

1.1 **Department of Labor and Industry**

1.2 **Proposed Permanent Rules Relating to Fire Code**

1.3 **7511.0090 RULES CODES AND STANDARDS INCORPORATED BY**  
1.4 **REFERENCE.**

1.5 Subpart 1. International Fire Code. For purposes of this chapter, "IFC" means the  
1.6 2006 edition of the International Fire Code as promulgated by the International Code  
1.7 Council, Inc., Falls Church, Virginia. The IFC is incorporated by reference and made a  
1.8 part of Minnesota Rules pursuant to statutory authority, subject to the alterations and  
1.9 amendments in this chapter. Portions of this chapter reproduce text and tables from  
1.10 the IFC. The IFC is not subject to frequent change and is available at the office of the  
1.11 commissioner of the Department of Labor and Industry and at the State Law Library, 25  
1.12 Rev. Dr. Martin Luther King Jr. Blvd., Saint Paul, Minnesota 55155. The IFC is copyright  
1.13 2006 by the International Code Council, Inc. All rights reserved.

1.14 Subp. 2. National Fire Protection Association Standard No. 58. For purposes of  
1.15 this chapter, "NFPA 58" means the National Fire Protection Association Standard Number  
1.16 58, Standard for the Storage and Handling of Liquefied Petroleum Gases, 2011 Edition, as  
1.17 promulgated by the National Fire Protection Association, Quincy, Massachusetts. The  
1.18 NFPA 58, 2011 Edition, is incorporated by reference and made part of Minnesota Rules  
1.19 pursuant to statutory authority, subject to alterations and amendments in this chapter. The  
1.20 NFPA 58 is not subject to frequent change and is available at the Department of Labor and  
1.21 Industry and at the State Law Library, 25 Rev. Dr. Martin Luther King Jr. Blvd., Saint  
1.22 Paul, Minnesota 55155. The NFPA 58 is copyright 2010 by the National Fire Protection  
1.23 Association. All rights reserved.

1.24 **7511.0903 SECTION 903, AUTOMATIC SPRINKLER SYSTEMS.**

1.25 [For text of subps 1 to 3, see M.R.]

2.1 Subp. 4. **IFC Section 903.3.1.** IFC Section 903.3.1 is amended by adding sections to  
2.2 read:

2.3 **903.3.1.4 Buildings of undetermined use.** When fire sprinkler systems are  
2.4 required in buildings of undetermined use, they shall be designed and installed to have a  
2.5 sprinkler density of not less than that required for an Ordinary Hazard Group 2 use with a  
2.6 minimum design area of 3,000 square feet (279 m<sup>2</sup>).

2.7 Use is considered undetermined if not specified at the time a permit is issued.

2.8 Where a subsequent occupancy requires a system with greater capability, it shall  
2.9 be the responsibility of the owner to upgrade the system to the required density for the  
2.10 new hazard, use or occupancy.

2.11 **903.3.1.5 Special sprinkler design criteria.** When fire sprinkler systems are  
2.12 required in areas containing the following uses, they shall be designed and installed to  
2.13 have a sprinkler density of not less than that required for an Ordinary Hazard Group 2 use:

- 2.14 1. Chemistry labs; or
- 2.15 2. Wrestling or gymnastic rooms.

2.16 **903.3.1.6 Modifications to sprinkler standards.** The sprinkler installation  
2.17 standards as referenced in Sections 903.3.1.1, 903.3.1.2, and 903.3.1.3 are modified as  
2.18 follows:

2.19 **903.3.1.6.1 Hose stream requirements.** When, in the opinion of the fire  
2.20 chief, an adequate alternate water supply for hose stream requirements is provided or  
2.21 available, the water supply requirements for the sprinkler system hose stream demands  
2.22 may be modified.

2.23 **903.3.1.6.2 Elevator shafts and equipment.** Sprinkler protection shall not  
2.24 be installed in elevator shafts, elevator pits or elevator machine rooms.

