

1.1 **Department of Labor and Industry**

1.2 **Proposed Permanent Rules Adopting the International Fire Code**

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

1.4 Subpart 1. **International Fire Code.** For purposes of this chapter, "IFC" means the  
1.5 ~~2006~~ 2012 edition of the International Fire Code as promulgated by the International  
1.6 Code Council, Inc., ~~Falls Church, Virginia~~ Washington, D.C. The IFC is incorporated by  
1.7 reference and made a part of Minnesota Rules pursuant to statutory authority, subject to  
1.8 the alterations and amendments in this chapter. Portions of this chapter reproduce text  
1.9 and tables from the IFC. The IFC is not subject to frequent change and is available at the  
1.10 office of the commissioner of the Department of Labor and Industry and at the State Law  
1.11 Library, 25 Rev. Dr. Martin Luther King Jr. Blvd., ~~Saint St.~~ Paul, Minnesota 55155. The  
1.12 IFC is copyright ~~2006~~ 2011 by the International Code Council, Inc. All rights reserved.

1.13 Subp. 2. [See repealer.]

1.14 **7511.0102 SECTION 102, APPLICABILITY.**

1.15 Subpart 1. **IFC section 102.1.** IFC section 102.1 is amended, and sections added, to  
1.16 read:

1.17 **102.1 Construction and design provisions.** The construction and design provisions of  
1.18 this code shall apply to:

- 1.19 1. Structures, facilities, and conditions arising after the adoption of this code.
- 1.20 2. Existing structures, facilities, and conditions when identified in specific sections  
1.21 of this code.
- 1.22 3. Existing structures, facilities, and conditions that, in the opinion of the code  
1.23 official, constitute a distinct hazard to life and property.

1.24 **102.1.1 Existing building features - application.** Existing construction and design  
1.25 features that exceed the requirements for existing structures or facilities but are equal  
1.26 to or less than the requirements for new structures or facilities shall not be further

2.1 diminished. Existing construction and design features that exceed the requirements  
 2.2 for new structures or facilities are allowed to be removed. (See Section 901.6  
 2.3 concerning maintenance of fire protection systems.)

2.4 Subp. 2. ~~IFC section 102.2.~~ IFC section 102.2 is amended by adding a section to read:  
 2.5 **102.2.1 Operational provisions - defined.** The operational provisions of this code  
 2.6 are those operations defined in Sections 105.6.1 through 105.6.46.

2.7 Subp. 3. ~~IFC section 102.6~~ **102.7.3.** IFC section ~~102.6~~ 102.7 is amended by adding  
 2.8 a section to read:

2.9 ~~102.6.1~~ **102.7.3 References to ICC codes.** The references to the codes and standards  
 2.10 promulgated by the International Code Council (listed under ICC in Chapter ~~45~~ 80)  
 2.11 are modified as follows:

2.12 1. Wherever this code references the ICC Electrical Code, it means the Electrical  
 2.13 Code, Minnesota Rules, chapter 1315.

2.14 2. Wherever this code references the International Building Code, it means the  
 2.15 Minnesota State Building Code adopted pursuant to Minnesota Statutes, section  
 2.16 326B.106, subdivision 1.

2.17 3. Wherever this code references the International Fuel Gas Code, it means  
 2.18 the Minnesota State Mechanical Code adopted pursuant to Minnesota Statutes,  
 2.19 section 326B.106.

2.20 4. Wherever this code references the International Mechanical Code, it means  
 2.21 the Minnesota State Mechanical Code adopted pursuant to Minnesota Statutes,  
 2.22 section 326B.106.

2.23 5. Wherever this code references the International Plumbing Code, it means the  
 2.24 Minnesota Plumbing Code, Minnesota Rules, chapter 4715.

2.25 ~~6. Wherever this code references the International Property Maintenance Code,~~  
 2.26 ~~it means the housing maintenance code or property maintenance code adopted~~  
 2.27 ~~by the jurisdiction (see Appendix J).~~

3.1 ~~7~~ 6. Wherever this code references the International Residential Code, it means  
3.2 the Minnesota State ~~Building~~ Residential Code adopted pursuant to Minnesota  
3.3 Statutes, section 326B.106, subdivision 1.

3.4 ~~8~~ 7. Wherever this code references the International Existing Building Code,  
3.5 it means the Minnesota ~~Building~~ Conservation Code for Existing Buildings  
3.6 adopted pursuant to Minnesota Statutes, section 326B.106, subdivision 1.

3.7 Subp. 4. **IFC section 102.** IFC section 102 is amended by adding sections to read:

3.8 ~~102.10~~ **102.13 Standards for existing Group I occupancies.** The provisions of protection  
3.9 in existing Group I-2 occupancies, and in existing Group I-3 occupancies used as detention  
3.10 and correctional facilities, shall be in accordance with the applicable provisions of the Life  
3.11 Safety Code, ANSI/NFPA 101, referred to as Standard No. 101, ~~issued~~ published by the  
3.12 National Fire Protection Association (Quincy, Massachusetts, 2000). Standard No. 101 is  
3.13 incorporated by reference, is not subject to frequent change and is available at the State  
3.14 Law Library, 25 Rev. Dr. Martin Luther King Jr. Blvd., Saint Paul, Minnesota 55155.

3.15 Construction provisions of Standard No. 101 that are more restrictive than those  
3.16 found in the Building Code shall not be applicable. For the purposes of Section ~~102.10~~  
3.17 **102.13**, construction provisions shall include those relating to type of construction,  
3.18 automatic fire-extinguishing and standpipe systems, fire alarm and detection systems,  
3.19 vertical opening protection, escape windows, exits, smoke barriers, accessibility for  
3.20 persons with disabilities and hazardous area separations.

3.21 ~~102.10.1~~ **102.13.1 Standard 101 modified.** Sections 23.3.7 through 23.3.7.3 of  
3.22 Standard No. 101 are deleted.

3.23 ~~102.11~~ **102.14 Mixed occupancies.** Where a building is occupied for two or more uses  
3.24 not included in the same occupancy, the building or portion thereof shall be classified as a  
3.25 mixed occupancy. The mixed occupancy shall be further classified as either nonseparated  
3.26 uses or separated uses according to the Building Code. Areas of Group H shall only be as  
3.27 separated uses as permitted by the Building Code.

4.1 ~~102.11.1~~ 102.14.1 **Separated uses.** Each portion of the building shall be individually  
4.2 classified as to use. Each fire area shall comply with the Fire Code based on the  
4.3 use of that space. Provisions for egress between different occupancies shall be  
4.4 in accordance with Chapter 10.

4.5 ~~102.11.2~~ 102.14.2 **Nonseparated uses.** Each portion of the building shall be  
4.6 individually classified as to use. The most restrictive provisions of the Fire Code shall  
4.7 apply to the nonseparated uses. Provisions for egress between different occupancies  
4.8 shall be in accordance with Chapter 10.

4.9 **7511.0104 SECTION 104, GENERAL AUTHORITY AND RESPONSIBILITIES.**

4.10 IFC section 104.9 is amended by adding sections to read:

4.11 ~~104.9.1~~ 104.9.3 **Performance-based fire and life safety design.** The code official is  
4.12 authorized to approve performance-based fire and life safety designs where the code  
4.13 official finds that the proposed design has been conducted by an approved method.  
4.14 Approved performance-based designs shall be deemed as evidence of compliance  
4.15 with the intent of this code. Approvals under the authority herein contained shall be  
4.16 subject to the approval of the building code official whenever the design involves  
4.17 matters regulated by the Building Code. Sections ~~104.9.1.1~~ 104.9.3.1 through  
4.18 ~~104.9.1.4~~ 104.9.3.4 shall apply to performance-based designs.

4.19 ~~104.9.1.1~~ 104.9.3.1 **Goals, objectives and acceptance criteria.** Design goals,  
4.20 objectives and performance criteria shall be approved by the code official prior to  
4.21 the submission of a performance-based design report, calculations or analysis  
4.22 results. As a minimum, an approved performance-based design shall address  
4.23 the following objectives: life safety of occupants, firefighter safety, property  
4.24 protection, continuity of operations and safeguarding of the environment.

4.25 ~~104.9.1.2~~ 104.9.3.2 **Peer review.** To determine the acceptability of the  
4.26 performance-based design, the code official is authorized to request technical  
4.27 assistance in accordance with Section 104.7.2.

5.1 ~~104.9.1.3~~ 104.9.3.3 **Engineer of record.** Performance-based designs shall be  
5.2 prepared by, and bear the stamp of, a licensed design professional competent in  
5.3 the area of work. The design professional shall provide written confirmation  
5.4 to the code official before a certificate of occupancy is issued that the  
5.5 performance-based design has been properly implemented, that the operation  
5.6 or use of the building is within the limitations of the design and that adequate  
5.7 controls are in place to maintain compliance with the conditions of the design  
5.8 throughout the life of the building.

5.9 ~~104.9.1.4~~ 104.9.3.4 **Annual recertification of performance-based design.**  
5.10 Where a performance-based design has been approved and used, the property  
5.11 owner shall annually certify that the design features and systems have been  
5.12 maintained in accordance with the approved original performance-based design  
5.13 and assumptions and any subsequent approved changes or modifications to the  
5.14 original performance-based design.

5.15 **7511.0105 SECTION 105, PERMITS.**

5.16 IFC section 105.7.13 is deleted.

5.17 **7511.0109 SECTION 109, VIOLATIONS.**

5.18 IFC section ~~109.3~~ 109.4 is amended to read:

5.19 ~~109.3~~ 109.4 **Violation penalties.** A person who violates a provision of this code shall be  
5.20 guilty of a misdemeanor.

5.21 **7511.0202 SECTION 202, GENERAL DEFINITIONS.**

5.22 IFC section 202 is amended by adding or amending definitions to read:

5.23 **ADULT DAY CARE CENTER.** A facility, licensed by the Department of Human  
5.24 Services under Minnesota Rules, parts 9555.9600 to 9555.9730, that provides a program of  
5.25 adult day care services to functionally impaired adults for periods of less than 24 hours per  
5.26 day in a setting other than a participant's home or the residence of the facility's operator.

6.1 **AERIAL LUMINARIES.** Aerial luminaries, sky lanterns, and similar devices are an  
6.2 unmanned type of balloon made from lightweight materials, which require a flame, candle,  
6.3 fuel cell, or other open flame to develop lift and propel them. When released, there is no  
6.4 way to control the flight path, altitude, or landing area.

6.5 **AMBULATORY CARE FACILITY.** Buildings or portions of buildings used to provide  
6.6 medical, surgical, psychiatric, nursing, or similar care on a less than 24-hour basis to  
6.7 individuals who are rendered incapable of self-preservation by the services provided. For  
6.8 the purposes of this chapter, federally certified end-stage renal disease facilities (kidney  
6.9 dialysis facilities) located on the level of exit discharge shall not be considered ambulatory  
6.10 care facilities.

6.11 **AISLE.** See Section 1002.1 That portion of an exit that connects an aisle accessway to an  
6.12 exit access doorway, corridor, or an exit.

6.13 **APPROVED.** "Approved" means approval by the fire code official, pursuant to the  
6.14 Minnesota State Fire Code, by reason of:

6.15 A. Inspection, investigation, or testing;

6.16 B. Accepted principles;

6.17 C. Computer simulations;

6.18 D. Research reports; or

6.19 E. Testing performed by either a licensed engineer or by a locally or nationally  
6.20 recognized testing laboratory.

6.21 **AUTHORITY HAVING JURISDICTION.** Any municipal fire code official serving  
6.22 a particular within their appointed jurisdiction or the state fire marshal or any of their  
6.23 authorized representatives.

6.24 **BUILDING CODE.** The Minnesota State Building Code adopted pursuant to Minnesota  
6.25 Statutes, section 326B.106, subdivision 1.

6.26 **CARE FACILITY.** Occupancies used as care facilities shall be classified into the  
6.27 occupancy group category identified in the following table.

7.1	<u>Care Facility Classifications</u>			
7.2			<u>IBC</u>	
7.3		<u>Number or Type of Residents</u>	<u>Occupancy Classification</u>	
7.4	<u>Type of Licensed Facility</u>			
7.5	<u>Child Care (Day Care)</u>	<u>Family Child Care Home</u>	<u>10 occupants maximum with ≤ 6 below school age</u>	<u>R-3 Dwelling Unit</u>
7.7		<u>Group Child Care Home &lt; 24 hours per day</u>	<u>11-14 occupants maximum</u>	<u>R-3 Dwelling Unit</u>
7.9		<u>Child Care Center &lt; 24 hours per day</u>	<u>&gt; 5 but ≤ 100 children &lt; 2.5 years of age and each room at, and with, an exit at the level of exit discharge</u>	<u>E</u>
7.13		<u>Child Care Center &lt; 24 hours per day</u>	<u>More than 5 children &gt; 2.5 years of age</u>	<u>E</u>
7.15		<u>Child Care Center &lt; 24 hours per day</u>	<u>More than 5 children ≤ 2.5 years of age</u>	<u>I-4</u>
7.17	<u>Adult Day Care</u>	<u>Family Adult Day Services</u>	<u>≤ 8 impaired adults</u>	<u>R-3 Dwelling Unit</u>
7.19		<u>Adult Day Care Center &lt; 24 hours per day</u>	<u>6 or more occupants, all may or may not be capable of self-preservation</u>	<u>I-4</u>
7.22		<u>Adult Day Care Center &lt; 24 hours per day</u>	<u>6 or more occupants, but having no more than 50 percent of the occupants who are not capable of self-preservation</u>	<u>E</u>
7.27	<u>Supervised Living Facilities</u>	<u>Class A-1</u>	<u>6 or fewer residents; all of whom are capable of self-preservation</u>	<u>R-3 Dwelling Unit</u>
7.30		<u>Class A-2</u>	<u>7 to 16 residents; all of whom are capable of self-preservation</u>	<u>R-4</u>

8.1		<u>Class A-2</u>	<u>More than 16 residents; all</u>	<u>I-1</u>
8.2			<u>of whom are capable of</u>	
8.3			<u>self-preservation</u>	
8.4		<u>Class B-1</u>	<u>6 or fewer residents; all of</u>	<u>R-3</u>
8.5			<u>whom may not be capable</u>	
8.6			<u>of self-preservation</u>	
8.7		<u>Class B-2</u>	<u>7 to 16 residents; all of</u>	<u>R-4</u>
8.8			<u>whom may not be capable</u>	
8.9			<u>of self-preservation</u>	
8.10		<u>Class B-3</u>	<u>More than 16 residents; all</u>	<u>I-2</u>
8.11			<u>of whom may not be capable</u>	
8.12			<u>of self-preservation</u>	
8.13	<u>Hospice</u>	<u>Residential Hospice Facility</u>	<u>1-5 terminally ill persons</u>	<u>R-3</u>
8.14		<u>Residential Hospice Facility</u>	<u>6-12 terminally ill persons</u>	<u>R-4</u>
8.15	<u>Adult Foster</u>	<u>Adult Foster Care Home</u>	<u>1-5 impaired adults</u>	<u>R-3</u>
8.16	<u>Care</u>			<u>Dwelling Unit</u>
8.17	<u>Child Foster</u>	<u>Foster Care</u>	<u>1-6 foster children without</u>	<u>R-3</u>
8.18	<u>Care</u>		<u>severe disability or assisted</u>	<u>Dwelling Unit</u>
8.19			<u>medical technology</u>	
8.20		<u>Foster Care</u>	<u>1-4 foster children with</u>	<u>R-3</u>
8.21			<u>medical or special care</u>	<u>Dwelling Unit</u>
8.22			<u>services</u>	
8.23	<u>Housing</u>	<u>Housing with Services</u>	<u>1-5 adult residents <math>\geq</math> 80</u>	<u>R-3</u>
8.24	<u>with Services</u>	<u>Establishment</u>	<u>percent 55 years of age</u>	<u>Dwelling Unit</u>
8.25	<u>Facility</u>	<u>Housing with Services</u>	<u>or older unless registered</u>	
8.26		<u>Establishment Providing</u>	<u>under MN Statutes, section</u>	
8.27		<u>Assisted Living Services</u>	<u>144D.025</u>	
8.28		<u>Housing with Services</u>	<u>6-16 adult residents <math>\geq</math> 80</u>	<u>R-4</u>
8.29		<u>Establishment</u>	<u>percent 55 years of age</u>	
8.30		<u>Housing with Services</u>	<u>or older unless registered</u>	
8.31		<u>Establishment Providing</u>	<u>under MN Statutes, section</u>	
8.32		<u>Assisted Living Services</u>	<u>144D.025</u>	

