between the street and the building that will impede fire fighting efforts. A 4-hour fire division wall may be considered as a street for the purpose of computing the area limitations for this table provided that no subdivided portion of the building has more streets than the entire building has.

SECTION 90. Comm 59.12, Table 59.12-2 Footnote is amended to read:

Comm 59.12, Table 59.12-2 Footnote * Streets shall be within 50 feet of the adjacent building side with no obstructions between the street and the building that will impede fire fighting efforts. A 4-hour fire division wall may be considered as a street for the purpose of computing the area limitations for this table provided that no subdivided portion of the building has more streets than the entire building has.

SECTION 91. Comm 62.93 is repealed and recreated to read:

Comm 62.93 Hazard enclosures and separations. (1) HAZARD ENCLOSURES. Hazards shall be enclosed in accordance with s. Comm 51.08.

(2) NONCOMBUSTIBLE CONSTRUCTION. Greenhouses of noncombustible construction do not require separation from any other occupancy or from any building of a different class of construction

(3) COMBUSTIBLE CONSTRUCTION. (a) Greenhouses of combustible construction shall be separated from any other occupancy or from all buildings of a different class of construction by at least 2-hour fire resistive construction in accordance with ss. Comm 51.04 to 51.049.

(b) All openings in the fire-resistive construction shall be protected by self-closing fire-resistive doors in accordance with s. Comm 51.047.

SECTION 92. Comm 64.21 Table 64.21 is repealed and recreated to read:

TABLE 64.21 - LOCATION OF EQUIPMENT(cont.)

Location and Type of Occupancy	Vented Units										Unvented Units		Electric	Water or Steam
	Gas or Oil or Solid Fuel Boilers	Gas or Oil or Solid Fuel Furnaces and Water Heaters	Gas or Oil Unit Heaters	Gas or Oil Infrared		Gas or Oil Space Heater ¹	Solid Fuel Space Heater ^{1,2}	Gas Direct Fired Make-up Air ^{3,4}	Gas Infrared	Suspended ⁵	Suspended ⁵			
				Closed Combustion Infrared Equipment with Surface Temperatures not Exceeding 1500°F	Open Flame Infrared Equipment with Surface Temperatures Exceeding 1500°F									
Schools and other places of Instruction	Yes	Yes ²⁰	Suspended ⁵	Suspended ⁵	Yes	Yes	N.P. ¹⁰	N.P.	N.P. ⁹	Suspended ⁵	N.P.	Permitted in all Occupancies	Unit Ventilators, Heaters, Make-Up Air Units, Baseboard Heaters, etc.	
Hospitals, Nursing Homes and Penal Institutions	Yes	Yes ²⁰	N.P.	N.P.	N.P.	N.P.	N.P.	N.P.	N.P.	N.P.	N.P.	Permitted in all Occupancies		
Residential Occupancies	Yes	Yes	N.P.	N.P.	N.P.	N.P.	N.P.	N.P.	N.P.	N.P.	N.P.	Permitted in all Occupancies		
Hazardous Occupancies	Yes	Yes	Yes ¹²	Yes ¹³	Yes ¹²	Yes ¹³	Yes	N.P. ¹⁵	Yes ¹²	Yes ¹³	Yes ¹²	Permitted in all Occupancies		
Garages	Yes	Yes	Yes ¹²	Yes ¹³	Yes ¹²	Yes ¹³	Yes	N.P. ¹⁵	Yes ¹²	Yes ¹³	Yes ¹²	Permitted in all Occupancies		
Aircraft Hangers	Yes	Yes	Yes ¹³	Yes ¹³	Yes ¹³	Yes ¹³	Yes	N.P.	Yes ¹³	Yes ¹³	Yes ¹³	Permitted in all Occupancies		
Day Care Centers	Yes	Yes	Yes	Yes	Yes	Yes	N.P.	N.P. ⁶	N.P.	N.P.	N.P.	Permitted in all Occupancies		
Community-Based Residential Facilities ¹⁷	Yes	Yes	N.P.	N.P.	N.P.	N.P.	N.P.	N.P. ⁶	N.P.	N.P.	N.P.	Permitted in all Occupancies		

Footnotes on next page

N.P. = Not Permitted

Unlisted Occupancies - Use the listed occupancy in the table that is most similar to the subject occupancy.