2.25 **903.3.1.6.3 Swimming pools.** Sprinkler protection need not be provided on  
2.26 the ceiling of rooms containing swimming pools when the pool area is used exclusively

3.1 for swimming purposes and when sprinklers are provided around the perimeter of the  
3.2 pool area.

3.3 **903.3.1.6.4 NFPA 13 modifications.** Sections ~~8.6.4.1.4.2, 8.6.4.1.4.3,~~  
3.4 ~~8.14.8.2~~ 8.15.8.2, and ~~8.16.2.5~~ 8.17.2.5 of NFPA 13 are amended to read:

3.5 ~~**8.6.4.1.4.2 Combustible spaces; installation near peak.**~~ Sprinklers  
3.6 under a roof or ceiling in combustible concealed spaces of wood joist or wood truss  
3.7 construction with members 3 feet (0.9 m) or less on center and a slope having a pitch of  
3.8 four in 12 or greater shall be installed so that a row of sprinklers is installed within 12  
3.9 inches (305 mm) horizontally of the peak and 1-12 inches (25.4-305 mm) down from the  
3.10 bottom of the top chord member.

3.11 ~~**8.6.4.1.4.3 Combustible spaces; installation along eave.**~~ Sprinklers  
3.12 under a roof or ceiling in combustible concealed spaces of wood joist or wood truss  
3.13 construction with members 3 feet (0.9 m) or less on center and a slope having a pitch of  
3.14 four in 12 or greater shall be installed so that the sprinklers installed along the eave are  
3.15 located not less than 5 feet (1.5 m) from the intersection of the truss cords.

3.16 ~~**8.14.8.2**~~ **8.15.8.2 Linen closets and pantries.** Sprinklers are not required in  
3.17 linen closets and pantries within dwelling units that meet the following conditions:

- 3.18 1. The area of the space does not exceed 12 square feet (1.1 m<sup>2</sup>).
- 3.19 2. The least dimension does not exceed 3 feet (0.9 m).
- 3.20 3. The walls and materials are surfaced with noncombustible or limited combustible  
3.21 materials.
- 3.22 4. The closet or pantry contains no mechanical equipment, electrical equipment  
3.23 or electrical appliances.

3.24 ~~**8.16.2.5**~~ **8.17.2.5 Valves.**

3.25 ~~**8.16.2.5.1**~~ **8.17.2.5.1 Fire department connection.** A listed check  
3.26 valve shall be installed in each fire department connection.

4.1 ~~8.16.2.5.1.1~~ 8.17.2.5.1.1 **Maximum pipe length.** There shall be  
4.2 a maximum of 25 feet (7.6 m) of pipe between the check valve and the fire department  
4.3 connection inlet.

4.4 **Exception:** This maximum shall not apply to the check valve serving a free-standing  
4.5 fire department connection.

4.6 ~~8.16.2.5.1.2~~ 8.17.2.5.1.2 **Check valve location.** The check valve  
4.7 shall be located to minimize freezing potential.

4.8 [For text of subps 5 to 8, see M.R.]

4.9 **7511.0907 SECTION 907, FIRE ALARM AND DETECTION SYSTEMS.**

4.10 [For text of subps 1 to 19, see M.R.]

4.11 Subp. 20. **IFC Sections 907.3.4 through 907.3.6.1.** IFC Section 907.3 is amended  
4.12 by adding sections to read:

4.13 **907.3.4 Group R-1, general.** A fire alarm system shall be installed in accordance  
4.14 with Sections 907.3.4 through 907.3.4.3 in existing Group R-1 occupancies three or more  
4.15 stories in height or with 20 or more guest rooms.

4.16 **Exception:** A fire alarm system is not required in buildings that do not have interior  
4.17 corridors serving guest rooms and where each guest room has an exit door opening  
4.18 directly to an exterior exit access that leads directly to the exits.