9.1		<u>Housing with Services</u>	<u>&gt; 16 adult residents <math>\geq</math> 80</u>	<u>I-1</u>
9.2		<u>Establishment</u>	<u>percent 55 years of age</u>	
9.3		<u>Housing with Services</u>	<u>or older unless registered</u>	
9.4		<u>Establishment Providing</u>	<u>under MN Statutes, section</u>	
9.5		<u>Assisted Living Services</u>	<u>144D.025</u>	
9.6	<u>Boarding Care</u>	<u>Boarding Care Home</u>	<u>&lt; 5 residents</u>	<u>R-3</u>
9.7				<u>Dwelling Unit</u>
9.8		<u>Boarding Care Home</u>	<u>6-16 residents</u>	<u>R-4</u>
9.9		<u>Boarding Care Home</u>	<u>&gt; 16 residents</u>	<u>I-1</u>
9.10	<u>Boarding and</u>	<u>Boarding and Lodging</u>	<u><math>\leq</math> 16 residents in sleeping</u>	<u>R-3</u>
9.11	<u>Lodging</u>		<u>rooms or <math>\leq</math> 2 dwelling units</u>	
9.12		<u>Boarding and Lodging</u>	<u>&gt; 16 residents in sleeping</u>	<u>R-2</u>
9.13			<u>rooms or &gt; 2 dwelling units</u>	
9.14		<u>Boarding and Lodging &lt; 30</u>	<u>Bed and Breakfast with 6 or</u>	<u>R-1</u>
9.15		<u>days</u>	<u>more sleeping units</u>	
9.16			<u>Boarding houses with &gt; 10</u>	
9.17			<u>occupants</u>	
9.18		<u>Boarding and Lodging &lt; 30</u>	<u>Bed and Breakfast with 5 or</u>	<u>R-3</u>
9.19		<u>days</u>	<u>fewer sleeping units</u>	<u>Dwelling Unit</u>
9.20			<u>Boarding houses with <math>\leq</math> 10</u>	
9.21			<u>occupants</u>	
9.22	<u>Senior Housing</u>	<u>Senior Housing (See IBC</u>	<u>More than 2 dwelling units</u>	<u>R-2</u>
9.23		<u>310)</u>	<u>in one building</u>	
9.24		<u>Senior Housing (See IBC</u>	<u>2 family dwelling units in</u>	<u>R-3</u>
9.25		<u>310)</u>	<u>one building</u>	
9.26		<u>Senior Housing (See IBC</u>	<u>1 dwelling unit</u>	<u>R-3</u>
9.27		<u>310)</u>		<u>Dwelling Unit</u>
9.28	<u>Congregate</u>	<u>Congregate Residence</u>	<u><math>\leq</math> 16 residents</u>	<u>R-3</u>
9.29	<u>Residence</u>			
9.30		<u>Congregate Residence</u>	<u>17 or more residents</u>	<u>R-2</u>
9.31	<u>Day Services</u>	<u>Day Services Facility</u>	<u>Adult (over 18)</u>	<u>I-4</u>
9.32		<u>Day Services Facility</u>	<u>Ages 13-18</u>	<u>I-4</u>

10.1	<u>Chemical</u>	<u>Chemical Dependency</u>	<u>Not regulated</u>	<u>B</u>
10.2	<u>Dependency</u>	<u>Treatment Program -</u>		
10.3	<u>Treatment</u>	<u>Outpatient (&lt; 24 hrs.)</u>		
10.4	<u>Programs</u>			
10.5		<u>Chemical Dependency</u>	<u>&lt; 5 residents</u>	<u>R-3</u>
10.6		<u>Treatment Program -</u>		<u>Dwelling Unit</u>
10.7		<u>Residential</u>		
10.8		<u>Chemical Dependency</u>	<u>6-16 residents</u>	<u>R-4</u>
10.9		<u>Treatment Program -</u>		
10.10		<u>Residential</u>		
10.11		<u>Chemical Dependency</u>	<u>&gt; 16 residents</u>	<u>I-1</u>
10.12		<u>Treatment Program -</u>		
10.13		<u>Residential</u>		

10.14 **CHIEF.** See FIRE CHIEF.

10.15 **CORRIDOR.** ~~See Section 1002.1.~~ An interior passageway having a length at least three  
 10.16 times its width, having walls, partitions, or other obstructions to exit travel over 6 feet  
 10.17 (1,829 mm) in height on two opposing sides and having openings from rooms or similar  
 10.18 spaces.

10.19 **DECORATIVE MATERIALS.** Combustible materials used for decorative effects such as  
 10.20 curtains; draperies; streamers; surface coverings applied over building interior finishes for  
 10.21 decorative, acoustical or other effect; cloth; cotton batting; paper; plastics; vegetation; hay;  
 10.22 split bamboo; straw; vines; leaves; trees; moss; and similar materials used for decorative  
 10.23 effect. Decorative materials do not include educational materials that are displayed in an  
 10.24 approved manner, ordinary window shades, floor coverings, interior finish materials used  
 10.25 as surface coverings (See Chapter 8 for regulations of such materials) and materials 1/28  
 10.26 inch (0.9 mm) or less in thickness applied directly to a noncombustible backing.

10.27 **FAMILY ADULT DAY SERVICES.** A program providing services for up to eight  
 10.28 functionally impaired adults for less than 24 hours per day in the license holder's primary  
 10.29 residence in accordance with Minnesota Statutes, section 245A.143. This includes  
 10.30 programs located in residences licensed by the Department of Human Services for

11.1 adult foster care, provided not more than eight adults, excluding staff, are present in  
11.2 the residence at any time.

11.3 **FAMILY DAY CARE HOME.** A residence, licensed by the Department of Human  
11.4 Services under Minnesota Rules, parts 9502.0315 to 9502.0445, in which no more than  
11.5 ten children at any one time receive care, maintenance and supervision by other than their  
11.6 relatives or legal guardians for less than 24 hours per day.

11.7 **FIRE CHIEF.** The chief officer of the fire department serving the jurisdiction or the  
11.8 chief's authorized representatives. ~~For purposes of enforcing this code, the term fire chief~~  
11.9 ~~also includes the state fire marshal and the state fire marshal's representatives.~~

11.10 **FIRE CODE OFFICIAL.** The state fire marshal, the state fire marshal's authorized  
11.11 representative, fire chief, fire department representatives authorized by the fire chief, or  
11.12 other authority specifically designated by ordinance or regulation that is charged with the  
11.13 administration and enforcement of the code. The appointing authority shall ensure that  
11.14 the fire code official is competent by virtue of certification as a fire inspector, training, or  
11.15 experience in fire prevention inspections and enforcement.

11.16 **FIRE DEPARTMENT.** A regularly organized fire department, fire protection district,  
11.17 or fire company regularly charged with the responsibility of providing firefighting or fire  
11.18 protection services to the state or a political subdivision.

11.19 **GROUP DAY CARE HOME.** A residence, licensed by the Department of Human  
11.20 Services under Minnesota Rules, parts 9502.0315 to 9502.0445, in which at least 11 but  
11.21 not more than 14 children receive care, maintenance and supervision by other than their  
11.22 relatives or legal guardians for less than 24 hours per day.

11.23 **GUEST ROOM.** A room or a group of rooms used or intended to be used for sleeping  
11.24 purposes of lodging by guests. ~~Every 100 square feet of superficial floor area in a~~  
11.25 ~~dormitory shall be considered to be a guest room.~~

11.26 **INTERMEDIATE BULK CONTAINER.** A storage container meeting the requirements  
11.27 of and containing products authorized by the United States Department of Transportation

12.1 Hazardous Materials Regulations, Code of Federal Regulations, title 49, or by Part 6 of  
12.2 the United Nations Recommendations on the Transport of Dangerous Goods for classes  
12.3 31H1, 31H2, and 31HZ1.

12.4 ~~JURISDICTION. Any municipality, district, or other political subdivision adopting~~  
12.5 ~~this code for use in its jurisdictional area.~~

12.6 ~~JURISDICTIONAL AREA. The territory of the municipality, district, or other political~~  
12.7 ~~subdivision adopting this code.~~

12.8 **MECHANICAL CODE.** The Minnesota State Mechanical Code as adopted pursuant  
12.9 to Minnesota Statutes, section 326B.106.

12.10 **MUNICIPALITY.** Any statutory or home rule charter city, county or town meeting the  
12.11 requirements of Minnesota Statutes, section 368.01, subdivision 1, the University of  
12.12 Minnesota, or the state for public buildings.

12.13 ~~OCCUPANCY CLASSIFICATION. This definition is amended by modifying the~~  
12.14 ~~definitions of Educational Group E; Institutional Groups I-1 and I-2; Institutional Group~~  
12.15 ~~I-4; and Residential Groups R-1, R-3 and R-4, to read: Except as modified by this~~  
12.16 ~~part, for the purposes of this code, certain occupancies and uses are defined. All other~~  
12.17 ~~subdefinitions not modified in this definition still apply:~~

12.18 ~~**Educational Group E.** Educational Group E occupancy includes any building used~~  
12.19 ~~for educational purposes through the 12th grade by six or more persons for more than~~  
12.20 ~~12 hours per week or four hours in any one day.~~

12.21 ~~**Child day care.** The use of a building or structure, or portion thereof, for educational,~~  
12.22 ~~supervision or personal care services for more than five children older than 2-1/2~~  
12.23 ~~years of age shall be classified as an E occupancy.~~

12.24 ~~**Adult day care.** An adult day care center serving more than five ambulatory and~~  
12.25 ~~mobile persons who are capable of taking appropriate action for self-preservation~~  
12.26 ~~under emergency conditions as determined by program licensure provisions shall be~~  
12.27 ~~classified as an E occupancy. See part 7510.3675 for the protection requirements~~

13.1 ~~for facilities serving both participants who are capable and not capable of taking~~  
 13.2 ~~appropriate action for self-preservation.~~

13.3 **Institutional Group I.**

13.4 **Group I-1.** This occupancy shall include buildings, structures, or ~~parts~~ portions  
 13.5 thereof ~~housing for~~ more than ~~16~~ sixteen persons who reside, on a 24-hour basis,  
 13.6 who because of age, mental disability or other reasons, live in a supervised  
 13.7 residential environment ~~that provides personal~~ and receive custodial care  
 13.8 services. ~~The occupants are capable of responding to an emergency situation~~  
 13.9 ~~without physical assistance from staff.~~ Examples of this group shall include, but  
 13.10 ~~not be limited to,~~ the following: residential board and care facilities, assisted  
 13.11 living facilities, halfway houses, group homes, congregate care facilities, social  
 13.12 rehabilitation facilities, alcohol and drug centers and convalescent facilities.

13.13 Alcohol and drug centers

13.14 Assisted living services

13.15 Boarding care homes

13.16 Congregate care facilities

13.17 Convalescent facilities

13.18 Group homes

13.19 Halfway houses

13.20 Housing with services establishment

13.21 Residential board and care facilities

13.22 Social rehabilitation facilities

13.23 Supervised living facilities Class A-2

13.24 A facility such as the above with five or fewer persons receiving such care shall  
 13.25 be classified as Group R-3.

13.26 A facility such as the above housing at least six and not more than ~~16~~ sixteen  
 13.27 persons; receiving such care shall be classified as Group R-4.

14.1 **Group I-2.** This occupancy shall include buildings and structures used for  
 14.2 medical, surgical, psychiatric, nursing or custodial care on a 24-hour basis for  
 14.3 more than five persons who are not capable incapable of self-preservation.

14.4 Examples of this group shall include, but not be limited to, the following:  
 14.5 hospitals, nursing homes (both intermediate-care facilities and skilled nursing  
 14.6 facilities), mental hospitals and detoxification facilities.

14.7 Detoxification facilities

14.8 Foster care facilities

14.9 Hospitals

14.10 Nursing homes

14.11 Psychiatric hospitals

14.12 Supervised living facilities Class B-3

14.13 A facility such as the above with five or fewer persons receiving care shall be  
 14.14 classified as Group R-3.

14.15 ~~**Child care facility.** A child care facility that provides care on a 24-hour basis to more  
 14.16 than five children 2-1/2 years of age or less shall be classified as Group I-2.~~

14.17 ~~**Group I-4, Day care facilities.** This group shall include buildings and structures  
 14.18 occupied by persons of any age who receive custodial care for less than 24 hours  
 14.19 by individuals other than parents or guardians, relatives by blood, marriage, or  
 14.20 adoption, and in a place other than the home of the person cared for. A facility  
 14.21 such as the above with five or fewer persons shall be classified as Group R-3.~~

14.22 ~~Places of worship during religious functions are not included.~~

14.23 ~~**Adult care facility.** A facility that provides accommodations for less than 24 hours  
 14.24 for more than five unrelated adults and provides supervision and personal care  
 14.25 services shall be classified as Group I-4.~~

14.26 ~~**Exception:** Where the occupants are capable of responding to an emergency situation  
 14.27 without physical assistance from the staff the facility shall be classified as Group A-3.~~

15.1 ~~Child care facility. A facility that provides supervision and personal care on less~~  
 15.2 ~~than a 24-hour basis for more than five children 2-1/2 years of age or less shall be~~  
 15.3 ~~classified as Group I-4.~~

15.4 ~~Exception: A child day care facility which provides care for more than five but~~  
 15.5 ~~no more than 100 children 2-1/2 years or less of age, when the rooms where such~~  
 15.6 ~~children are cared for are located on the level of exit discharge and each of these child~~  
 15.7 ~~care rooms has an exit door directly to the exterior, shall be classified as Group E.~~

15.8 Group I-4, Day care facilities. This group shall include buildings and structures  
 15.9 occupied by more than five persons of any age who receive custodial care for  
 15.10 less than 24 hours per day by persons other than parents or guardians, relatives  
 15.11 by blood, marriage, or adoption, and in a place other than the home of the person  
 15.12 cared for. This group shall include, but not be limited to, the following:

15.13 Adult day care

15.14 Child day care

15.15 Classification as Group E. A child day care facility that provides care for more than  
 15.16 five but no more than 100 children 2-1/2 years or less of age, where the rooms in  
 15.17 which the children are cared for are located on a level of exit discharge serving such  
 15.18 rooms and each of these child care rooms has an exit door directly to the exterior,  
 15.19 shall be classified as Group E.

15.20 Within a place of religious worship. Rooms and spaces within places of religious  
 15.21 worship providing such care during religious functions shall be classified as part of  
 15.22 the primary occupancy.

15.23 Five or fewer occupants receiving care. A facility having five or fewer persons  
 15.24 receiving custodial care shall be classified as part of the primary occupancy.

15.25 Five or fewer occupants receiving care in a dwelling unit. A facility such as the  
 15.26 above within a dwelling unit and having five or fewer persons receiving custodial  
 15.27 care shall be classified as a Group R-3 occupancy.

15.28 Residential Group R.

16.1 Residential Group R includes, among others, the use of a building or  
16.2 structure, or a portion thereof, for sleeping purposes when not classified as  
16.3 an Institutional Group I. Residential occupancies shall include the following:

16.4 **R-1.** Residential occupancies containing sleeping units where the occupants are  
16.5 primarily transient in nature, including:

16.6 Bed and breakfast facilities with six or more guest rooms. A facility with  
16.7 less than six guest rooms shall be classified as a Group R-3 occupancy

16.8 Boarding houses (transient) with more than ten occupants

16.9 Congregate living facilities (transient) with more than ten occupants

16.10 Hotels (transient)

16.11 Motels (transient)

16.12 ~~Bed and breakfast facilities with six or more guest rooms. A facility with~~  
16.13 ~~less than six guest rooms shall be classified as a Group R-3 occupancy.~~

16.14 **R-2.** Residential occupancies containing sleeping units or more than two  
16.15 dwelling units where the occupants are primarily permanent in nature, including:

16.16 Apartment houses

16.17 Boarding houses (not transient) with more than sixteen occupants

16.18 Congregate living facilities (nontransient) with more than sixteen occupants

16.19 Convents

16.20 Dormitories

16.21 Fraternities and sororities

16.22 Hotels (not transient)

16.23 Monasteries

16.24 Motels (not transient)

16.25 Vacation time-share properties

16.26 ~~Congregate living facilities with 16 or fewer occupants are permitted to~~  
16.27 ~~comply with construction that complies with the requirements for Group R-3.~~

- 17.1 **R-3.** Residential occupancies where the occupants are primarily permanent in  
 17.2 nature and not classified as R-1, R-2, R-4 or I, including:
- 17.3 Assisted living services
  - 17.4 Buildings that do not contain more than two dwelling units
  - 17.5 Boarding care homes
  - 17.6 Boarding houses (nontransient) with sixteen or fewer occupants
  - 17.7 Boarding houses (transient) with ten or fewer occupants
  - 17.8 ~~Adult Care~~ facilities that provide accommodations for five or fewer persons  
 17.9 of any age for less than 24 hours receiving care
  - 17.10 ~~Child care facilities that provide accommodations for five or fewer persons~~  
 17.11 of any age for less than 24 hours
  - 17.12 Congregate living facilities (nontransient) with 16 sixteen or fewer persons  
 17.13 occupants
  - 17.14 Congregate living facilities (transient) with ten or fewer occupants
  - 17.15 Dwelling units in mixed occupancy buildings
  - 17.16 Family adult foster home
  - 17.17 Foster care
  - 17.18 Housing with services establishment
  - 17.19 Residential hospice with five or fewer occupants
  - 17.20 ~~Adult and child care facilities~~
- 17.21 **R-4.** ~~Residential occupancies shall include buildings arranged for occupancy as~~  
 17.22 ~~residential care/assisted living facilities including more than five but not more~~  
 17.23 ~~than 16 occupants, excluding staff. This occupancy shall include buildings,~~  
 17.24 structures or portions thereof for more than five but not more than sixteen  
 17.25 occupants, excluding staff, who reside on a 24-hour basis in a supervised  
 17.26 residential environment and receive custodial care. The persons receiving care  
 17.27 are capable of self-preservation. Examples of this group include the following:

- 18.1 Alcohol and drug centers
- 18.2 Assisted living services
- 18.3 Boarding care homes
- 18.4 Congregate care facilities
- 18.5 Group homes
- 18.6 Halfway houses
- 18.7 Housing with services establishment
- 18.8 Residential board and care facilities
- 18.9 Residential hospice with twelve or fewer occupants
- 18.10 Social rehabilitation facilities

18.11 Group R-4 occupancies shall meet the requirements for construction as defined  
18.12 for Group R-3 except as otherwise provided for in this code.