Clearance to combustibles and combustible construction. 1. Heating equipment shall be installed in accordance with the manufacturer's recommendations to provide minimum clearance. In the absence of manufacturer's recommendations, a minimum clearance of 36 inches shall be provided. 2. Combustible construction, such as partitions, shelving or storage lockers, shall not encroach upon the required clearance.

Note: Electrical Code clearances specified in ch. COMM 16 apply. Electrical components and burners may be required to be at least 18 inches from the floor in "Class I" areas including garages.

¹ See s. COMM 64.22 (7) (d) for fireplace requirements.

² All solid-fuel fired space heaters shall be located in occupied space or in a space provided with approved smoke detectors and located or guarded to maintain clearances to combustibles and prevent accidental damage or contact with hot surfaces. Solid-fuel burning stoves are limited to 150,000 Btu/hr output.

³ Except as provided in Footnote 4, direct-fired make-up air units shall be mechanically exhausted in the range of 90% to 110% of the air supplied.

⁴ See s. COMM 64.22 (4) for other permitted uses of direct-fired unvented natural gas heaters.

⁵ Boilers, water heaters, gas and liquid fuel-fired space heaters, suspended furnaces, vented and unvented unit heaters may be suspended where approved by the department. Except in factories, suspended boilers and water heaters shall be limited to up to 200,000 Btu input. All such units shall be located in an occupied space and suspended at least 7 feet above the floor. The blow-off pipe for suspended boilers and water heaters shall be extended down to within 6 inches of the floor. Infrared equipment shall be located at least 8 feet above the floor. Suspension of solid-fuel fired equipment is not permitted. See ss. COMM 51.08 and 64.22 (3) for additional requirements.

⁶ Permitted with combustion air ducted to unit in occupancies less than 3,000 square feet gross area and with occupant load less than 100 persons.

⁷ Permitted in kitchens to provide make-up air for kitchen exhaust systems if located outside building or in a rated enclosure.

⁹ Permitted only in shops with a 3-hour separation from other areas of the school building. See s. Comm 51.08.

¹⁰ Permitted only in shops with a 3-hour separation from other areas of the school building. See s. Comm 51.08.

¹¹ Gas-fired, direct-vent wall furnaces are permitted in apartments and motels. Space heaters fired with liquid fuel may be used without an enclosure in motels and apartment buildings not more than one story in height.

¹² Suspended heating units are allowed in garages if located at least 8 feet off the floor. Suspension of solid-fuel fired equipment is not permitted.

¹³ Suspended heating units are allowed if located at least 10 feet above the upper surface of the wings or engine enclosure of the aircraft. Suspension of solid-fuel fired equipment is not permitted.

¹⁴ Solid-fuel fired space heaters are permitted in rowhouse units only.

¹⁵ Waste oil burners are permitted provided they are installed on mezzanines or service platforms located at least 8'-0" above the main floor, are visible from the main floor and are guarded as specified in this section.

¹⁷ See s. COMM 61.24 for requirements.

¹⁹ See s. COMM 51.08 for hazard enclosure requirements.

²¹ Includes water heaters used for space heating and for plumbing system supply.

SECTION 95. Comm 64.22 (8) is amended to read:

Comm 64.22 (8) FLOOR-STANDING VENTED OR UNVENTED EQUIPMENT. Floor-standing, vented or unvented unit heaters, furnaces and boilers in metal fabricating plants, foundries and machine shops are exempt from the requirements of s. Comm ~~54.14~~ 51.08.

SECTION 96. Comm 64.42 is repealed.

SECTION 97. Comm 64.51 (4) (a) is amended to read:

Comm 64.51 (4) FIRE PROTECTION. (a) ~~1.~~ Heat-producing appliances and their chimney or vent connectors shall be installed with clearances to combustible material as specified in NFPA ~~Manual No. 211~~ unless listed for installation at other clearances.

~~2. Clearance to combustible materials shall be as specified in NFPA Standard No. 211 or as specified by a nationally recommended testing laboratory, whichever is greater.~~

SECTION 98. Comm 64.67 (1) is amended to read:

Comm 64.67 (1) SCOPE. This section applies to all areas where food is prepared, except in domestic science educational facilities from grades kindergarten through 12, and ~~single unit apartments in hotels, motels and apartment buildings~~ within individual dwelling units of buildings under the scope of chs. Comm 57 and Comm 66.

SECTION 99. Comm 64.67 (5) (f) is repealed and recreated to read:

Comm 64.67 (5) (f) *Duct enclosure*. 1. A grease duct that penetrates or passes through any ceiling, wall or floor shall be completely enclosed from the point of penetration to the outlet terminal.