4.19 **907.3.4.1 Initiation.** Initiation of the fire alarm system shall be by automatic  
4.20 means. Approved automatic fire detectors shall be provided in boiler and furnace rooms,  
4.21 shops, laundry rooms, mechanical and electrical rooms, trash-collection rooms, storage  
4.22 rooms, gift shops, locker rooms and similar areas. Automatic smoke detectors shall be  
4.23 provided in all common areas and interior corridors serving as required means of egress.

4.24 **Exception:** System fire and smoke detectors are not required when an approved  
4.25 automatic fire-extinguishing system is installed throughout the building and manual  
4.26 activation is provided at a constantly attended location.

4.27 **907.3.4.2 Notification.** Activation of the fire alarm system or automatic sprinkler  
4.28 system shall initiate a general evacuation signal.

5.1           **907.3.4.3 Guest room detectors.** Guest room smoke detectors required by  
5.2 Section 907.2.10 shall not be connected to a fire alarm system.

5.3           **Exception:** Connection of such detectors for annunciation only.

5.4           **907.3.5 Group R-2, general.** A fire alarm system shall be installed in accordance  
5.5 with Sections 907.3.5 through 907.3.5.2 in existing Group R-2 occupancies where:

- 5.6           1. Any guest room or dwelling unit is located two or more stories above the story  
5.7 containing the lowest level of exit discharge;
- 5.8           2. Any guest room or dwelling unit is located more than one story below the highest  
5.9 level of exit discharge of exits serving the dwelling unit;
- 5.10          3. The building contains more than 16 dwelling units or guest rooms; or
- 5.11          4. The building is used as a dormitory, convent, monastery, fraternity or sorority  
5.12 and has an occupant load of 20 or more.

5.13           **Exception:** A fire alarm system is not required in buildings that do not have interior  
5.14 corridors serving guest rooms and where each dwelling unit has an exit door opening  
5.15 directly to an exterior exit access that leads directly to the exits.

5.16           **907.3.5.1 Initiation.** Initiation of the fire alarm system shall be by automatic  
5.17 means. Approved automatic fire detectors shall be provided in boiler and furnace rooms,  
5.18 shops, laundry rooms, mechanical and electrical rooms, trash-collection rooms, storage  
5.19 rooms and similar areas. Automatic smoke detectors shall be provided in all common  
5.20 areas and interior corridors serving as required means of egress.

5.21           **Exception:** System fire and smoke detectors are not required when an approved  
5.22 automatic fire-extinguishing system is installed throughout the building.

5.23           **907.3.5.2 Notification.** Activation of the fire alarm system or automatic sprinkler  
5.24 system shall initiate a general evacuation signal.

5.25           **907.3.5.3 Dwelling unit smoke detectors.** Dwelling unit smoke detectors  
5.26 required by Section 907.3.6 shall not be connected to the building fire alarm system.

5.27           **Exception:** Connection of such detectors for annunciation only.

6.1 **907.3.6 Single- or multiple-station smoke alarms.** Existing Group R occupancies  
6.2 not already provided with single- or multiple-station smoke alarms shall be provided with  
6.3 approved single- or multiple-station smoke alarms installed and maintained in accordance  
6.4 with Section 907.2.10.

6.5 **Exception:** For buildings constructed prior to August 1, 1989, detectors can receive  
6.6 their power from a battery supply. For buildings constructed on or after August 1,  
6.7 1989, detectors shall be connected to a centralized power source.

6.8 **907.3.6.1 Fire station and emergency medical quarters.** Areas used for  
6.9 sleeping in fire stations and emergency medical and ambulance crew quarters shall be  
6.10 provided with single station smoke detectors in accordance with Section 907.3.6.

6.11 **907.3.6.2 NFPA 72 Modification.** NFPA 72 Section 29.5.1 is amended by  
6.12 adding an exception to section 29.5.1.1(1).

6.13 **Exception:** Smoke alarms shall not be required in sleeping rooms in existing one and  
6.14 two-family dwellings and existing apartment buildings.

6.15 [For text of subps 21 to 25, see M.R.]