18.13 **OUTPATIENT CLINIC.** ~~A building~~ Buildings or part portions thereof used to provide,  
18.14 ~~on an outpatient basis, surgical treatment requiring general anesthesia or other treatment of~~  
18.15 ~~patients that would render them incapable of unassisted self-preservation under emergency~~  
18.16 ~~conditions. This would include outpatient surgical centers and kidney dialysis units, but~~  
18.17 ~~does not include doctors' and dentists' offices or clinics for the practice of medicine or the~~  
18.18 ~~delivery of primary care.~~ medical care on a less than 24-hour basis to persons who are  
18.19 not rendered incapable of self-preservation by the services provided, including federally  
18.20 certified end-stage renal disease facilities (kidney dialysis facilities) not classified as an  
18.21 ambulatory care facility.

18.22 **PERFORMANCE-BASED DESIGN.** An engineering approach to design elements of a  
18.23 building based on agreed-upon performance goals and objectives, engineering analysis  
18.24 and quantitative assessment of alternatives against the design goals and objectives using  
18.25 accepted engineering tools, methodologies and performance criteria.

19.1 **POWER TAP.** A device that is connected to an electrical receptacle, has built-in  
19.2 overcurrent protection and allows connection of one or more electrical plugs to supply  
19.3 electricity to other devices and equipment.

19.4 **REQUIRED BY THE FIRE CHIEF.** Determined by the fire chief to be directly related  
19.5 to safeguarding life and property from the hazards of fire, and uniform for each class or  
19.6 kind of building, structure or property covered.

19.7 **RESIDENTIAL HOSPICE FACILITY.** A facility located in a residential area that  
19.8 directly provides 24-hour residential and support services in a home-like setting for not  
19.9 more than 12 persons who have been diagnosed as terminally ill with a probable life  
19.10 expectancy of under one year.

19.11 **ROOM.** A space or area bounded by any obstructions over 6 feet in height which at  
19.12 any time enclose more than 80 percent of the perimeter of the area. In computing the  
19.13 unobstructed perimeter, openings less than 3 feet in clear width and less than 6 feet 8 inches  
19.14 high shall not be considered. Aisles and corridors shall not be construed to form rooms.

19.15 **SMALL HOSE CONNECTION.** "Small hose connection" means a 1 1/2-inch connection  
19.16 supplied inside of a building for firefighting overhaul operations in sprinkler-protected  
19.17 structures.

19.18 **STATE FIRE MARSHAL.** The Minnesota state fire marshal or the state fire marshal's  
19.19 authorized representatives.

19.20 **SUPERVISED LIVING FACILITY.** A facility in which supervision, lodging, meals,  
19.21 and, in accordance with the rules of the Department of Human Services and the  
19.22 Department of Health, counseling and developmental habilitative or rehabilitative services  
19.23 are provided to persons who are chemically dependent, adult mentally ill, or physically or  
19.24 developmentally disabled.

19.25 **Class A-1 supervised living facility.** A supervised living facility for six or fewer  
19.26 ambulatory or mobile disabled persons who are capable of taking appropriate action

20.1 for self-preservation under emergency conditions as determined by program licensure  
20.2 provisions.

20.3 **Class A-2 supervised living facility.** A supervised living facility for more than  
20.4 six ambulatory or mobile disabled persons who are capable of taking appropriate  
20.5 action for self-preservation under emergency conditions as determined by program  
20.6 licensure provisions.

20.7 **Class B-1 supervised living facility.** A supervised living facility for six or fewer  
20.8 ambulatory or nonambulatory, mobile or nonmobile persons who are not mentally or  
20.9 physically capable of taking appropriate action for self-preservation under emergency  
20.10 conditions as determined by program licensure provisions.

20.11 **Class B-2 supervised living facility.** A supervised living facility for seven to 16  
20.12 ambulatory or nonambulatory, mobile or nonmobile persons who are not mentally or  
20.13 physically capable of taking appropriate action for self-preservation under emergency  
20.14 conditions as determined by program licensure provisions.

20.15 **Class B-3 supervised living facility.** A supervised living facility for 17 or more  
20.16 ambulatory or nonambulatory, mobile or nonmobile persons who are not mentally or  
20.17 physically capable of taking appropriate action for self-preservation under emergency  
20.18 conditions as determined by program licensure provisions.

20.19 **7511.0304 SECTION 304, COMBUSTIBLE WASTE MATERIAL.**

20.20 Subpart 1. IFC section 304.3.2. IFC section 304.3.2 is deleted.

20.21 Subp. 2. IFC section 304.3.4. IFC section 304.3.4 is deleted.

20.22 **7511.0307 SECTION 307, OPEN BURNING AND RECREATIONAL FIRES.**

20.23 Subpart 1. IFC sections 307.1 through 307.2.1 and 307.4 through 307.4.1. IFC  
20.24 sections 307.1 through 307.2.1 and IFC sections 307.4 through 307.4.1 are deleted.

20.25 Subp. 2. IFC section 307.3. IFC section 307.3 is amended to read as follows:

21.1 **307.3 Extinguishment authority.** When open burning, a recreational fire or a portable  
21.2 outdoor fireplace creates or adds to a hazardous situation, or a required permit has not  
21.3 been obtained, the fire code official is authorized to order extinguishment.

21.4 Subp. 3. IFC section 307.4.3. IFC section 307.4.3 is amended by deleting the  
21.5 exception.

21.6 **7511.0308 SECTION 308, OPEN FLAMES.**

21.7 Subpart 1. IFC section 308.1.4. IFC sections 308.3.1 through 308.3.1.1 are section  
21.8 308.1.4 is deleted.

21.9 Subp. 2. IFC section 308.1.9. IFC section 308.1 is amended by adding a section to  
21.10 read:

21.11 308.1.9 Aerial luminaries. The use of aerial luminaries is prohibited.

21.12 **7511.0315 SECTION 315, MISCELLANEOUS COMBUSTIBLE MATERIALS**  
21.13 **STORAGE GENERAL STORAGE.**

21.14 Subpart 1. IFC section 315.2.1 315.3.1. IFC section 315.2.1 315.3.1 is amended  
21.15 by adding a paragraph to read:

21.16 315.3.1 Ceiling clearance. Storage shall be maintained 2 feet (610 mm) or more  
21.17 below the ceiling in nonsprinklered areas of buildings or a minimum of 18 inches  
21.18 (457 mm) below sprinkler head deflectors in sprinklered areas of buildings. Where  
21.19 more restrictive clearances between sprinkler head deflectors and storage are required  
21.20 by the sprinkler listing or NFPA 13, the more restrictive clearances shall apply.

21.21 Subp. 2. IFC section 315.2.3 315.3.3. IFC section 315.2.3 315.3.3 is amended, and  
21.22 sections added, to read:

21.23 315.2.3 315.3.3 Equipment rooms. Combustible storage in boiler rooms, mechanical  
21.24 rooms, electrical equipment rooms and elevator equipment rooms shall be in  
21.25 accordance with Sections 315.2.3.1 315.3.3.1 through 315.2.3.2 315.3.3.4. Storage  
21.26 not in conformance with these sections shall be removed or the condition abated.

22.1 For purposes of Sections ~~315.2.3~~ 315.3.3.1 through ~~315.2.3.5~~ 315.3.3.4, storage  
22.2 does not include materials necessary for the construction, maintenance, or operation  
22.3 of the equipment.

22.4 ~~315.2.3.1 Boiler rooms~~ 315.3.3.1 Mechanical equipment, boiler, and furnace  
22.5 rooms. Storage in boiler and furnace rooms shall be neat and orderly. Access to  
22.6 electrical panels shall be maintained in accordance with Section 605.3. At least  
22.7 36 inches (914 mm) shall be maintained for access to equipment. Combustible  
22.8 storage in boiler and furnace rooms shall be in accordance with Section  
22.9 ~~315.2.3.1.1 or 315.2.3.1.2~~. Storage in mechanical equipment rooms, boiler rooms,  
22.10 and furnace rooms shall be neat and orderly and arranged to provide immediate  
22.11 access to equipment. Clearances between equipment and storage shall be at least  
22.12 36 inches, or as required by the manufacturer, whichever is greater. When in the  
22.13 opinion of the code official, the type, amount, arrangement, or location of storage  
22.14 creates a hazard, the code official is authorized to order its removal.

22.15 ~~315.2.3.1.1 Boiler rooms with equipment at 400,000 BTU's per hour~~  
22.16 ~~input or less~~. Combustible storage is allowed in boiler and furnace rooms equipped  
22.17 throughout with an approved automatic fire-extinguishing system and where the fuel-fired  
22.18 equipment is 400,000 BTU's per hour input or less. No combustibles shall be  
22.19 within 36 inches (914 mm) of fuel-fired equipment.

22.20 ~~315.2.3.1.2 Boiler rooms with equipment over 400,000 BTU's per hour~~  
22.21 ~~input~~. Combustible storage is allowed in boiler and furnace rooms equipped throughout  
22.22 with an approved automatic fire-extinguishing system and where the fuel-fired equipment  
22.23 exceeds 400,000 BTU's per hour input. No storage shall be within 10 feet (3048 mm) of  
22.24 the boiler.

22.25 ~~315.2.3.2 Mechanical rooms~~. Combustible storage is allowed in mechanical  
22.26 rooms with or without fuel-fired equipment when equipped throughout with an approved  
22.27 automatic fire-extinguishing system. Storage shall be neat and orderly. A 3-foot aisle shall

23.1 ~~be maintained to all equipment. No storage shall be allowed within 3 feet of fuel-fired~~  
 23.2 ~~equipment. Access to electrical service panels shall be maintained per Section 605.3.~~

23.3 ~~315.2.3.3~~ 315.3.3.2 **Electrical vaults and equipment rooms.** No combustible  
 23.4 storage or any other type of storage shall be allowed in electrical distribution  
 23.5 equipment rooms. Electrical vaults and rooms or areas solely dedicated to main  
 23.6 electrical distribution equipment shall not contain storage.

23.7 ~~315.2.3.4~~ 315.3.3.3 **Elevator equipment rooms.** No combustible storage or any  
 23.8 other type of storage shall be allowed in elevator equipment rooms or elevator  
 23.9 machine rooms.

23.10 ~~315.2.3.5~~ 315.3.3.4 **Shafts.** No combustible storage shall be allowed in  
 23.11 mechanical rooms such as penthouses with shafts open to multiple floors.

23.12 **7511.0316 SECTION 316, CLEARANCE OF VEGETATION FROM**  
 23.13 **STRUCTURES. [RENUMBERED TO PART 7511.0319]**

23.14 **7511.0318 SECTION 318, LAUNDRY CARTS.**

23.15 IFC section 318 is deleted in its entirety.

23.16 **7511.0319 SECTION 319, CLEARANCE OF VEGETATION FROM**  
 23.17 **STRUCTURES. [MOVED FROM PART 7511.0316]**

23.18 IFC chapter 3 is amended by adding a section to read:

23.19 SECTION 316 319

23.20 CLEARANCE OF VEGETATION FROM STRUCTURES

23.21 ~~316.1~~ 319.1 **General.** Land that is covered with grass, grain, brush, or forest, whether  
 23.22 privately or publicly owned, which is so situated or is of such inaccessible location that a  
 23.23 fire originating upon the land would present an abnormally difficult job of suppression or  
 23.24 would result in great and unusual damage through fire or resulting erosion shall comply  
 23.25 with Section ~~316.2~~ 319.2.

23.26 ~~316.2~~ 319.2 **Fire breaks.** Persons owning, leasing, controlling, operating, or maintaining  
 23.27 buildings or structures in, upon or adjoining land covered with grass, grain, brush or

24.1 forest, and persons owning, leasing or controlling land adjacent to such buildings or  
24.2 structures, shall comply at all times with all of the following requirements:

24.3 1. Maintain an effective fire break by removing and clearing away flammable  
24.4 vegetation and combustible growth from areas within 30 feet (9,144 mm) of such  
24.5 buildings or structures.

24.6 **Exception:** Single specimens of trees, ornamental shrubbery or similar plants  
24.7 used as ground covers, provided they do not form a means of rapidly transmitting  
24.8 fire from the native growth to any structure.

24.9 2. Maintain additional fire protection or firebreak by removing brush, flammable  
24.10 vegetation and combustible growth located from 30 feet to 100 feet (9,144 mm to  
24.11 30,480 mm) from such buildings or structures, when required by the fire chief because  
24.12 of extrahazardous conditions causing a firebreak of only 30 feet (9,144 mm) to be  
24.13 insufficient to provide reasonable fire safety.

24.14 **Exception:** Grass and other vegetation located more than 30 feet (9,144 mm)  
24.15 from buildings or structures and less than 18 inches (457 mm) in height above  
24.16 the ground need not be removed where necessary to stabilize the soil and prevent  
24.17 erosion.

24.18 3. Remove portions of trees that extend within 10 feet (3,048 mm) of the outlet  
24.19 of a chimney.

24.20 4. Maintain trees adjacent to or overhanging a building free of deadwood.

24.21 5. Maintain the roof of a structure free of leaves, needles or other dead vegetative  
24.22 growth.

24.23 **7511.0401 SECTION 401, UNPLANNED EVACUATION.**

24.24 IFC section 401.7 is deleted.

24.25 **7511.0503 SECTION 503, FIRE APPARATUS ACCESS ROADS.**

24.26 Subpart 1. IFC section 503.1.1. IFC section 503.1.1 is amended to read as follows:

25.1 503.1.1 Buildings and facilities. Approved fire apparatus access roads shall be  
25.2 provided for every facility, building, or portion of a building hereafter constructed or  
25.3 moved into or within the jurisdiction. The fire apparatus access road shall comply  
25.4 with the requirements of this section and shall extend to within 150 feet (45,720  
25.5 mm) of all portions of the facility and all portions of the exterior walls of the first  
25.6 story of the building as measured by an approved route around the exterior of the  
25.7 building or facility.

25.8 Exception: Fire apparatus access roads need not be provided where there are  
25.9 two or fewer Group R-3 or Group U occupancy buildings.

25.10 503.1.1.1 Increases allowed. The 150-foot distance shall be permitted to be  
25.11 increased for the following:

25.12 1. When the building is equipped throughout with an approved automatic  
25.13 sprinkler system installed in accordance with Section 903.3.1.1, 903.3.1.2,  
25.14 or 903.3.1.3.

25.15 2. For Group R occupancies equipped throughout with an approved  
25.16 automatic sprinkler system installed in accordance with Section 903.3.1.1,  
25.17 903.3.1.2, or 903.3.1.3, the fire apparatus access road shall extend to within  
25.18 600 feet (183 m).

25.19 3. Where fire apparatus access roads cannot be installed because of location  
25.20 on property, topography, waterways, nonnegotiable grades, or other similar  
25.21 conditions, and an approved alternative means of fire protection is provided,  
25.22 the fire apparatus access road shall extend to within 300 feet (91.4 m).

25.23 Subp. 2. IFC section 503.2.1. IFC section 503.2.1 is amended by adding an  
25.24 exception as follows:

25.25 Exception: Where the road serves Group R buildings that are equipped  
25.26 throughout with an approved automatic sprinkler system installed in accordance

26.1 with Section 903.1.1, 903.1.2, or 903.1.3, the minimum unobstructed width  
26.2 can be reduced to 16 feet (4,877 mm).

26.3 Subp. 3. IFC section 503.2.5. IFC section 503.2.5 is amended by adding an  
26.4 exception as follows:

26.5 Exception: Where the dead-end road serves Group R buildings that are equipped  
26.6 throughout with an approved automatic sprinkler system installed in accordance  
26.7 with Section 903.3.1.1, 903.3.1.2, or 903.3.1.3, the maximum dead-end length  
26.8 distance is permitted to be increased up to 300 feet (91.4 m).

26.9 **7511.0506 SECTION 506, KEY BOXES.**

26.10 IFC section 506.1 is amended to read:

26.11 **506.1 Where required.** Where access to or within a structure or an area is unduly difficult  
26.12 because of secured openings or where immediate access is necessary for life-saving or  
26.13 firefighting purposes, the fire code official is authorized to require a key box to be installed  
26.14 in an approved location. The key box shall be of an approved type and shall contain keys  
26.15 to gain necessary access as required by the fire code official.

26.16 Exception: One- and two-family dwellings need not be provided with lock boxes.

26.17 **7511.0507 SECTION 507, FIRE PROTECTION WATER SUPPLIES.**

26.18 **[RENUMBERED FROM PART 7511.0508]**

26.19 Subpart 1. IFC section 507.3. IFC section 507.3 is amended and sections added to  
26.20 read:

26.21 **507.3 Fire flow.** Fire flow requirements for buildings or portions of buildings and facilities  
26.22 shall be determined by an approved method. If no municipal water supply exists, the  
26.23 minimum water flow and duration requirements for new buildings, portions of buildings  
26.24 hereafter constructed, or buildings moved into or within the jurisdiction shall be as  
26.25 specified in Table 507.3.

27.1 507.3.1 Fire flow for Group R-3 or Group U occupancies. No minimum fire flows  
 27.2 are required for Group R-3 occupancies or Group U occupancies with less than 5,000  
 27.3 square feet of floor area (465 m<sup>2</sup>).