2. The duct enclosure shall meet one of the following requirements:

- a. The duct shall be enclosed in a noncombustible 2-hour rated fire-resistive enclosure.
- b. The duct shall be completely covered on all sides with a material classified and labeled for such purpose and the penetration shall be protected with a classified through-penetration firestop system with F and T ratings at least equal to the rating of the assembly being penetrated.

SECTION 100. Comm 64.67 (6) (intro.) is repealed.

SECTION 101. Comm 64.67 (6) (a) to (e) are renumbered (b) to (f).

SECTION 102. Comm 64.67 (6) (a) is created to read:

Comm 64.67 (6) AUTOMATIC SUPPRESSION SYSTEMS. (a) *General*. 1. Exhaust hood and duct systems in commercial kitchen applications shall be protected with an automatic fire suppression system.

2. The type of automatic fire suppression system used shall be recognized by a national standard as being appropriate for use in commercial kitchen applications.

3. Manufactured fire suppression systems shall be listed and labeled for use in commercial kitchen applications or shall comply with one of the applicable standards listed in s. Comm 51.235.

4. Alternate suppression systems shall comply with the applicable standard listed in s. Comm 51.235.

5. Automatic fire sprinkler systems shall comply with s. Comm 51.23.

SECTION 103. Comm 64.67 (6) (b), as renumbered, (title) is created to read:

Comm 64.67 (6) (b) (title) *System interconnection*.

SECTION 104. Comm 64.67 (6) (c), as renumbered, (title) is created to read:

Comm 64.67 (6) (c) (title) *Actuation*.

SECTION 105. Comm 64.67 (6) (d), as renumbered, (title) is created to read:

Comm 64.67 (6) (d) (title) *Manual actuator location*.

SECTION 106. Comm 64.67 (6) (e), as renumbered, is amended to read:

Comm 64.67 (6) (e) *Maintenance*. The automatic fire suppression system shall be maintained at full operating capacity by the owner and shall be serviced every 6 months; and in accordance with its listing, the manufacturer's instructions and the maintenance requirements of ss. Comm 51.23 or 51.235.

SECTION 107. Comm 64.67 (6) (f), as renumbered, (title) is created to read:

Comm 64.67 (6) (f) (title) *Service accessibility*.

SECTION 108. Comm 64.67 (6) (g) and (h) are created to read:

Comm 64.67 (6) (g) *Carbon dioxide systems*. Carbon dioxide systems protecting commercial cooking equipment shall be installed in accordance with NFPA 12 and the following provisions:

1. A nozzle shall be provided at the top of the duct.
2. Where ducts exceed 20 feet of vertical distance or 50 feet of horizontal distance, additional nozzles shall be installed within the duct in a symmetrical pattern to give uniform distribution of carbon dioxide.
3. a. Dampers shall be installed at either the top or the bottom of the duct and shall operate automatically upon activation of the carbon dioxide system.
b. Where the damper is located at the top of the duct, the top nozzle shall be immediately below the damper.
4. The carbon dioxide system shall be sized to protect all hazards venting through a common duct simultaneously.

(h) *Automatic fire sprinkler systems*. Automatic fire sprinkler systems protecting commercial cooking equipment shall be installed in accordance with NFPA 13 and the following provisions:

1. Automatic sprinkler systems protecting commercial cooking equipment shall be provided with a separate, readily-accessible indicating-type control valve that is clearly identified.
2. Sprinklers used to protect fryers shall be listed for such use and shall be installed in accordance with the listing.

SECTION 109. Comm 64.67 (8) is created to read:

Comm 64.67 (8) MAINTENANCE OF DUCT AND HOOD SYSTEMS. Duct and hood systems shall be maintained in accordance with NFPA 96.

SECTION 110. Comm 64.67 (9) is created to read:

Comm 64.67 (9) PORTABLE FIRE EXTINGUISHERS. (a) Portable fire extinguishers shall be provided in accordance with s. Comm 51.22.

(b) The extinguishing agent in the portable fire extinguisher shall be compatible with the extinguishing agent in the automatic suppression system as determined by the manufacturers.

SECTION 111. Comm 66.32(5)(c)1.a. is amended to read:

Comm 66.32(5)(c)1.a. A fire damper as specified in s. Comm ~~64.42~~ 51.0485.