6.16 **7511.3800 CHAPTER 38 - LIQUEFIED PETROLEUM GASES.**

6.17 Subpart 1. NFPA 58 modification. IFC Chapter 38 is deleted in its entirety and  
6.18 replaced with the following: NFPA 58 in its entirety, except as amended by this part.

6.19 **CHAPTER 38**

6.20 **~~LIQUEFIED PETROLEUM GASES~~**

6.21 **~~SECTION 3801~~**

6.22 **~~NFPA STANDARD NO. 58 INCORPORATED~~**

6.23 **~~3801.1 Incorporation by reference.~~** ~~The storage, handling, transportation, and use of~~  
6.24 ~~liquefied petroleum gas and the installation of all equipment pertinent to systems for such~~  
6.25 ~~uses shall be designed, constructed, installed, operated, and maintained in accordance with~~  
6.26 ~~the provisions of the National Fire Protection Association Standard No. 58, Standard for~~  
6.27 ~~the Storage and Handling of Liquefied Petroleum Gases (Quincy, Massachusetts, 2004).~~  
7.1 ~~Standard No. 58, as amended by Section 3802, is incorporated by reference, is not subject~~

7.2 to frequent change, and is available at the State Law Library, 25 Rev. Dr. Martin Luther  
7.3 King Jr. Blvd., Saint Paul, Minnesota 55155.

7.4 **SECTION 3802**

7.5 **~~AMENDMENTS TO NFPA STANDARD NO. 58~~**

7.6 Subp. 2. Chapter 1, Section 1.1; scope. ~~3802.1 Amendments.~~ Section 1.1 is  
7.7 amended to read as follows:

7.8 ~~NFPA 58 shall apply to~~ The storage, handling, transportation and use of liquefied  
7.9 petroleum gas and the installation of all equipment pertinent to systems for such uses,  
7.10 except as amended by this section shall comply with NFPA 58.

7.11 Subp. 3. Chapter 6 amendments. The following sections in Chapter 6 of NFPA 58  
7.12 are amended as follows:

7.13 1. **Section ~~6.4.5.6~~ 6.4.5.7.** Section ~~6.4.5.6~~ 6.4.5.7 of NFPA Standard No. 58 is  
7.14 amended to read:

7.15 **~~6.4.5.6~~ 6.4.5.7.** No horizontal separation shall be required between  
7.16 aboveground LP-Gas containers and underground tanks containing flammable or  
7.17 combustible liquids installed in accordance with Chapter 34 of the International Fire Code.

7.18 2. **Section 6.4.5.10.** Section 6.4.5.10 of NFPA Standard No. 58 is amended to read:

7.19 **6.4.5.10** The minimum separation between LP-Gas containers and liquefied  
7.20 hydrogen containers shall be in accordance with Chapter 32 of the International Fire Code.

7.21 3. **Table 6.5.3.** Footnote "b" of Table 6.5.3 of NFPA Standard No. 58 is amended to  
7.22 read:

7.23 b. Walls constructed of noncombustible materials having a fire rating of at least one  
7.24 hour as determined by the Building Code.

7.25 4. **Section 6.6.7.1.** Section 6.6.7.1 of NFPA Standard No. 58 is amended to read:

7.26 **6.6.7.1.** Installation of containers on roofs of buildings shall be prohibited.

7.27 5. **Section 6.6.7.2.** Section 6.6.7.2 of NFPA Standard No. 58 is deleted.

8.1 6. ~~Section 6.17.11.1~~ 6.19.11.1. Section ~~6.17.11.1~~ 6.19.11.1 of NFPA Standard No.  
8.2 58 is deleted.

8.3 7. ~~Section 6.20.2.1~~ 6.22.2.1. Section ~~6.20.2.1~~ 6.22.2.1 of NFPA Standard No. 58  
8.4 is amended to read:

8.5 ~~6.20.2.1~~ 6.22.2.1 Electrical equipment and wiring shall be of a type  
8.6 specified by and shall be installed in accordance with the Electrical Code for ordinary  
8.7 locations except that fixed electrical equipment in classified areas shall comply with  
8.8 Section ~~6.20.2.2~~ 6.22.2.2.