27.4 TABLE 507.3

27.5 MINIMUM FIRE FLOW REQUIREMENTS

27.6 27.7 27.8	<u>Hazard Classification [Note 1]</u>	<u>Sprinklered Building [Note 2]</u>	<u>Unsprinklered or partially sprinklered building</u>	<u>Duration (minutes)</u>
27.9 27.10	<u>Light Hazard</u>	<u>100 gpm available for fire department use</u>	<u>250 gpm available for fire department use</u>	<u>30</u>
27.11 27.12	<u>Ordinary Hazard</u>	<u>250 gpm available for fire department use</u>	<u>500 gpm available for fire department use</u>	<u>60</u>
27.13 27.14	<u>Extra Hazard</u>	<u>500 gpm available for fire department use</u>	<u>750 gpm available for fire department use</u>	<u>90</u>
27.15 27.16 27.17 27.18	<u>High Piled Combustible Storage</u>	<u>Hose stream demand from sprinkler installation standard (NFPA 13) or 500 gpm, whichever is larger</u>	<u>1,000 gpm available for fire department use</u>	<u>120</u>
27.19 27.20 27.21 27.22 27.23	<u>Other Group H Occupancies</u>	<u>Hose stream demand from sprinkler installation standard (NFPA 13, MSFC Chapter 57, etc.) or 500 gpm, whichever is larger</u>	<u>1,000 gpm available for fire department use</u>	<u>120</u>

27.24 [Note 1: Light, ordinary, and extra hazard are as defined in NFPA 13, Standard for the  
 27.25 Installation of Automatic Sprinkler Systems.]

27.26 [Note 2: In sprinklered buildings, when a fixed water supply is used for the sprinklers, the  
 27.27 hose stream available for fire department need not come from the fixed source (i.e. tank).]

27.28 Subp. 2. IFC section 507.5.1. IFC section 508.5.1 507.5.1 is amended to read:  
 27.29 508.5.1 507.5.1 Where required. Where a portion of the facility or building hereafter  
 27.30 constructed or moved into or within the jurisdiction is more than 300 feet (91.5 m)  
 27.31 from a hydrant on a fire apparatus access road, as measured by an approved route

28.1 around the exterior of the facility or building, on-site fire hydrants and mains shall be  
28.2 provided where required by the fire code official.

28.3 **Exceptions:**

28.4 1. For Group R-3 and Group U occupancies, the distance requirement shall be  
28.5 400 feet (122 m).

28.6 2. For buildings equipped throughout with an approved automatic sprinkler  
28.7 system installed in accordance with Section 903.3.1.1 or 903.3.1.2, the distance  
28.8 requirement shall be 400 feet (122 m) threshold for requiring on site fire hydrants  
28.9 and mains shall be increased to 400 feet (122 m).

28.10 3. For Group R-3 buildings equipped throughout with an automatic sprinkler  
28.11 system installed in accordance with Section 903.3.1.1, 903.3.1.2, or 903.3.1.3,  
28.12 the threshold for requiring on site fire hydrants and mains shall be increased to  
28.13 600 feet (183 m).

28.14 **7511.0508 SECTION 508, FIRE PROTECTION WATER SUPPLIES.**  
28.15 **[RENUMBERED TO PART 7511.0507]**

28.16 **7511.0510 SECTION 510, EMERGENCY RESPONDER RADIO COVERAGE.**

28.17 IFC section 510 is deleted entirely.

28.18 **7511.0601 SECTION 601, GENERAL.**

28.19 IFC section 601.2 is amended to read as follows:

28.20 **601.2 Permits.** Permits shall be obtained for refrigeration systems and battery systems,  
28.21 as set forth in Sections 105.6 and 105.7.

28.22 **7511.0603 SECTION 603, FUEL-FIRED APPLIANCES.**

28.23 Subpart 1. **IFC section 603.5.** IFC section 603.5 is amended, and sections added, to  
28.24 read:

28.25 **603.5 Heating appliances.** Heating appliances shall be listed and shall comply with  
28.26 this section.

29.1 **Exception:** Unlisted appliances may be installed where permitted by the fire code  
 29.2 official, provided clearance from combustibles is maintained in accordance with the  
 29.3 Mechanical Code.

29.4 **603.5.1 Guard against contact.** The heating element or combustion chamber shall  
 29.5 be permanently guarded so as to prevent accidental contact by persons or material.

29.6 **603.5.2 Heating appliance installation and maintenance.** Heating appliances shall  
 29.7 be installed and maintained in accordance with the manufacturer's instructions, ~~the~~  
 29.8 ~~International Building Code, the International Mechanical Code, the International~~  
 29.9 ~~Fuel Gas Code and the ICC Electrical Code~~ and the Minnesota State Building Code.

29.10 **603.5.3 Heating appliance clearance to combustible materials.** Clearances  
 29.11 between heat-producing appliances and combustibles shall be in accordance with this  
 29.12 section. Where specific manufacturer's instructions or listings allow a reduction  
 29.13 from the distances specified in this section, those distances are allowed. Clearance  
 29.14 reductions permitted by the Mechanical Code are allowed.

29.15 **603.5.3.1 Gas or fuel-oil heaters.** A minimum of 18 inches (457 mm) shall be  
 29.16 maintained between gas or fuel-oil heat-producing appliances and combustible  
 29.17 materials.

29.18 **603.5.3.2 Solid fuel-burning heaters.** A minimum of 36 inches (914 mm) shall  
 29.19 be maintained between solid fuel-burning appliances and combustible materials.

29.20 Subp. 2. **IFC section 603.8.** IFC section 603.8 and all subsections are deleted.

29.21 **7511.0604 SECTION 604, EMERGENCY AND STANDBY POWER SYSTEMS.**

29.22 Subpart 1. IFC section 604.2.1. IFC section 604.2.1 is deleted.

29.23 Subp. 2. IFC section 604.2.18.3. IFC section 604.2.18.3 is amended to read as  
 29.24 follows:

29.25 604.2.18.3 Two or more elevators. Where two or more elevators are controlled  
 29.26 by a common operating system, all elevators shall automatically transfer to

30.1 standby power within 60 seconds after failure of normal power where the  
30.2 standby power source is of sufficient capacity to operate all elevators at the same  
30.3 time. Where the standby power source is not of sufficient capacity to operate  
30.4 all elevators at the same time, the elevators shall operate according to ASME  
30.5 A17.1 2004/CSA B44-2010 2.27.2.

30.6 Subp. 3. IFC section 604.5.2. IFC section 604.5.2 is amended to read as follows:  
30.7 604.5.2 Power test. For battery-powered emergency lighting, a power test of the  
30.8 emergency lighting equipment shall be completed annually. The power test shall  
30.9 operate the emergency lighting for a minimum of 30 minutes. All emergency lighting  
30.10 shall remain sufficiently illuminated for the duration of the test.

30.11 **7511.0605 SECTION 605, ELECTRICAL EQUIPMENT, WIRING AND**  
30.12 **HAZARDS.**

30.13 Subpart 1. IFC section 605.10.4. IFC Section 605.10.4 is deleted.

30.14 Subp. 2. IFC section 605.11. IFC section 605.11 is amended to read as follows:  
30.15 605.11 Solar photovoltaic power systems. Solar photovoltaic power systems shall be  
30.16 installed in accordance with the Minnesota State Building Code. Solar photovoltaic power  
30.17 systems shall be maintained in accordance with the Minnesota State Building Code and  
30.18 the Electrical Code.

30.19 **7511.0611 SECTION 611, PEDESTRIAN WALKWAYS AND PEDESTRIAN**  
30.20 **TUNNELS.**

30.21 IFC Chapter 6 is amended by adding a section 611 to read:

30.22 **SECTION 611**

30.23 **PEDESTRIAN WALKWAYS AND, PEDESTRIAN TUNNELS, AND MEZZANINES**

30.24 **611.1 Installation and maintenance.** New pedestrian walkways and tunnels shall be  
30.25 constructed and maintained in conformance with the Building Code. Existing pedestrian  
30.26 walkways and pedestrian tunnels shall comply with the following:

- 31.1 1. Unless all buildings connected to them are protected throughout by approved  
31.2 automatic fire-extinguishing systems, pedestrian walkways and pedestrian tunnels  
31.3 shall, at a minimum, be separated from the interior of buildings by walls and  
31.4 self-closing doors constructed to form a barrier to limit the transfer of smoke.
- 31.5 2. The unobstructed width of pedestrian walkways and pedestrian tunnels shall not be  
31.6 less than 44 inches (1,118 mm).
- 31.7 3. ~~No~~ Combustible materials or decorations shall not be located in pedestrian  
31.8 walkways or pedestrian tunnels. Interior wall, ceiling, and floor finishes shall comply  
31.9 with Chapter 8.
- 31.10 4. Pedestrian walkways and pedestrian tunnels that serve as required means of egress  
31.11 from attached buildings shall comply with Sections ~~1026~~ 1030 and ~~1027~~ 1104.
- 31.12 5. Pedestrian walkways and pedestrian tunnels exceeding 400 feet (122 m) in length  
31.13 shall be provided with means of egress so arranged that the maximum length of exit  
31.14 access travel to reach an exit does not exceed 200 feet (60,960 mm).
- 31.15 6. Means of egress from pedestrian walkways and pedestrian tunnels shall not be  
31.16 locked unless provisions for emergency egress are provided.

31.17 **611.2 Mezzanines.** Mezzanines in buildings shall conform to the requirements of the  
31.18 Building Code.

31.19 **7511.0806 SECTION 806, DECORATIVE VEGETATION IN NEW AND**  
31.20 **EXISTING BUILDINGS.**

31.21 IFC section 806.1 and its subsections are deleted entirely and replaced with the  
31.22 following:

31.23 **806.1.1 Natural or resin-bearing trees.** The use, display, or storage of natural or  
31.24 resin-bearing trees for use or decoration inside buildings shall be in accordance with  
31.25 Sections 806.1.1 through 806.1.1.5.

31.26 **806.1.1.1 Group R occupancies.** The use and display of natural or resin-bearing  
31.27 trees inside dwelling units of Group R-2 and R-3 occupancies is permitted.

32.1 806.1.1.2 Sprinkler protected areas. Trees located in areas protected by an  
32.2 approved automatic sprinkler system installed in accordance with Section  
32.3 903.3.1.1 or 903.3.1.2 in all occupancies except Group I are permitted.

32.4 806.1.1.3 Where allowed. Trees without open flames or electric lights are  
32.5 allowed in Group A used for worship purposes, Group B, E, and M occupancies.

32.6 806.1.1.4 Restricted. Trees used inside buildings for other occupancies or  
32.7 conditions are not allowed.

32.8 806.1.1.5 Location. The use and display of natural or resin-bearing trees shall  
32.9 not be placed in a location that would obstruct egress, fire protection systems and  
32.10 equipment, and shall not be allowed to accumulate inside a building. In buildings  
32.11 where more than one tree is located, they shall be separated by at least 20 feet  
32.12 as measured from the tree branches.

32.13 806.1.2 Support devices. The support device that holds the tree in an upright position  
32.14 shall be of a type that is stable and that meets all of the following criteria:

32.15 1. The device shall hold the tree securely and be of adequate size to avoid tipping  
32.16 over of the tree.

32.17 2. The device shall be capable of containing a minimum two-day supply of water.

32.18 3. The water level, when full, shall cover the tree stem at least 2 inches (51  
32.19 mm). The water level shall be maintained above the fresh cut and checked at  
32.20 least once daily.

32.21 806.1.3 Dryness. The tree shall be removed from the building whenever the needles  
32.22 or leaves fall off readily when a tree branch is shaken or if the needles are brittle and  
32.23 break when bent between the thumb and index finger. The tree shall be checked  
32.24 daily for dryness.

32.25 806.1.4 Decorative natural vegetation. The use, display, or storage of wreaths, hay  
32.26 bales, corn stalks, and other cut natural decorative vegetation shall be in accordance  
32.27 with Sections 806.1.4.1 through 806.1.4.4.

33.1 806.1.4.1 Occupancies. Limited quantities of cut natural decorative vegetation  
33.2 shall be permitted where the fire code official determines that adequate safeguards  
33.3 are provided based on the quantity and nature of the combustible vegetation.

33.4 806.1.4.2 Group I occupancies. Cut, natural, decorative vegetation is not  
33.5 permitted in Group I occupancies.

33.6 806.1.4.3 Group M occupancies. The use and display of decorative natural  
33.7 vegetation for resale in Group M occupancies is permitted.

33.8 806.1.4.4 Location. The use and display of cut natural decorative vegetation  
33.9 shall not obstruct aisles, egress, or exit paths, block access to fire protection  
33.10 systems or equipment, and shall not accumulate inside a building.

33.11 (Sections 806.2, 806.3, 806.4, and 806.5 still apply)

33.12 **7511.0807 SECTION 807, DECORATIVE MATERIALS OTHER THAN**  
33.13 **DECORATIVE VEGETATION IN NEW AND EXISTING BUILDINGS.**

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

33.15 Subp. 3a. IFC section 807.4.3.2. IFC section 807.4.3.2 is amended by adding an  
33.16 exception to read:

33.17 Exception: Artwork and teaching materials shall not exceed 50 percent of  
33.18 the wall area when the building is protected throughout with an approved  
33.19 automatic sprinkler system in accordance with Section 903.3.1.1.

33.20 [For text of subp 4, see M.R.]

33.21 Subp. 5. IFC section 807.4.4.2. IFC section 807.4.4.2 is amended by adding an  
33.22 exception to read as follows:

33.23 Exception: Artwork and teaching materials shall not exceed 50 percent of  
33.24 the wall area when the building is protected throughout with an approved  
33.25 automatic sprinkler system in accordance with Section 903.3.1.1.

34.1 Subp. 6. IFC section 807.5. IFC section 807 is amended by adding a section to  
34.2 read as follows:

34.3 807.5 Combustible decorations in Group I-2 occupancies. Combustible decorations  
34.4 shall be prohibited in any Group I-2 occupancy, unless one of the following criteria is met:

34.5 1. The decorations are flame-retardant or are treated with approved fire-retardant  
34.6 coating that is listed and labeled for application to the material to which it is applied;

34.7 2. The decorations meet the requirements of NFPA 701, Standard Methods of Fire  
34.8 Tests for Flame Propagation of Textiles and Films;

34.9 3. The decorations exhibit a heat release rate not exceeding 100 kW when tested  
34.10 in accordance with NFPA 289, Standard Method of Fire Test for Individual Fuel  
34.11 Packages, using the 20 kW ignition source;

34.12 4. Decorations, such as photographs, paintings, and other art, are attached directly to  
34.13 the walls, ceiling, and non-fire-rated doors are limited to:

34.14 4.1. (a) 20 percent of the wall, ceiling, and door areas inside any room or space of  
34.15 a smoke compartment that is not protected throughout by an automatic sprinkler  
34.16 system, or (b) 30 percent of the wall, ceiling, and door areas inside any room  
34.17 or space of a smoke compartment that is protected throughout by an approved  
34.18 supervised automatic sprinkler system in accordance with Section 903.3.1.1 or  
34.19 903.3.1.2; or

34.20 4.2. 50 percent of the wall, ceiling, and door areas inside patient sleeping rooms,  
34.21 having a capacity not exceeding four persons, in a smoke compartment that is  
34.22 protected throughout by an approved, supervised automatic sprinkler system in  
34.23 accordance with Section 903.3.1.1 or 903.3.1.2; and

34.24 4.3. Decorations do not interfere with the operation or latching of any door; or

34.25 5. Decorations, such as photographs and paintings, are in such limited quantities that  
34.26 a hazard of fire development or spread is not present.

35.1 **7511.0901 SECTION 901, GENERAL.**

35.2 Subpart 1. **IFC section 901.6.1.** IFC section 901.6.1 is amended by adding an  
35.3 exception to read:

35.4 **Exception:** Fire alarm and automatic fire-extinguishing systems shall be  
35.5 inspected and tested at least annually. Inspections and testing shall be conducted  
35.6 in accordance with the procedures specified in the referenced standards listed  
35.7 in Table 901.6.1. As part of the annual inspection required by this section,  
35.8 all weekly, monthly, quarterly, semiannual, and annual inspections, tests, and  
35.9 maintenance requirements in the listed standards shall be conducted and shall  
35.10 note any problems observed.

35.11 Subp. 2. **IFC section ~~901.10~~ 901.11.** IFC section 901 is amended by adding sections  
35.12 to read:

35.13 **~~901.10~~ 901.11 Fire sprinklers and fire detectors - ceilings.** In buildings protected by  
35.14 automatic sprinklers or automatic fire detectors, suspended or removable ceiling tiles shall  
35.15 be maintained in place to prevent the delay in sprinkler or detector activation.

35.16 **Exception:** When additional sprinklers or detectors are installed in the space above  
35.17 the suspended ceiling.

35.18 **~~901.10.1~~ 901.11.1 Open-grid ceilings.** Open-grid ceilings shall not be installed  
35.19 beneath sprinklers.

35.20 **Exception:** Open-grid ceilings are allowed when the requirements of NFPA 13  
35.21 for open-grid ceilings are met.

35.22 **~~901.10.2~~ 901.11.2 Drop-out ceilings.** Drop-out ceilings shall be permitted to be  
35.23 installed beneath sprinklers when all requirements of NFPA 13 for drop-out ceilings  
35.24 have been met.