[NOTE TO REVISOR: Please insert the following note after s. Comm 66.47 (3) (b). "Note: See s. Comm 66.32 (4) (c) for an isolation exemption relating to gasoline-fired equipment stored in garages."]

(END)

.....

EFFECTIVE DATE

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

.....

RULE REPORT

Department of Commerce

Rule No.: Chs. Comm 50-64

Relating to: Fire Safety Requirements in the Commercial Building Code

Agency contact person for substantive questions:

Name John Lippitt

Title Program Manager

Telephone Number (608) 266-1036

Agency contact person for internal processing:

Name Duane Hubeler

Title Code Consultant

Telephone Number (608) 266-1390

1. Agency statutory authority under which the agency intends to promulgate the rule(s).

101.02 (1) and (15), and 101.14 (4), Stats.

2. Citation of federal regulations which require adoption or which are relevant to the proposed rule(s).

None known.

3. Citation of court decisions which are applicable to the proposed rule(s).

None known.

4. Description of the proposed rule(s).

This rule change is intended primarily to update currently adopted national standards and state code requirements relating to fire safety requirements in the commercial building code. While there are additional national standards adopted by reference, some of these standards replace requirements contained in the existing rules that have become obsolete. There are new rules added to the code to cover the storage of some previously unregulated commodities inside of buildings and rules clarifying testing and maintenance requirements for fire detection and suppression equipment that were not addressed in previous editions of the code. Most of the new code requirements are contained in the International Building Code, which the department is considering for adoption as a replacement for the current chapters Comm 50-64.

5. Reason for the proposed rule(s).

Industry experts have recognized that some of the fire safety requirements in the commercial building code are based on obsolete technology and outdated national standards. This update will bring those requirements up to current national standards. This proposed code update was developed with the assistance of the Fire Safety Code Council. The Commercial Building Code Council and the Uniform Multifamily Dwelling Code Council have reviewed this proposal and agreed with the department's need assessment.

FISCAL ESTIMATE WORKSHEET
Detailed Estimate of Annual Fiscal Effect
DOA-2047(R02/97)

ORIGINAL
 CORRECTED

UPDATED
 SUPPLEMENTAL

LRB or Bill No./Adm. Rule No.
Chs. Comm 50-64

Amendment No.
N/A

Subject

Fire Safety Requirements in the Commercial Building Code

I. One-time Costs or Revenue Impacts for State and/or Local Government (do not include in annualized fiscal effect):

None

II. Annualized Costs:	Annualized Fiscal impact on State funds from:	
	Increased Costs	Decreased Costs
A. State Costs By Category	\$	\$ -
State Operations - Salaries and Fringes		
(FTE Position Changes)	(0 FTE)	(- 0 FTE)
State Operations - Other Costs		-
Local Assistance		-
Aids to Individuals or Organizations		-
TOTAL State Costs By Category	\$	\$ -
B. State Costs By Source of Funds	\$	\$ -
GPR		-
FED		-
PRO/PRS		-
SEG/SEG-S		-
III. State Revenues- Complete this only when proposal will increase or decrease state revenues (e.g., tax increase, decrease in license fee, etc.)	\$	\$ -
GPR Taxes		-
GPR Earned		-
FED		-
PRO/PRS		-
SEG/SEG-S		-
TOTAL State Revenues	\$ 0	\$ -0

NET ANNUALIZED FISCAL IMPACT

	<u>STATE</u>	<u>LOCAL</u>
NET CHANGE IN COSTS	\$ 0	\$ 0
NET CHANGE IN REVENUES	\$ 0	\$ 0

Agency/Prepared by: (Name & Phone No.)

Commerce/(Duane Hubeler 266-1390)

Authorized Signature/Telephone No.

[Signature]
267-0770

Date

4/3/99

FISCAL ESTIMATE
DOA-2048 (R02/97)

ORIGINAL
 CORRECTED

UPDATED
 SUPPLEMENTAL

Administrative Rule No.
Chs. Comm 50-64
Amendment No. if Applicable
N/A

Subject
Fire Safety Requirements in the Commercial Building Code

Fiscal Effect

State: No State Fiscal Effect

Check columns below only if bill makes a direct appropriation or affects a sum sufficient appropriation

Increase Existing Appropriation Increase Existing Revenues
 Decrease Existing Appropriation Decrease Existing Revenues
 Create New Appropriation

Increase Costs - May be Possible to Absorb Within Agency's Budget Yes No
 Decrease Costs