8.9 8. ~~Section 6.20.2.2~~ 6.22.2.2. The first sentence of Section ~~6.20.2.2~~ 6.22.2.2 of NFPA  
8.10 Standard No. 58 is amended to read:

8.11 ~~6.20.2.2~~ 6.22.2.2 Fixed electrical equipment and wiring installed within the  
8.12 classified areas specified in Table ~~6.20.2.2~~ 6.22.2.2 shall comply with Table ~~6.20.2.2~~  
8.13 6.22.2.2 and shall be installed in accordance with the Electrical Code.

8.14 ~~Subp. 4. Chapter 10, Section 10.2.3.~~ 9. Section 10.2.3. Section 10.2.3 of NFPA  
8.15 Standard No. 58 is amended to read:

8.16 **10.2.3 Structure or building heating.** Heating shall be by steam or hot water  
8.17 radiation or other heating transfer medium with the heat source located outside the building  
8.18 or structure (see Section ~~6.20, Ignition Source Control~~ 6.22), or by electrical appliances  
8.19 listed for Class I, Group D, Division 2 locations, in accordance with the Electrical Code.

## 8.20 **7511.4500 CHAPTER 45 - REFERENCED STANDARDS.**

8.21 Chapter 45 of the IFC is amended by changing the effective date of National Fire  
8.22 Protection Association (NFPA) Standards Nos. 1123 and 1126 to 2006. The standard  
8.23 reference number listed for NFPA 1123 is changed to 1123-06, and the standard reference  
8.24 number listed for NFPA 1126 is changed to 1126-06. This list of referenced standards  
8.25 in IFC Chapter 45 is modified as follows:



9.1 A. References to NFPA 11-02 shall be deleted and replaced with references to  
9.2 NFPA 11-05.

9.3 B. References to NFPA 11A-99 shall be deleted.

9.4 C. References to NFPA 12-00 shall be deleted and replaced with references to  
9.5 NFPA 12-08.

9.6 D. References to NFPA 12A-04 shall be deleted and replaced with references  
9.7 to NFPA 12A-08.

9.8 E. References to NFPA 13-02 shall be deleted and replaced with references  
9.9 to 13-10.

9.10 F. References to NFPA 13R-02 shall be deleted and replaced with references to  
9.11 NFPA 13R-10.

9.12 G. References to NFPA 14-03 shall be deleted and replaced with references to  
9.13 NFPA 14-07.

9.14 H. References to NFPA 20-03 shall be deleted and replaced with references to  
9.15 NFPA 20-10.

9.16 I. References to NFPA 25-02 shall be deleted and replaced with references to  
9.17 NFPA 25-08.

9.18 J. References to NFPA 30-03 shall be deleted and replaced with references to  
9.19 NFPA 30-08.

9.20 K. References to NFPA 30A-03 shall be deleted and replaced with references  
9.21 to NFPA 30A-08.

9.22 L. References to NFPA 58-04 shall be deleted and replaced with references to  
9.23 NFPA 58-11.

10.1 M. References to NFPA 72-02 shall be deleted and replaced with references to  
10.2 NFPA 72-10.

10.3 N. References to NFPA 2001-04 shall be deleted and replaced with references  
10.4 to NFPA 2001-08.

10.5 O. References to NFPA 1123-00 shall be deleted and replaced with references  
10.6 to NFPA 1123-06.

10.7 P. References to NFPA 1126-01 shall be deleted and replaced with references  
10.8 to NFPA 1126-06.

10.9 **REPEALER.** Minnesota Rules, parts 7511.8500; 7511.8510; 7511.8520; 7511.8530;  
10.10 7511.8540; 7511.8550; 7511.8560; and 7511.8570, are repealed.