36.1 **7511.0903 SECTION 903, AUTOMATIC SPRINKLER SYSTEMS.**

36.2 Subpart 1. IFC section ~~903.2.7~~ 903.2.8. IFC section ~~903.2.7~~ 903.2.8 is amended,  
36.3 and ~~a section subsections~~ added, to read:

36.4 ~~903.2.7~~ 903.2.8 Group R. An automatic sprinkler system installed in accordance with  
36.5 Section ~~903.3.1.1, 903.3.1.2, or 903.3.1.3~~ shall be provided throughout all buildings  
36.6 containing a in accordance with Section 903.3 in Group R occupancy where one of  
36.7 the following conditions exists occupancies and townhouses as follows:

36.8 1. ~~The combined area on all floors, including mezzanines, exceeds 9,250 square~~  
36.9 ~~feet (859.3 m<sup>2</sup>); or~~

36.10 2. ~~The Group R fire area is located more than three stories above grade plane.~~

36.11 ~~Exceptions:~~

36.12 1. ~~Group R-3 single dwelling unit buildings.~~

36.13 2. ~~Group R-3 or R-4 occupancies containing a facility licensed by the state of~~  
36.14 ~~Minnesota shall be provided with a fire suppression system as required by the~~  
36.15 ~~applicable licensing provision or this section, whichever is more restrictive.~~

36.16 3. ~~Group R-3 attached garages need not be sprinklered throughout if a dry sprinkler~~  
36.17 ~~is installed within 5 feet (1524 mm) of the door opening between the garage and~~  
36.18 ~~attached residence.~~

36.19 1. All Group R-4 occupancies.

36.20 2. Group R-1 multiunit resort buildings as defined in Minnesota Statutes, section  
36.21 157.15, and licensed by the Department of Health shall comply with chapter 1305,  
36.22 the Minnesota Building Code.

36.23 3. In other than R-1 multiunit resort buildings, Group R-1 occupancies shall comply  
36.24 with chapter 1305, the Minnesota Building Code.

36.25 4. R-2 occupancies shall comply with chapter 1305, the Minnesota Building Code.

36.26 5. Townhouses shall comply with chapter 1309, the Minnesota Residential Code.

36.27 For the purposes of this section, fire walls, party walls, or attached multiple  
36.28 fire-resistive exterior walls shall ~~not constitute~~ only create separate buildings where  
36.29 providing separation from occupancies other than Group R.

37.1 ~~Exception: Fire walls, party walls or attached multiple fire-resistive exterior walls~~  
37.2 ~~separating other occupancies not accessory to the Group R.~~

37.3 903.2.8.1 Group R-3 or R-4 congregate residences. An automatic sprinkler  
37.4 system installed in accordance with Section 903.3.1.3 shall be permitted in  
37.5 Group R-3 or R-4 congregate residences with 16 or fewer residents.

37.6 903.2.8.2 State licensed facilities. Group R-3 or R-4 occupancies containing  
37.7 facilities licensed by Minnesota shall be provided with an automatic sprinkler  
37.8 system as required by the applicable licensing provisions or this section,  
37.9 whichever is more restrictive.

37.10 903.2.7.1 903.2.8.3 Residential hospice facilities. An automatic sprinkler system  
37.11 installed in accordance with NFPA 13 shall be provided throughout all buildings  
37.12 with a Group R-3 or Group R-4 fire area containing a residential hospice facility.

37.13 Exception: An automatic sprinkler system installed in accordance with  
37.14 Section 903.3.1.2 or 903.3.1.3 shall be allowed, provided that all habitable  
37.15 spaces and closets are sprinklered.

37.16 Subp. 2. IFC section ~~903.2.12.1~~ 903.2.11.4. IFC section ~~903.2.12.1~~ 903.2.11.4  
37.17 is amended to read:

37.18 903.2.12.1 903.2.11.4 Fire protection for exhaust systems. ~~Any portion of an~~  
37.19 ~~exhaust system utilizing combustible components or having the potential for~~  
37.20 ~~combustible residue build-up on the inside or where required by other sections~~  
37.21 ~~of this code, where the duct cross-sectional area is greater than or equal to 75~~  
37.22 ~~square inches (480 cm<sup>2</sup>), shall be provided with an automatic extinguishing~~  
37.23 ~~system within the duct and at the duct intake, hood, enclosure or canopy, or shall~~  
37.24 ~~be constructed of material listed for use without sprinkler protection. Where~~  
37.25 ~~required by the International Mechanical Code, automatic sprinklers shall be~~  
37.26 ~~provided in ducts having a cross-sectional area of 75 square inches (480 cm<sup>2</sup>)~~  
37.27 ~~or more and that convey flammable or combustible components or that have~~

38.1 the potential for combustible residue build-up on the inside. When sprinkler  
38.2 protection is installed, means shall be provided to prevent water accumulation in  
38.3 the duct or the flow of water back to a process where the application of water  
38.4 constitutes a serious life or fire hazard.

38.5 Subp. 2a. IFC section 903.3.1. IFC section 903.3.1 is amended as follows:

38.6 903.3.1 Standards. Sprinkler systems shall be designed and installed in accordance  
38.7 with Section 903.3.1.1, unless otherwise permitted by Sections 903.3.1.2 and 903.3.1.3  
38.8 and other chapters of this code, as applicable. Automatic sprinkler systems installed  
38.9 in state-licensed or state-registered facilities shall be installed in accordance with this  
38.10 code and by the appropriate licensing or registration provisions of Minnesota.

38.11 [For text of subp 3, see M.R.]

38.12 Subp. 4. IFC section 903.3.1. IFC section 903.3.1 is amended by adding sections to  
38.13 read:

38.14 **903.3.1.4 Buildings of undetermined use.** When fire sprinkler systems are  
38.15 required in buildings of undetermined use, they shall be designed and installed to  
38.16 have a sprinkler density of not less than that required for an Ordinary Hazard  
38.17 Group 2 use with a minimum design area of 3,000 square feet (279 m<sup>2</sup>). Use is  
38.18 considered undetermined if not specified at the time a permit is issued. Where a  
38.19 subsequent occupancy requires a system with greater capability, it shall be the  
38.20 responsibility of the owner to upgrade the system to the required density for the  
38.21 new hazard, use or occupancy.

38.22 **903.3.1.5 Special sprinkler design criteria.** When fire sprinkler systems are  
38.23 required in areas containing the following uses, they shall be designed and  
38.24 installed to have a sprinkler density of not less than that required for an Ordinary  
38.25 Hazard Group 2 use:

38.26 1. Chemistry labs; or

39.1 2. Wrestling or gymnastic rooms.

39.2 **903.3.1.6 Modifications to sprinkler standards.** The sprinkler installation  
39.3 standards as referenced in Sections 903.3.1.1, 903.3.1.2, and 903.3.1.3 are  
39.4 modified as follows:

39.5 **903.3.1.6.1 Hose stream requirements.** When, in the opinion of the fire  
39.6 chief, an adequate alternate water supply for hose stream requirements is  
39.7 provided or available, the water supply requirements for the sprinkler system  
39.8 hose stream demands may be modified.

39.9 **903.3.1.6.2 Elevator shafts and equipment.** Sprinkler protection shall not  
39.10 be installed in elevator shafts, elevator pits or elevator machine rooms.

39.11 **Exception:** Health care occupancies required to have NFPA 13 systems  
39.12 and are licensed by the Minnesota Department of Health or that  
39.13 participate in Title XVIII (Medicare) or Title XIX (Medicaid) of the  
39.14 Social Security Act.

39.15 **903.3.1.6.3 Swimming pools.** Sprinkler protection need not be provided  
39.16 on the ceiling of rooms containing swimming pools when the pool area is  
39.17 used exclusively for swimming purposes and when sprinklers are provided  
39.18 around the perimeter of the pool area.

39.19 **903.3.1.6.4 NFPA 13 modifications.** Sections 8.15.8.2 ~~and~~, 8.17.2.5, and  
39.20 22.2.1.1 of NFPA 13 are amended to read:

39.21 **8.15.8.2 Linen closets and pantries.** Sprinklers are not required in linen  
39.22 closets and pantries within dwelling units that meet the following conditions:

- 39.23 1. The area of the space does not exceed 12 square feet (1.1 m<sup>2</sup>).
- 39.24 2. The least dimension does not exceed 3 feet (0.9 m).
- 39.25 3. The walls and materials are surfaced with noncombustible or limited
- 39.26 combustible materials.

40.1 4. The closet or pantry contains no mechanical equipment, electrical  
40.2 equipment or electrical appliances.

40.3 **8.17.2.5 Valves.**

40.4 **8.17.2.5.1 Fire department connection.** A listed check valve shall be  
40.5 installed in each fire department connection.

40.6 **8.17.2.5.1.1 Maximum pipe length.** There shall be a maximum of 25  
40.7 feet (7.6 m) of pipe between the check valve and the fire department  
40.8 connection inlet.

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

40.11 **8.17.2.5.1.2 Check valve location.** The check valve shall be located to  
40.12 minimize freezing potential.

40.13 **22.2.1.1 Water supply capacity information.** Where a waterflow test is  
40.14 used for the purposes of system design, the test shall be conducted no more  
40.15 than 36 months prior to the working plan submittal.

40.16 **903.3.1.6.5 Vestibules.** Sprinkler protection is not required in vestibules that  
40.17 meet all of the following conditions:

40.18 1. The vestibule is 225 square feet or less in floor area;

40.19 2. The vestibule is of noncombustible or limited combustible  
40.20 construction;

40.21 3. The vestibule has glazing allowing vision into vestibule;

40.22 4. The vestibule's only purpose is ingress and egress; and

40.23 5. The vestibule contains no fueled equipment, flammable or  
40.24 combustible liquids, or furniture. Incidental combustible storage in the  
40.25 vestibule is limited to five cubic feet of material.

40.26 **903.3.1.6.6 NFPA 13D sprinkler systems.** Automatic sprinkler systems  
40.27 installed in Group R-3 and R-4 congregate residences and townhouses shall

41.1 be permitted to be installed throughout in accordance with NFPA 13D.  
 41.2 Attached garages in townhouse buildings are required to have one dry head  
 41.3 sprinkler located within 5 linear feet of each door installed in the common  
 41.4 wall separating the dwelling unit and the attached garage.

41.5 Subp. 4a. IFC section 903.3.8. IFC section 903.3 is amended by adding a section to  
 41.6 read:

41.7 903.3.8 Sprinkler system design pressure safety margin. For new sprinkler  
 41.8 systems or additions to existing sprinkler systems, the available water supply shall  
 41.9 exceed the sprinkler system demand, including the hose stream requirements, by 5  
 41.10 psi (0.34 bars) or more.

41.11 Exception: 13D systems installed in accordance with section 903.3.1.3.

41.12 [For text of subps 5 to 7, see M.R.]

41.13 Subp. 8. [See repealer.]

41.14 **7511.0904 SECTION 904, ALTERNATIVE AUTOMATIC FIRE-EXTINGUISHING**  
 41.15 **FIRE-EXTINGUISHING SYSTEMS.**

41.16 ~~IFC Section 904.2.1 is amended by adding a section to read:~~

41.17 ~~904.2.1.1 Protection of existing cooking equipment. Approved automatic~~  
 41.18 ~~fire-extinguishing systems shall be provided for the protection of existing commercial-type~~  
 41.19 ~~cooking equipment that produces grease-laden vapors.~~

41.20 IFC section 904.1 is amended to read:

41.21 904.1.1 Certification of service personnel for fire-extinguishing equipment.

41.22 Service personnel installing, providing, or conducting maintenance on automatic  
 41.23 fire-extinguishing systems, other than automatic sprinkler systems, shall possess  
 41.24 a valid certificate issued by an approved organization for the type of system and  
 41.25 work performed.

42.1 **7511.0905 SECTION 905, STANDPIPE SYSTEMS.**42.2 [For text of subps 1 to 3, see M.R.]

42.3 Subp. 4. **IFC section 905.3.** IFC section 905.3 is amended by adding sections to read:  
42.4 **905.3.8 905.3.9 Detention and correctional facilities.** Regardless of the height  
42.5 of the building or number of stories, every building in a Group I-3 detention and  
42.6 correctional facility, where 50 or more persons are under restraint or security under  
42.7 Occupancy Condition 3, 4 or 5, shall be provided with a Class III automatic wet  
42.8 or semiautomatic dry standpipe system.

42.9 **Exception:** Combined systems meeting the provisions of Section 905.2 may  
42.10 be used.

42.11 When acceptable to the fire chief, fire department connections may be located inside  
42.12 all security walls or fences on the property.

42.13 Standpipes shall be located in accordance with Section 905. In addition, standpipes  
42.14 shall be located so that it will not be necessary to extend hose lines through smoke  
42.15 barriers. When located in cell complexes, standpipes may be located in secured  
42.16 pipe chases.

42.17 **905.3.9 905.3.10 Group R-2 occupancies; small hose connections.** ~~Class III wet~~  
42.18 ~~standpipes~~ Small hose connections shall be installed in Group R-2 occupancies three  
42.19 or more stories in height where any portion of the building's interior area is more than  
42.20 200 feet (60,960 mm) of travel, vertically or horizontally, from the nearest point of  
42.21 fire department vehicle access. ~~Standpipes~~ Small hose connections required by this  
42.22 section shall ~~be installed in enclosed stairways.~~ comply with the following:

42.23 1. Supply one 1 ½-inch (38 mm) fire hose valve at each floor level or intermediate  
42.24 stair landing in each required and enclosed stairway.

42.25 2. The water for the small hose connections shall be supplied separately from the  
42.26 sprinkler system protecting that area so that the small hose connections are still

43.1 functional if the water supply to the sprinkler system is shut down following fire  
43.2 extinguishment.

43.3 3. The piping shall be a minimum of 1 ½-inch (38 mm).

43.4 4. The water shall be supplied from a wet-pipe sprinkler system only.

43.5 5. The piping shall be comprised of metallic piping and hose valve connections.

43.6 Permanent signage shall be required which reads "Fire Department Overhaul Hose  
43.7 Connection" at each connection in the building. If a separate standpipe system is  
43.8 provided, a sign shall also be provided at the exterior fire department connection.

43.9 Subp. 5. IFC section 905.5.1. IFC section 905.5.1 is deleted.

43.10 **7511.0906 SECTION 906, PORTABLE FIRE EXTINGUISHERS.**

43.11 Subpart 1. IFC section 906.1. IFC section 906.1 is amended to read:

43.12 **906.1 Where required.** Portable fire extinguishers shall be installed in the following  
43.13 locations:

43.14 1. In all Group A, B, E, F, H, I, M, R-1, R-2, R-4 and S occupancies.

43.15 **Exception:** In all Group A, B and E occupancies equipped throughout with  
43.16 an approved automatic sprinkler system installed in accordance with Sections  
43.17 Section 903.3.1.1 and 903.3.1.2, fire extinguishers shall be required only in  
43.18 laundry rooms, boiler and furnace rooms, mechanical and electrical rooms,  
43.19 garages, stages, projection booths, shops, laboratories, kitchens, locker rooms,  
43.20 janitors' custodial closets, trash-collection rooms, storage rooms greater than 100  
43.21 square feet, and similar areas.

43.22 2. Within 30 feet (9,144 mm) of commercial cooking equipment.

43.23 3. In areas where flammable or combustible liquids are stored, used or dispensed.

43.24 4. On each floor of structures under construction, except Group R-3 occupancies, in  
43.25 accordance with Section ~~1415.1~~ 3315.1.

43.26 5. Where required by the sections indicated in Table 906.1.

- 44.1 6. Special-hazard areas, including but not limited to laboratories, computer rooms  
44.2 and generator rooms, where required by the fire code official.  
44.3 7. R-3 occupancies used as family day care, group family day care, foster care, adult  
44.4 family day services and residential hospices.

44.5 Subp. 2. IFC section 906.2. IFC section 906.2 is amended to read:  
44.6 906.2 General requirements. Portable fire extinguishers shall be selected, installed,  
44.7 and maintained in accordance with this section and NFPA 10. Section 7.1.2 of NFPA  
44.8 10 is deleted.  
44.9 (The exceptions are unchanged and still apply.)

44.10 Subp. 3. IFC section 906.2. IFC section 906.2.1 is amended to read:  
44.11 906.2.1 Certification of service personnel for portable fire extinguishers. Service  
44.12 personnel providing or conducting maintenance on portable fire extinguishers shall  
44.13 possess a valid certificate issued by an approved organization for the type of work  
44.14 performed.

44.15 **7511.0907 SECTION 907, FIRE ALARM AND DETECTION SYSTEMS.**

44.16 Subpart 1. [See repealer.]

44.17 [For text of subp 2, see M.R.]

44.18 Subp. 3. IFC section 907.2.1. IFC section 907.2.1 is amended, and sections added,  
44.19 to read:

44.20 **907.2.1 Group A, general.** A fire alarm system shall be installed in accordance with  
44.21 Sections 907.2.1 through 907.2.1.3 in Group A occupancies having an occupant  
44.22 load of 300 or more.

44.23 **Exceptions:**

- 44.24 1. Assembly areas used solely for worship purposes.

45.1 2. A fire alarm system is not required in buildings with an occupant load  
45.2 less than 1,000 when an approved automatic ~~fire-extinguishing~~ fire sprinkler  
45.3 system is installed throughout the building.

45.4 3. ~~Group A occupancy portions of~~ Assembly uses located inside Group E  
45.5 occupancies ~~are allowed to~~ shall have alarms as required for the Group E  
45.6 occupancy.

45.7 4. Group A-5 occupancies. See also Section 907.2.11.

45.8 **907.2.1.1 Initiation.** Initiation of the fire alarm system shall be by automatic  
45.9 means. Approved automatic fire detectors shall be installed in laundry rooms,  
45.10 boiler and furnace rooms, mechanical and electrical rooms, shops, kitchens,  
45.11 trash-collection rooms, storage rooms and similar areas.

45.12 **907.2.1.2 Notification.** The required fire alarm system shall activate an audible  
45.13 and visible notification appliance at a constantly attended location within the  
45.14 building for the purposes of initiating emergency action. A presignal feature and  
45.15 positive alarm sequencing in accordance with NFPA 72 are permitted.