Local: No local government costs

1. Increase Costs
 Permissive Mandatory

3. Increase Revenues
 Permissive Mandatory

5. Types of Local Governmental Units Affected:

Towns Villages Cities

2. Decrease Costs
 Permissive Mandatory

4. Decrease Revenues
 Permissive Mandatory

Counties Others _____

School Districts WTCS Districts

Fund Sources Affected

GPR FED PRO PRS SEG SEG-S

Affected Ch. 20 Appropriations

Assumptions Used in Arriving at Fiscal Estimate

There are no new enforcement programs to be implemented as a result of these rule changes. The rules are intended primarily to update currently adopted national standards and state code requirements. While there are additional national standards adopted by reference, some of these replace requirements contained in the existing rules that have become obsolete. There are new rules added to the code that cover the storage of some commodities that were not addressed in previous editions of the code. Additional enforcement activities as a result of these changes should be minimal.

The department does not believe that any additional manpower will be needed to enforce these rules.

Long-Range Fiscal Implications

None known or anticipated

Agency/Prepared by: (Name & Phone No.)
Commerce/(Duane Hubeler 266-1390)

Authorized Signature/Telephone No.
Duane Hubeler
267-0770

Date
4/3/99

DEPARTMENT OF COMMERCE
PUBLIC HEARING COMMENT AND AGENCY RESPONSE

Clearinghouse Rule No.: 99-120		Hearing Location: N/A	
Rule Number: Chs. Comm 50-64		Hearing Date: N/A	
Relating to: Fire Safety Requirements in the Commercial Building Code			
Comments: Oral or Exhibit No.	Presenter, Group Represented, City and State	Comments/Recommendations	Agency Response
Exhibit # 1	Richard Kaiser, Society of Fire Protection Engineers, Milwaukee, WI	Supports the proposed rule changes.	No response needed.
Exhibit # 2	Robert Stedman, Waukesha Fire Dept., Waukesha, WI	Supports the proposed rule changes	No response needed.
Exhibit # 3	Jon Cechvala, WI Dept. of Health & Family Services, Madison, WI	Recommends a change to s. Comm 58.28 regarding standpipes in health care facilities.	Disagree. After further discussion with the presenter, it was determined that the current requirement is not redundant in all cases and should stay as currently written.
Exhibit # 4	Mike Marmayek, Dept. of Commerce HVAC Advisory Council, Madison, WI	Recommends several code changes that should be made to accommodate the adoption of the International Mechanical Code (IMC). These changes entail moving some fire separation requirements for heating equipment that are currently contained in chapter 64 to s. 51.08. Since ch. 64 is planned for repeal when the IMC is adopted, these requirements must be moved or they will be lost.	Agree. Changes will be made.

RESPONSE TO LEGISLATIVE COUNCIL CLEARINGHOUSE REPORT

Department of Commerce

CLEARINGHOUSE RULE NO.: 99-120

RULE NO.: Chapters Comm 50-64

RELATING TO: Fire Safety Requirements in the Commercial Building Code

Agency contact person for substantive questions.

Name: John Lippitt

Title: Fire Safety Program Manager

Telephone No. 266-1036

Legislative Council report recommendations accepted in whole.

Yes

No

2. Review of rules for form, style and placement in administrative code [s. 227.15(2)(c)]

a. Accepted

b. Accepted in part

c. Rejected

d. Comments attached

d. Disagree. When the reference to a renumbered section is internal, as in all these cases, it is clear from context that the larger section numbers stay the same. Typing the complete citation would add no value and would increase the chance of error.

h. Disagree. Since all of the current s. Comm 51.24 (10) is being amended, it is a "section containing a title" as referred to in the Procedures Manual. Therefore, the title must be shown even though it is not amended.

Agree with all other points a. to o.

(Continued on next page)

RESPONSE TO LEGISLATIVE COUNCIL CLEARINGHOUSE REPORT (cont.)

4. Review rules for adequate references to related statutes, rules and forms [s. 227.15(2)(e)]

- a. Accepted
- b. Accepted in part
- c. Rejected
- d. Comments attached

5. Review language of rules for clarity, grammar, punctuation and plainness [s. 227.15(2)(f)]

- a. Accepted
- b. Accepted in part
- c. Rejected
- d. Comments attached

b. Clarification. The appropriate national standard to use should be clear from the title of the standard.

f. Clarification. The note referred to has been deleted since the error was corrected in a subsequent printing.

Agree with all other points a. to f.