45.16 Occupant notification shall be by means of voice announcements, either live or  
45.17 prerecorded, initiated by the person in the constantly attended location.

45.18 **Exception:** Where no constantly attended location exists, an automatic  
45.19 fire alarm system providing a general evacuation signal or an approved  
45.20 emergency voice/alarm communications system is permitted.

45.21 **907.2.1.3 System initiation in Group A occupancies with occupant load of**  
45.22 **1,000 or more.** Activation of the fire alarm system in Group A occupancies  
45.23 with an occupant load of 1,000 or more shall immediately initiate an approved  
45.24 prerecorded message announcement using an approved emergency voice/alarm  
45.25 communications system in accordance with NFPA 72.

45.26 **Exception:** Where approved, the prerecorded announcement is allowed to  
45.27 be manually deactivated for a period of time, not to exceed three minutes, for

46.1 the sole purpose of allowing a live voice announcement from an approved,  
46.2 constantly attended location.

46.3 Subp. 4. **IFC section 907.2.2.** IFC section 907.2.2 is amended, and sections added,  
46.4 to read:

46.5 **907.2.2 Group B, general.** A fire alarm system shall be installed in accordance with  
46.6 Sections 907.2.2 through 907.2.2.3 in Group B occupancies if:

- 46.7 1. The building has an occupant load of 500 or more persons; ~~or~~
- 46.8 2. The building has an occupant load of more than 100 persons above or below  
46.9 the lowest level of exit discharge; or
- 46.10 3. The building contains an ~~outpatient clinic~~ ambulatory care facility.

46.11 When automatic sprinkler systems or automatic fire detectors are installed in  
46.12 ~~outpatient clinics~~ ambulatory care facilities, such systems or detectors shall be  
46.13 connected to the building fire alarm system.

46.14 **Exception:** In other than ~~outpatient clinics~~ ambulatory care facilities, a fire alarm  
46.15 system is not required when an approved automatic fire-extinguishing system  
46.16 is installed throughout the building.

46.17 **907.2.2.1 Initiation.** Initiation of the fire alarm system shall be by automatic  
46.18 means. Approved automatic fire detectors shall be provided in boiler and furnace rooms,  
46.19 shops, kitchens, mechanical and electrical rooms, trash-collection rooms, storage rooms  
46.20 and similar areas. In ~~outpatient clinics~~ ambulatory care facilities, initiation of the fire  
46.21 alarm system shall also be by manual means.

46.22 **907.2.2.2 Notification.** Activation of the fire alarm system shall initiate a general  
46.23 evacuation signal.

46.24 **Exception:** In lieu of audible notification appliances, visible notification  
46.25 appliances shall be permitted to be used in patient care areas.

46.26 **907.2.2.3 ~~Outpatient clinics~~ Ambulatory care facilities.** ~~Corridors in outpatient~~  
46.27 ~~clinics and spaces open to the corridors shall be protected by an automatic~~

47.1 ~~smoke-detection system.~~ Corridors and rooms or spaces open to corridors within  
47.2 an ambulatory care facility shall be protected by an automatic smoke-detection  
47.3 system.

47.4 Subp. 5. IFC section **907.2.3**. IFC section 907.2.3 is amended, and sections added,  
47.5 to read:

47.6 **907.2.3 Group E, general.** A fire alarm system shall be installed in accordance  
47.7 with Sections 907.2.3 through 907.2.3.3 in Group E occupancies having an  
47.8 occupant load of 50 or more.

47.9 **907.2.3.1 Initiation.** Initiation of the fire alarm system shall be by manual and  
47.10 automatic means. Approved automatic fire detectors shall be provided in laundry  
47.11 rooms, boiler and furnace rooms, mechanical and electrical rooms, shops,  
47.12 laboratories, kitchens, locker rooms, janitors' custodial closets, trash-collection  
47.13 rooms, storage rooms, lounges and similar areas.

47.14 **Exceptions:**

47.15 1. In buildings protected throughout by an approved, ~~supervised~~ fire  
47.16 sprinkler system, manual fire alarm boxes are only required in the main  
47.17 office and in a custodial area.

47.18 2. Where all corridors are protected by an approved automatic fire alarm  
47.19 system having smoke detection with alarm verification, manual fire  
47.20 alarm boxes are only required near exits serving shops, chemistry and  
47.21 physics laboratories, boiler rooms, industrial technology and industrial  
47.22 arts rooms, kitchens, custodian's offices and main offices.

47.23 **907.2.3.2 Travel through adjoining rooms.** Where the only means of egress  
47.24 travel from an interior room or rooms having an aggregate occupant load of  
47.25 more than ten occupants is through an adjoining or intervening room, automatic  
47.26 smoke detectors shall be installed throughout the common atmosphere through  
47.27 which the path of egress travel passes.



49.1 Subp. 8. **IFC section 907.2.6.** IFC section 907.2.6 and all subsections are deleted in  
49.2 their entirety and replaced with the following:

49.3 **907.2.6 Group I, general.** A fire alarm system shall be installed in accordance with  
49.4 Sections 907.2.6 through ~~907.2.6.4.3~~ 907.2.6.4.2 in Group I occupancies.

49.5 **907.2.6.1 Group I-1 occupancies, general.** A manual and automatic fire alarm  
49.6 system shall be installed in Group I-1 occupancies in accordance with Sections  
49.7 907.2.6.1.1 through 907.2.6.1.3.

49.8 ~~907.2.6.1~~ **907.2.6.1.1 Initiation.** Initiation of the fire alarm system shall be  
49.9 by manual and automatic means. Approved automatic fire detectors shall  
49.10 be installed in laundry and soiled linen rooms, boiler and furnace rooms,  
49.11 mechanical and electrical rooms, shops, laboratories, kitchens, locker rooms,  
49.12 janitors' custodial closets, trash-collection rooms, storage rooms, lounges,  
49.13 gift shops and similar areas. Automatic smoke detectors shall be provided in  
49.14 waiting corridors and areas that are open to corridors.

49.15 **Exception:** Manual fire alarm boxes in patient sleeping areas of Group  
49.16 I-1 ~~and I-2~~ occupancies shall not be required at exits if located at all  
49.17 nurses' stations or other constantly attended staff locations, provided  
49.18 such fire alarm boxes are visible and continuously accessible ~~and that, if~~  
49.19 travel distances required by Section ~~907.4.1~~ 907.4.2 are not exceeded.

49.20 ~~907.2.6.2~~ **907.2.6.1.2 Notification.** Activation of the fire alarm system or  
49.21 automatic sprinkler system shall initiate a general evacuation signal. In  
49.22 addition, activation of the fire alarm system shall immediately transmit an  
49.23 alarm to an approved central station or remote station service.

49.24 **Exceptions:**

49.25 1. In lieu of audible notification appliances, visible notification  
49.26 appliances shall be allowed to be used in critical care areas.

50.1 2. Where occupants are incapable of evacuating themselves  
50.2 because of age, physical/mental disabilities or physical restraint,  
50.3 only the attendants or other personnel required to evacuate  
50.4 occupants from a zone, area, floor or building shall be required to  
50.5 be notified. This notification shall include means to readily identify  
50.6 the zone, area, floor or building in need of evacuation.

50.7 907.2.6.1.3 Sleeping room smoke alarms. Smoke alarms shall be installed  
50.8 in resident sleeping rooms in accordance with Section 907.2.11.1.

50.9 907.2.6.2 Group I-2 occupancies, general. A manual and automatic fire alarm  
50.10 system shall be installed in Group I-2 occupancies in accordance with Sections  
50.11 907.2.6.2 through 907.2.6.2.4.

50.12 907.2.6.2.1 Initiation. Initiation of the fire alarm system shall be by manual  
50.13 and automatic means. Approved automatic fire detectors shall be installed  
50.14 in laundry and soiled linen rooms, boiler and furnace rooms, mechanical  
50.15 and electrical rooms, shops, laboratories, kitchens, locker rooms, custodial  
50.16 closets, trash-collection rooms, storage rooms, lounges, gift shops, and  
50.17 similar areas. Hospitals, nursing homes (both intermediate care and skilled  
50.18 nursing facilities), board and care homes, and detoxification facilities shall  
50.19 be provided with smoke detection throughout the corridor and areas open to  
50.20 the corridors, other than nurse's stations.

50.21 **Exceptions:**

50.22 1. Corridor smoke detection shall not be required where the  
50.23 sleeping room smoke detectors required in Section 907.2.6.2.3 are  
50.24 connected to an approved fire alarm system and activate a general  
50.25 evacuation signal.

50.26 2. Manual fire alarm boxes shall not be required at exits from  
50.27 patient sleeping areas if located at all nurses' stations or other

51.1 constantly attended staff locations, provided such fire alarm boxes  
51.2 are visible and continuously accessible and that travel distances  
51.3 horizontally, on the same floor shall not exceed 200 feet to reach  
51.4 a manual fire alarm box.

51.5 **907.2.6.2.2 Notification.** Activation of the fire alarm system or automatic  
51.6 sprinkler system shall initiate a signal that is distinctive from audible signals  
51.7 used for other purposes in the same building. Such signal is intended to  
51.8 notify staff and need not meet the minimum sound pressure levels required  
51.9 for general evacuation fire alarm notification. In addition, activation of the  
51.10 fire alarm system shall immediately transmit an alarm to an approved central  
51.11 station or remote station service.

51.12 **Exceptions:**

- 51.13 1. In lieu of audible notification appliances, visible notification  
51.14 appliances shall be allowed to be used in critical care areas.
- 51.15 2. Where occupants are incapable of evacuating themselves  
51.16 because of age, physical/mental disabilities, or physical restraint,  
51.17 only the attendants or other personnel required to evacuate  
51.18 occupants from a zone, area, floor, or building shall be required to  
51.19 be notified. This notification shall include means to readily identify  
51.20 the zone, area, floor, or building in need of evacuation.
- 51.21 3. Where total evacuation of occupants is impractical due to  
51.22 building configuration, only the occupants in the affected zones  
51.23 shall be initially notified. Provisions shall be made to selectively  
51.24 notify occupants in other zones to afford orderly evacuation of  
51.25 the entire building.

51.26 **907.2.6.2.3 Patient room smoke detectors.** Smoke detectors shall be  
51.27 installed in patient sleeping rooms of hospitals and nursing homes. Such

52.1 detector's primary power shall be other than battery power. Actuation of  
52.2 such detectors shall cause a visual display on the corridor side of the room  
52.3 where the detector is located and shall cause a distinct audible and visual  
52.4 alarm at the nurse's station attending the room. Such detectors may be part of  
52.5 the facility's fire alarm system, nurse's call system, or a standalone system.

52.6 907.2.6.2.3.1 Integral smoke detectors for automatic door-closing  
52.7 devices. Integral smoke detectors for automatic door-closing devices on  
52.8 sleeping room doors can meet the requirement for patient room smoke  
52.9 detectors found in section 907.2.6.2.3 provided they perform all the  
52.10 required alerting functions found in section 907.2.6.2.3.

52.11 907.2.6.2.4 Sleeping room smoke alarms. For Group I-2 facilities, other  
52.12 than hospitals and nursing homes, single station smoke alarms shall be  
52.13 installed in resident sleeping rooms.

52.14 ~~907.2.6.3 Group I-2 occupancies. Corridors in hospitals, nursing homes~~  
52.15 ~~(both intermediate care and skilled nursing facilities), board and care homes and~~  
52.16 ~~detoxification facilities and spaces open to the corridors shall be protected by an automatic~~  
52.17 ~~smoke-detection system.~~

52.18 ~~907.2.6.3.1 Patient room smoke detectors. Smoke detectors that receive~~  
52.19 ~~their primary power from the building wiring shall be installed in patient sleeping rooms~~  
52.20 ~~of hospitals and nursing homes. Actuation of such detectors shall cause a visual display~~  
52.21 ~~on the corridor side of the room where the detector is located and shall cause an audible~~  
52.22 ~~and visual alarm at the nurse's station attending the room.~~

52.23 907.2.6.4 907.2.6.3 Group I-3 occupancies, general. Group I-3 occupancies  
52.24 shall be provided with a fire alarm system installed for alerting staff. A manual  
52.25 and automatic fire alarm system shall be installed in Group I-3 occupancies in  
52.26 accordance with Sections 907.2.6.3 through 907.2.6.3.4.

53.1 ~~907.2.6.4.1~~ 907.2.6.3.1 **Initiation.** Initiation of the fire alarm system shall  
53.2 be by manual and automatic means. Approved automatic fire detectors shall  
53.3 be installed in laundry and soiled linen rooms, boiler and furnace rooms,  
53.4 mechanical and electrical rooms, shops, laboratories, kitchens, locker rooms,  
53.5 janitors' custodial closets, trash-collection rooms, storage rooms, lounges,  
53.6 gift shops, commissaries and similar areas. Actuation of an automatic  
53.7 fire-extinguishing system, a manual fire alarm box or a fire detector shall  
53.8 initiate an approved fire alarm signal, which automatically notifies staff.  
53.9 Presignal systems shall not be used.

53.10 ~~907.2.6.4.2~~ 907.2.6.3.2 **Manual fire alarm boxes.** Manual fire alarm boxes  
53.11 are not required to be located in accordance with Section 907.4 where the  
53.12 fire alarm boxes are provided at staff-attended locations having direct  
53.13 supervision over areas where manual fire alarm boxes have been omitted.

53.14 Manual fire alarm boxes are permitted to be locked in areas occupied by detainees,  
53.15 provided that staff members are present within the subject area and have keys readily  
53.16 available to operate the manual fire alarm boxes.

53.17 ~~907.2.6.4.3.~~ 907.2.6.3.3 **Smoke detectors.** An approved automatic  
53.18 smoke-detection system shall be installed throughout resident housing areas,  
53.19 including sleeping areas and contiguous day rooms, group activity spaces  
53.20 and other common spaces normally accessible to residents.

53.21 **Exceptions:**

53.22 1. Other approved smoke-detection arrangements providing  
53.23 equivalent protection, such as placing detectors in exhaust ducts  
53.24 from cells or behind protective grills, are allowed when necessary  
53.25 to prevent damage or tampering.

54.1 2. Smoke detectors are not required in sleeping rooms with four  
54.2 or fewer occupants in smoke compartments that are equipped  
54.3 throughout with an approved automatic sprinkler system.

54.4 907.2.6.3.4 Notification. Activation of the fire alarm system or automatic  
54.5 sprinkler system shall initiate a signal that is distinctive from audible signals  
54.6 used for other purposes in the same building. Such signal is intended to  
54.7 notify staff and need not meet the minimum sound pressure levels required  
54.8 for general evacuation fire alarm notification. In addition, activation of the  
54.9 fire alarm system shall immediately transmit an alarm to an approved central  
54.10 station or remote station service.

54.11 907.2.6.4 Group I-4 occupancies, general. A manual and automatic fire alarm  
54.12 system shall be installed in Group I-4 occupancies in accordance with Sections  
54.13 907.2.6.4.1 through 907.2.6.4.2.

54.14 907.2.6.4.1 Initiation. Initiation of the fire alarm system shall be by manual  
54.15 and automatic means. Approved automatic fire detectors shall be installed  
54.16 in laundry and soiled linen rooms, boiler and furnace rooms, mechanical  
54.17 and electrical rooms, shops, laboratories, kitchens, locker rooms, custodial  
54.18 closets, trash-collection rooms, storage rooms, lounges, gift shops, and  
54.19 similar areas. Automatic smoke detectors shall be provided in corridors  
54.20 and areas that are open to corridors.

54.21 907.2.6.4.2 Notification. Activation of the fire alarm system or automatic  
54.22 sprinkler system shall initiate a general evacuation signal. In addition,  
54.23 activation of the fire alarm system shall immediately transmit an alarm  
54.24 signal to an approved central station or remote station service.

54.25 [For text of subp 9, see M.R.]

54.26 Subp. 10. IFC section 907.2.8. IFC section 907.2.8 and all subsections are deleted  
54.27 in their entirety and replaced with the following:

55.1 **907.2.8 Group R-1, general.** A fire alarm system shall be installed in accordance  
55.2 with Sections 907.2.8 through 907.2.8.3 in Group R-1 occupancies.

55.3 **Exceptions:**

55.4 1. A fire alarm system is not required in buildings not over two stories in  
55.5 height where all individual ~~guest rooms~~ sleeping units and contiguous attic  
55.6 and crawl spaces are separated from each other and public or common areas  
55.7 by at least one-hour fire partitions and each ~~guest room~~ sleeping unit has an  
55.8 exit directly to a public way, exit court or yard.

55.9 2. Buildings containing five or less ~~guest rooms~~ fewer sleeping units shall  
55.10 be allowed to be equipped with approved multiple-station smoke detectors  
55.11 alarms installed as required for Group R-3 occupancies. Installation shall  
55.12 be in accordance with Section ~~907.2.10~~ 907.2.11.

55.13 **907.2.8.1 Initiation.** Initiation of the fire alarm system shall be by automatic  
55.14 means. Approved automatic fire detectors shall be provided in boiler and furnace  
55.15 rooms, shops, laundry rooms, mechanical and electrical rooms, trash-collection  
55.16 rooms, storage rooms, gift shops, locker rooms and similar areas. Automatic  
55.17 smoke detectors shall be provided in all common areas and interior corridors  
55.18 serving as required means of egress.

55.19 **Exception:** System fire and smoke detectors are not required when an  
55.20 approved automatic fire-extinguishing system is installed ~~throughout the~~  
55.21 ~~building and manual activation is provided at a constantly attended location~~  
55.22 in accordance with Section 903.3.1.1 or 903.3.1.2 and a manual fire alarm  
55.23 box is provided at a constantly attended location. When a constantly  
55.24 attended location is not provided, the manual fire alarm box shall be  
55.25 provided at the main exit.

55.26 **907.2.8.2 Notification.** Activation of the fire alarm system or automatic sprinkler  
55.27 system shall initiate a general evacuation signal.

56.1 **907.2.8.3 Guest room Sleeping unit smoke detectors alarms.** ~~Guest room~~  
56.2 ~~Sleeping unit smoke detectors alarms~~ required by Section 907.2.10 907.2.11 shall  
56.3 not be connected to a fire alarm system.

56.4 **Exception:** Connection of such ~~detectors~~ alarms for annunciation only.

56.5 Subp. 11. **IFC section 907.2.9.** IFC section 907.2.9 is amended, and sections  
56.6 added, to read:

56.7 **907.2.9 Group R-2, general.** A fire alarm system shall be installed in accordance  
56.8 with Sections 907.2.9 through 907.2.9.2 in Group R-2 occupancies where:

- 56.9 1. Any ~~guest room~~ sleeping unit or dwelling unit is located two or more stories  
56.10 above the story containing the lowest level of exit discharge;
- 56.11 2. Any ~~guest room~~ sleeping unit or dwelling unit is located more than one story  
56.12 below the highest level of exit discharge of exits serving the dwelling unit;
- 56.13 3. The building contains more than 16 dwelling units or ~~guest rooms~~ sleeping  
56.14 units; or
- 56.15 4. The building is used as a congregate living facility, dormitory, convent,  
56.16 monastery, fraternity or, sorority, group home, or shelter and has an occupant  
56.17 load of 20 or more.

56.18 **Exception:** A fire alarm system is not required in buildings not over two  
56.19 stories in height where all dwelling units and contiguous attic and crawl  
56.20 spaces are separated from each other and public or common areas by at  
56.21 least one-hour fire partitions and each dwelling unit has an exit directly  
56.22 to a public way, exit court or yard.

56.23 **907.2.9.1 Initiation.** Initiation of the fire alarm system shall be by automatic  
56.24 means. Automatic fire detectors shall be provided in boiler and furnace rooms,  
56.25 trash-collection rooms, shops, laundry rooms, mechanical and electrical rooms,  
56.26 storage rooms and similar areas. Automatic smoke detectors shall be provided in  
56.27 all common areas and interior corridors serving as a required means of egress.

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

57.4           **907.2.9.2 Notification.** Activation of the fire alarm system or automatic sprinkler  
57.5           system shall initiate a general evacuation signal.

57.6           **907.2.9.3 Dwelling unit smoke detectors alarms.** Dwelling unit smoke  
57.7           detectors alarms required by Section ~~907.2.10~~ 907.2.11 shall not be connected to  
57.8           the building fire alarm system.

57.9           **Exception:** Connection of such ~~detectors~~ alarms for annunciation only.

57.10          Subp. 11a. IFC section 907.2.10. IFC section 907.2.10 is amended to read as follows:

57.11          907.2.10 Group R-4, general. A fire alarm system shall be installed in accordance  
57.12          with Sections 907.2.10 through 907.2.10.3 in Group R-4 occupancies.

57.13          **Exceptions:**

57.14                 1. A fire alarm system is not required in buildings two stories or less in  
57.15                 height where all individual sleeping units and contiguous attic and crawl  
57.16                 spaces to those units are separated from each other and public or common  
57.17                 areas by at least one-hour fire partitions and each sleeping unit room has an  
57.18                 exit directly to a public way, exit court, or yard.

57.19                 2. Buildings containing five or fewer sleeping units shall be allowed to be  
57.20                 equipped with approved multiple-station smoke alarms installed as required  
57.21                 for Group R-3 occupancies. Installation shall be in accordance with Section  
57.22                 907.2.11.

57.23                 **907.2.10.1 Initiation.** Initiation of the fire alarm system shall be by automatic  
57.24                 means. Approved automatic fire detectors shall be provided in boiler and furnace  
57.25                 rooms, shops, laundry rooms, mechanical and electrical rooms, trash-collection  
57.26                 rooms, storage rooms, gift shops, locker rooms, and similar areas. Automatic

58.1 smoke detectors shall be provided in all common areas and interior corridors  
58.2 serving as required means of egress.

58.3 Exception: System fire and smoke detectors are not required when an  
58.4 approved automatic fire-extinguishing system is installed in accordance with  
58.5 section 903.3.1.1, 903.3.1.2, or 903.3.1.3.

58.6 907.2.10.2 Notification. Activation of the fire alarm system or automatic  
58.7 sprinkler system shall initiate a general evacuation signal.

58.8 907.2.10.3 Smoke alarms. Single and multistation smoke alarms shall be  
58.9 installed in accordance with Section 907.2.11.

58.10 Subp. 12. [See repealer.]

58.11 Subp. 13. IFC section ~~907.2.10.2~~ 907.2.11.4. IFC section ~~907.2.10.2~~ 907.2.11.4 is  
58.12 amended by numbering the existing exception and adding a new exception, so that the  
58.13 exceptions read as follows:

58.14 **Exceptions:**

- 58.15 1. Smoke alarms are not required to be equipped with battery backup in  
58.16 Group R-1 where they are connected to an emergency electrical system.
- 58.17 2. Smoke alarms are not required to be equipped with battery backup in  
58.18 Group R-2 occupancies equipped throughout with an automatic sprinkler  
58.19 system installed in accordance with Section 903.3.1.1 or 903.3.1.2.
- 58.20 3. Smoke alarms installed in sleeping rooms of Group R-3 buildings  
58.21 equipped throughout with an automatic sprinkler system installed in  
58.22 accordance with Section 903.3.1.1, 903.3.1.2, or 903.3.1.3 are allowed  
58.23 to be battery-powered.

58.24 Subp. 14. [See repealer.]

58.25 [For text of subp 15, see M.R.]

59.1 Subp. 15a. IFC section 907.3. IFC section 907.3 is amended and sections added to  
59.2 read:

59.3 907.3 Fire safety functions. Automatic fire detectors required by Section 907.2 and  
59.4 Chapter 11 are to activate notification appliances in accordance with those sections. When  
59.5 automatic fire detectors are installed for other fire safety functions, they shall perform the  
59.6 intended function upon activation. When automatic detectors are installed for fire safety  
59.7 functions and the building has a fire alarm system, the detectors shall activate supervisory  
59.8 signals at the fire alarm control panel or at a constantly attended location. When the  
59.9 building does not have a fire alarm system, the detectors shall activate a visual and audible  
59.10 supervisory signal at an approved location, which shall indicate the source of the signal.

59.11 907.3.1 Air distribution and air-handling systems. Smoke detectors installed to  
59.12 shut down the air distribution or air-handling system shall, upon activation, perform  
59.13 the intended function. Air distribution or air-handling equipment that is part of a  
59.14 smoke-control system shall switch to smoke-control mode upon activation of a  
59.15 detector.

59.16 907.3.1.1 Fire alarm system interface. Smoke detectors that are installed in  
59.17 air distribution or air-handling systems for shutdown purposes and that are  
59.18 connected to a fire alarm system shall not sound a general evacuation signal.

59.19 907.3.2 Elevator control functions. Smoke detectors that are installed to control or  
59.20 recall elevators or to control doors for elevators, elevator lobbies, or elevator shafts  
59.21 and that are connected to a fire alarm system shall not sound a general evacuation  
59.22 signal. Elevator recall and firefighter's emergency operation for elevators shall only  
59.23 be controlled by elevator smoke detectors and shall not initiate upon other building  
59.24 fire detectors or evacuation signals.

59.25 907.3.3 Door hold-open functions. Smoke detectors that are installed to hold open  
59.26 fire doors under nonemergency conditions and that are connected to a fire alarm  
59.27 system shall sound a general evacuation signal when the doors being held open are

60.1 part of the means of egress corridor or stair system. Door hold-open smoke detectors  
60.2 are not required to activate a visual or audible signal.

60.3 Subp. 15b. IFC section 907.6.5. IFC section 907.6.5 is deleted.

60.4 Subp. 16. [See repealer.]

60.5 Subp. 17. [See repealer.]

60.6 Subp. 18. [See repealer.]

60.7 Subp. 19. [See repealer.]

60.8 Subp. 20. [See repealer.]

60.9 Subp. 21. [See repealer.]

60.10 Subp. 22. [See repealer.]

60.11 Subp. 23. [See repealer.]

60.12 Subp. 24. [See repealer.]

60.13 Subp. 25. IFC section 907.20.2 907.8.2. IFC section 907.20.2 907.8.2 is amended to  
60.14 read:

60.15 907.20.2 907.8.2 Testing. Fire alarm systems shall be inspected and tested at least  
60.16 annually in accordance with NFPA 72 or more frequently where required by the  
60.17 code official.

60.18 **Exception:** Devices or equipment that are inaccessible for safety considerations  
60.19 shall be tested during scheduled shutdowns where approved by the code official,  
60.20 but not less than every 18 months.

60.21 **7511.0908 SECTION 908, EMERGENCY ALARM SYSTEMS.**

60.22 IFC section 908.7 is deleted.

60.23 **7511.0909 SECTION 909, SMOKE CONTROL SYSTEMS.**

60.24 Subpart 1. [See repealer.]

61.1 Subp. 1a. IFC section 909.1. IFC section 909.1 is amended to read as follows:

61.2 909.1 Scope and purpose. This section applies to mechanical or passive smoke control  
61.3 systems when they are required for new buildings or portions thereof by provisions of  
61.4 this section or Minnesota Rules, chapter 1305. The purpose of this section is to establish  
61.5 minimum requirements for the design, installation, and acceptance testing of smoke  
61.6 control systems that are intended to provide a tenable environment for the evacuation or  
61.7 relocation of occupants and for fire suppression and overhaul efforts. These provisions are  
61.8 not intended for the preservation of contents or the timely restoration of operations.

61.9 Subp. 1b. IFC section 909.4.6. IFC section 909.4.6 is amended to read as follows:

61.10 909.4.6 Duration of operations. All portions of the active or passive smoke control  
61.11 system shall be capable of continued operation after detection of the fire event  
61.12 for a period of not less than 20 minutes. System design shall be for 20 minutes;  
61.13 however fans shall continue to operate after 20 minutes and shall continue to operate  
61.14 automatically for suppression efforts for a minimum of 5 minutes for every 10 feet of  
61.15 height of the protected space.

61.16 Subp. 1c. IFC section 909.4.7. IFC section 909.4 is amended by adding a section  
61.17 to read as follows:

61.18 909.4.7 Door opening force. With any of the design methods allowed by Section  
61.19 909, the door opening force, latch release, and set-in-motion force shall comply with  
61.20 Section 1008.1.3 requirements when the system is in smoke control mode.

61.21 Subp. 1d. IFC section 909.20. IFC section 909.20 is amended and a section added to  
61.22 read:

61.23 909.20 Maintenance. Smoke control systems and post-fire smoke exhaust systems shall  
61.24 be maintained to ensure to a reasonable degree that the system is capable of controlling  
61.25 smoke for the duration required. The system shall be maintained in accordance with the  
61.26 manufacturer's instructions and Sections 909.20.1 through 909.20.6.

62.1 (Sections 909.20.1 to 909.20.5 remain unchanged)

62.2 909.20.6 Qualifications. Special inspection agencies for smoke control shall have  
62.3 expertise in fire protection engineering, mechanical engineering, and certification as  
62.4 air balancers.

62.5 Subp. 2. IFC section ~~909.22~~ 909.21. IFC section 909 is amended by adding a  
62.6 section to read:

62.7 ~~909.22~~ 909.21 High-rise and covered mall smoke-exhaust systems. High-rise buildings  
62.8 and covered mall buildings exceeding 50,000 square feet (4645 m<sup>2</sup>) in floor area,  
62.9 excluding anchor stores, not provided with a smoke control or a post-fire smoke exhaust  
62.10 system, shall be equipped with a smoke removal system installed and maintained in  
62.11 accordance with the Building Code. Covered mall buildings exceeding 50,000 square feet  
62.12 (4,645 m<sup>2</sup>) in floor area, excluding anchor stores, and not provided with a smoke control  
62.13 system, shall be equipped with a post-fire smoke exhaust system installed and maintained  
62.14 in accordance with the Building Code.

62.15 **7511.0910 SECTION 910, SMOKE AND HEAT VENTS.**

62.16 [For text of subp 1, see M.R.]

62.17 Subp. 2. IFC section **910.4**. IFC section 910.4 is amended to read:

62.18 **910.4 Mechanical smoke exhaust.** Mechanical smoke exhaust shall be in accordance  
62.19 with Sections 910.4.1 through ~~910.4.6~~ 910.4.7.

62.20 Subp. 3. IFC section **910.4.3**. IFC section 910.4.3 is amended to read:

62.21 **910.4.3 Operation.** Mechanical smoke exhaust fans shall be ~~automatically~~ manually  
62.22 activated upon sprinkler system water flow. A 5- to 10-minute delay shall be provided  
62.23 between the sprinkler water flow signal and activation of the exhaust fans. In addition,  
62.24 Individual manual controls of each fan unit shall also be provided.

62.25 ~~Exception: When required by the code official, initiation of mechanical smoke~~  
62.26 ~~exhaust fans shall be only through manual activation.~~

63.1 [For text of subp 4, see M.R.]

63.2 Subp. 5. IFC section ~~910~~ **910.5**. IFC section 910 is amended by adding sections to  
63.3 read deleting section 910.5 and replacing it with the following:

63.4 **910.5 Calculated engineering design of mechanical smoke exhaust.** Calculated  
63.5 engineering design of mechanical smoke exhaust shall be in accordance with Sections  
63.6 910.5.1 through 910.5.5.

63.7 **910.5.1 Methodology.** Mechanical smoke exhaust systems shall be designed to  
63.8 remove smoke after a fire is extinguished and to assist the fire department during  
63.9 suppression operations or during marginal sprinkler control situations. They are not  
63.10 considered life safety systems and are not designed for occupant safety.

63.11 **910.5.2 Calculation method.** Volumetric flow rate calculations shall demonstrate  
63.12 that the system will provide at least three air changes per hour for the space required  
63.13 to be provided with smoke exhaust. When only a portion of a space is used for  
63.14 high-piled storage requiring smoke exhaust, the volume to be extracted shall be based  
63.15 on the ceiling height multiplied by the actual gross floor area for storage.

63.16 **910.5.3 Operation.** Mechanical smoke exhaust fans shall be ~~automatically~~ manually  
63.17 activated upon sprinkler system water flow. ~~A 5- to 10-minute delay shall be provided~~  
63.18 ~~between the sprinkler water flow signal and activation of the exhaust fans.~~ In addition,  
63.19 individual manual controls of each fan unit shall also be provided.

63.20 ~~**Exception:** When required by the code official, initiation of mechanical smoke~~  
63.21 ~~exhaust fans shall be only through manual activation.~~

63.22 **910.5.4 Supply air.** Supply air for exhaust fans shall be sized to provide a minimum  
63.23 of 50 percent of the required exhaust. Air velocity at each supply air opening shall  
63.24 not exceed an average of 200 feet per minute when measured 4 feet (1219 mm) in  
63.25 front of the opening. Openings for supply air shall be uniformly distributed around  
63.26 the periphery of the area served and be located or ducted to a position not more  
63.27 than one-half the storage height above the floor. Supply air openings shall open

64.1 automatically upon operation of the smoke exhaust system and shall not require a  
64.2 manual action at each supply opening for operation. Supply air openings shall be kept  
64.3 clear of storage or obstructions to airflow for at least 4 feet (1219 mm) in front of  
64.4 the opening. Supply air openings shall be separated from exhaust fans and exterior  
64.5 combustibles to prevent introduction of smoke into the building.

64.6 **910.5.5 Equipment.** Wiring and controls shall be as required in Section 910.4.4.  
64.7 Interlocks shall be as required in Section 910.4.6. Exhaust fans shall be uniformly  
64.8 spaced and each fan shall have a maximum individual capacity of 30,000 cfm (850  
64.9 m<sup>3</sup>/min).

64.10 Subp. 6. IFC section 910.6. IFC section 910.6 is amended as follows:

64.11 **910.6 Testing and maintenance.** Mechanical smoke exhaust systems shall be tested and  
64.12 maintained as required in Sections 910.6.1 through 910.6.4.

64.13 **910.6.1 Acceptance testing.** Mechanical smoke exhaust systems shall be acceptance  
64.14 tested as required by Sections ~~909.18.2 through 909.18.5~~ 909.18 and 909.19.

64.15 **910.6.1.1 Controls.** For testing purposes, each smoke exhaust system equipped  
64.16 for automatic activation shall be put into operation by the actuation of the  
64.17 automatic initiating device. Control sequences shall be verified throughout the  
64.18 system, including verification of override from the firefighter's control panel  
64.19 when systems are equipped for automatic activation.

64.20 **910.6.2 Special inspections.** Special inspections for mechanical smoke exhaust shall  
64.21 be conducted according to Section 909.18.8.

64.22 **910.6.3 Maintenance.** Mechanical smoke exhaust systems, including exhaust fans,  
64.23 supply air openings and controls, shall be maintained and unobstructed.

64.24 **910.6.4 Operational testing.** Operational testing of the smoke exhaust system shall  
64.25 include all equipment such as initiating devices, fans, dampers, controls and supply  
64.26 air openings. Mechanical smoke exhaust systems shall be operated and tested under  
64.27 each control sequence at least annually.

65.1 Subp. 7. IFC section 910.7. IFC section 910.7 is amended to read:  
65.2 910.7 Maintenance. Smoke and heat vents shall be maintained in an operative condition  
65.3 in accordance with NFPA 204. Fusible links shall be promptly replaced whenever fused,  
65.4 damaged, or painted. Smoke and heat vents shall not be modified.

65.5 **7511.1001 SECTION 1001, ADMINISTRATION.**

65.6 Subpart 1. **IFC section 1001.1.** IFC section 1001.1 is amended by adding a section  
65.7 to read:

65.8 **1001.1 General.** Buildings or portions thereof shall be provided with a means of egress  
65.9 system as required by this chapter. The provisions of this chapter shall control the design,  
65.10 construction, and arrangement of means of egress components required to provide an  
65.11 approved means of egress from structures and portions thereof. Sections ~~1001~~ 1003  
65.12 through ~~1025~~ 1029 and Section ~~1028~~ 1030 shall apply to new construction. Sections 1001,  
65.13 1002, ~~1026~~, ~~1027~~ 1030, and ~~1028~~ 1104 shall apply to existing buildings.

65.14 1001.1.1 Compliance options. Means of egress installed and maintained in  
65.15 accordance with the Minnesota Residential Code or Minnesota Building Code, when  
65.16 applicable, shall be deemed to comply with this chapter.

65.17 Subp. 1a. IFC section 1001.1. IFC section 1001.1 is amended by deleting the  
65.18 exception.

65.19 Subp. 2. **IFC section 1001.3.** IFC section 1001 is amended by adding a section to  
65.20 read:

65.21 **1001.3 Special exiting provisions for younger students.** Rooms in Group E occupancies  
65.22 used by preschool, kindergarten, first- or second-grade pupils, latchkey, child care, early  
65.23 childhood family education, teen parent, or similar programs shall be located as required  
65.24 by the Building Code.

66.1 **7511.1008 SECTION 1008, DOORS, GATES AND TURNSTILES.**

66.2 Subpart 1. IFC sections ~~1008.1.8.1, 1008.1.8.2, 1008.1.8.3~~ 1008.1.9.1, 1008.1.9.2,  
66.3 and 1008.1.9.3. IFC sections ~~1008.1.8.1, 1008.1.8.2, and 1008.1.8.3~~ 1008.1.9.1,  
66.4 1008.1.9.2, and 1008.1.9.3 are amended to read:

66.5 ~~1008.1.8.1~~ 1008.1.9.1 **Hardware.** Except as permitted by Section ~~1008.1.8.3~~  
66.6 1008.1.9.3, door handles, pulls, latches, locks and other operating devices on  
66.7 doors shall only require a single operation to release the door from the egress side.  
66.8 ~~1008.1.8.2~~ 1008.1.9.2 **Hardware height.** Door handles, pulls, latches, locks, and  
66.9 other operating devices shall be installed 34 inches (864 mm) minimum and  
66.10 48 inches (1219 mm) maximum above the finished floor. Locks used only for  
66.11 security purposes and not used for normal operation are permitted at any height.  
66.12 ~~1008.1.8.3~~ 1008.1.9.3 **Locks and latches.** Locks and latches shall be permitted  
66.13 to prevent operation of doors where any of the following exists:

66.14 1. Places of detention or restraint.  
66.15 2. In buildings in occupancy Group A having an occupant load of 300 or  
66.16 less, Groups B, F, M, and S and in ~~churches~~ places of religious worship, the  
66.17 main exterior door or doors are permitted to be equipped with key-operated  
66.18 locking devices from the egress side, provided:

66.19 2.1 The locking device is readily distinguishable as locked.  
66.20 2.2 A readily visible durable sign is posted on the egress side on or  
66.21 adjacent to the door stating: THIS DOOR TO REMAIN UNLOCKED  
66.22 WHEN BUILDING IS OCCUPIED. The sign shall be in letters 1 inch  
66.23 (25 mm) high on a contrasting background.

66.24 2.3 The use of the key-operated locking device is revocable by the fire  
66.25 code official for due cause.

67.1 3. Where egress doors are used in pairs, approved automatic flush bolts shall  
 67.2 be permitted to be used, provided that the door leaf having the automatic  
 67.3 flush bolts has no doorknob or surface-mounted hardware.

67.4 4. Doors from individual dwelling or sleeping units of Group R occupancies  
 67.5 having an occupant load of ten or less are permitted to be equipped with a  
 67.6 night latch, dead bolt or security chain, provided such devices are openable  
 67.7 from the inside without the use of a key or tool.

67.8 5. Fire doors after the minimum elevated temperature has disabled the  
 67.9 unlatching mechanism in accordance with listed fire door test procedures.

67.10 ~~5 6.~~ Delayed egress locks, installed and maintained in conformance with  
 67.11 Section ~~1008.1.8.6~~ 1008.1.9.7.

67.12 ~~6 7.~~ Special egress-control devices locking arrangements installed and  
 67.13 maintained in conformance with Section ~~1008.1.11~~ 1008.1.9.6 are allowed  
 67.14 in Group R-3 and Group R-4 congregate care facilities and in Group I  
 67.15 occupancies.

67.16 ~~7 8.~~ Existing door-locking arrangements in Group I occupancies that were  
 67.17 installed prior to March 20, 1995, and comply with Appendix I may be  
 67.18 allowed to continue. Electromagnetically locked egress doors installed and  
 67.19 maintained in accordance with Section 1008.1.9.9.

67.20 ~~8 9.~~ In rooms, other than cells, where occupants are being restrained for  
 67.21 safety or security reasons, special ~~locking~~ detention arrangements that  
 67.22 comply with the requirements of Section ~~1008.1.10~~ 1008.1.11 are permitted.

67.23 Subp. 1a. IFC section 1008.1.9.6. IFC section 1008.1.9.6 is amended to read:

67.24 1008.1.9.6 Special locking arrangements in Group I-1, I-2, R-3, or R-4  
 67.25 occupancies. Approved special locking arrangements shall be permitted in a  
 67.26 Group I-1, I-2, R-3, or R-4 occupancy where the clinical needs of the persons  
 67.27 receiving care require such locking. Special locking arrangements shall be

68.1 permitted in such occupancies where the building is equipped throughout with  
68.2 an approved automatic sprinkler system in accordance with Section 903.3.1.1  
68.3 and either an approved automatic smoke or heat detection system installed in  
68.4 accordance with Section 907, provided that doors are installed and operate in  
68.5 accordance with items 1 through 10. Items 1 through 4 shall not apply to doors to  
68.6 areas where persons, because of clinical needs, require restraint or containment  
68.7 as part of the function of a psychiatric treatment area.

- 68.8 1. The doors unlock upon actuation of the automatic sprinkler system or  
68.9 automatic fire detection system.
- 68.10 2. The doors unlock upon loss of power controlling the lock or lock  
68.11 mechanism.
- 68.12 3. The door locks shall have the capability of being unlocked from a signal  
68.13 from the fire command center, a nursing station, or other approved location.
- 68.14 4. A building occupant shall not be required to pass through more than one  
68.15 door with a special egress lock before entering an exit.
- 68.16 5. The procedures to operate the unlocking system shall be described and  
68.17 approved as part of the emergency planning and preparedness required by  
68.18 Chapter 4.
- 68.19 6. All clinical staff shall have keys, codes, or other means necessary to  
68.20 operate the locking device.
- 68.21 7. Emergency lighting shall be provided at the door.
- 68.22 8. 24-hour resident or patient supervision is provided within the locked area.
- 68.23 9. Locking devices are designed to fail in the open position.
- 68.24 10. Floor levels within the building or portion of the building with special  
68.25 locking arrangements shall be divided into at least two compartments by  
68.26 smoke barriers meeting the requirements of the State Building Code.

69.1                    Exception to item 10: In existing Group R-3 occupancies where the  
69.2                    construction of smoke barrier compartmentation is not practical, an  
69.3                    existing sleeping room provided with smoke tight construction and  
69.4                    having an escape window complying with Section 1029 is allowed.

69.5                    Subp. 2. IFC section ~~1008.1.8.6~~ 1008.1.9.7. IFC section ~~1008.1.8.6~~ 1008.1.9.7  
69.6                    is amended to read:

69.7                    ~~1008.1.8.6~~ 1008.1.9.7 Delayed egress door locks. Approved, listed, delayed  
69.8                    egress locks shall be permitted to be installed on doors serving any occupancy  
69.9                    except Assembly Group A occupancies and High Hazard Group H occupancies,  
69.10                   and assembly uses within Educational Group E occupancies. Delayed egress  
69.11                   locks shall be installed only in buildings that are equipped throughout with an  
69.12                   automatic sprinkler system in accordance with Section 903.3.1.1 or an approved  
69.13                   automatic smoke detection system installed in accordance with Section 907,  
69.14                   an approved smoke detection system installed in the means of egress system  
69.15                   servicing the locked area, provided that the doors unlock in accordance with Items  
69.16                   1 through 6 4. A building occupant shall not be required to pass through more  
69.17                   than one door equipped with a delayed egress lock before entering an exit.

- 69.18                    1. The doors unlock upon actuation of the automatic sprinkler system or  
69.19                    automatic fire detection system.
- 69.20                    2. The doors unlock upon loss of power controlling the lock or lock  
69.21                    mechanism.
- 69.22                    3. The door locks have the capability of being unlocked by a signal from the  
69.23                    fire command center.
- 69.24                    4. The ~~initiation of~~ door locks shall include an irreversible process that will  
69.25                    release the latch in not more than 15 seconds when a force of not more than  
69.26                    15 pounds (66 N) is applied for one second to the release device. Initiation  
69.27                    of the irreversible process shall activate an audible signal in the vicinity of

70.1 the door. Once the door lock has been released by the application of force to  
70.2 the releasing device, relocking shall be by manual means only.

70.3 **Exception:** Where approved, a delay of not more than 30 seconds  
70.4 shall be permitted.

70.5 Doors that have been equipped with delayed egress locks shall also comply  
70.6 with items 1 to 3 below.

70.7 5 1. A sign shall be provided on the door located above and within 12 inches  
70.8 (305 mm) of the release device reading: PUSH UNTIL ALARM SOUNDS.  
70.9 DOOR CAN BE OPENED IN 15 SECONDS.

70.10 6 2. Emergency lighting shall be provided at the door.

70.11 3. Delayed egress locks shall be maintained and tested in accordance with  
70.12 this code.

70.13 Subp. 2a. IFC section 1008.1.9.11. IFC section 1008.1.9.11 is amended to read:

70.14 1008.1.9.11 Stairway doors. Interior stairway means of egress doors shall be  
70.15 openable from both sides without the use of a key or special knowledge or effort.

70.16 **Exceptions:**

70.17 1. Stairway discharge doors shall be openable from the egress side and  
70.18 shall only be locked from the opposite side.

70.19 2. This section shall not apply to doors arranged in accordance with  
70.20 Section 403.5.3 of the International Building Code.

70.21 3. In stairways serving not more than four stories, doors are permitted  
70.22 to be locked from the side opposite the egress side. The exit door is  
70.23 permitted to be locked but shall be openable from the egress side.

70.24 4. Stairway exit doors shall be openable from the egress side and  
70.25 shall only be locked from the opposite side in Group B, F, M, and S  
70.26 occupancies where the only interior access to the tenant space is from a  
70.27 single exit stair where permitted in Section 1021.2.

71.1 5. Stairway exit doors shall be openable from the egress side and shall  
 71.2 only be locked from the opposite side in Group R-2 occupancies where  
 71.3 the only interior access to the dwelling unit is from a single exit stair  
 71.4 where permitted in Section 1021.2.

71.5 Subp. 3. **IFC section 1008.1.** IFC section 1008.1 is amended by adding sections to  
 71.6 read:

71.7 ~~1008.1.10~~ **1008.1.11 Special locking detention arrangements.** Special locking  
 71.8 detention arrangements meeting the requirements of Sections ~~1008.1.10~~ 1008.1.11  
 71.9 through ~~1008.1.10.5~~ 1008.1.11.4 are permitted for rooms, other than cells, where the  
 71.10 occupants are being restrained for safety or security reasons. The use of Sections  
 71.11 ~~1008.1.10~~ 1008.1.11 through ~~1008.1.10.5~~ 1008.1.11.4 may be revoked by the fire  
 71.12 chief or building fire code official for due cause.

71.13 ~~1008.1.10.1~~ **1008.1.11.1 Locking hardware.** Locking devices shall release  
 71.14 upon any of the following conditions:

- 71.15 1. Activation of the automatic sprinkler system.
- 71.16 2. Activation of any automatic fire detection device.
- 71.17 3. Activation of an automatic fire alarm system.
- 71.18 4. Loss of electrical power to the locking device or the fire alarm system.
- 71.19 5. Activation of the fire alarm trouble signal.
- 71.20 6. Operation of a manual switch located in an approved location.

71.21 All locking devices shall be designed to fail in the open position. Following the  
 71.22 release of the locking devices for any of the conditions specified above in Items 1 through  
 71.23 5, 6, relocking the devices shall be by manual means only at the door.

71.24 ~~1008.1.10.2~~ **1008.1.11.2 Fire-extinguishing system.** When special locking  
 71.25 arrangements are used, the room or area being secured must be protected with  
 71.26 quick-response sprinklers.

72.1 ~~1008.1.10.3~~ 1008.1.11.3 **Fire alarm and detection.** When special locking  
72.2 arrangements are used, the room or area and spaces between the room or area  
72.3 and an outside exit door shall be protected with automatic smoke detection  
72.4 connected to the building's fire alarm system. If the walls of the room or area  
72.5 do not extend to the ceiling, automatic smoke detection can be provided in the  
72.6 adjacent room or area, provided that there are no substantial obstructions to  
72.7 delay activation of the smoke detection.

72.8 ~~1008.1.10.4 Construction~~ 1008.1.11.4 **Door swing.** ~~Rooms or areas containing~~  
72.9 ~~these special locking arrangements shall be constructed of noncombustible~~  
72.10 ~~materials having a minimum of one-hour fire-resistive construction. Doors~~  
72.11 ~~separating the room~~ detention rooms ~~from other spaces must swing with in the~~  
72.12 direction of egress travel from the detention room and have a fire-protection  
72.13 rating of not less than 20 minutes. Doors need not be self-closing. The interior  
72.14 finish of the wall and ceiling surfaces must not exceed a Class III (or Class C)  
72.15 flame spread rating.

72.16 ~~1008.1.10.5 Testing of devices.~~ ~~Special locking arrangements shall be tested~~  
72.17 ~~monthly to ensure that they will release under the conditions set forth in Section~~  
72.18 ~~1008.1.10.1, Items 1-5. Locking arrangements that are found not to comply with the~~  
72.19 ~~requirements of Sections 1008.1.10.1 through 1008.1.10.5 shall not be used.~~

72.20 ~~1008.1.11 Special egress control devices.~~ ~~Where the clinical needs of the patients~~  
72.21 ~~require specialized security measures for their safety, door-locking arrangements are~~  
72.22 ~~permitted in Group I-1 occupancies (this includes use groups as described in Group I-1~~  
72.23 ~~occupancies that are identified as either Group R-3 or Group R-4 occupancies because of~~  
72.24 ~~occupant load) and Group I-2 occupancies, provided that:~~

- 72.25 1. ~~Keys or devices that function like keys are carried by staff at all times;~~
- 72.26 2. ~~In at least one egress path, not more than one such arrangement is located;~~

- 73.1 ~~3. The building or fire area is protected by an approved automatic sprinkler system~~  
73.2 ~~in accordance with Section 903.3.1.1 and an approved fire alarm system having~~  
73.3 ~~smoke detection installed throughout the exit corridor system and areas open to the~~  
73.4 ~~exit corridor;~~
- 73.5 ~~4. Locking devices automatically unlock upon activation of any of the following:~~
- 73.6 ~~a. Automatic sprinkler system;~~
- 73.7 ~~b. Automatic smoke detection system;~~
- 73.8 ~~c. Automatic fire alarm system; or~~
- 73.9 ~~d. Loss of electrical power;~~
- 73.10 ~~5. Locking devices can be remotely unlocked from an approved location within~~  
73.11 ~~the secured area;~~
- 73.12 ~~6. There is no public assembly space within the secured area;~~
- 73.13 ~~7. 24-hour patient supervision is provided within the secured area;~~
- 73.14 ~~8. Relocking of the locking device is by manual means from an approved location~~  
73.15 ~~within the secured area;~~
- 73.16 ~~9. Locking devices are designed to fail in the open position.~~
- 73.17 ~~**1008.1.12 Exit stair door locking.** Doors are not to be locked on the stairwell side~~  
73.18 ~~unless meeting one of the following criteria:~~
- 73.19 ~~1. Delayed egress locks meeting Section 1008.1.8.6.~~
- 73.20 ~~2. Locking devices meeting the requirements of Section 403.12 of the International~~  
73.21 ~~Building Code.~~
- 73.22 ~~3. Non-high-rise buildings that are more than four stories meeting NFPA 101 Section~~  
73.23 ~~7.2.1.5.2.~~
- 73.24 **7511.1009 SECTION 1009, STAIRWAYS.**
- 73.25 Subpart 1. IFC section 1009.13. IFC section 1009.5.2 is amended to read:

74.1 ~~1009.5.2 Outdoor conditions. Outdoor ramps and associated landings and approaches~~  
74.2 ~~shall be designed so that water will not accumulate on walking surfaces. IFC section~~  
74.3 ~~1009.13 is amended to read:~~

74.4 1009.13 Alternating tread devices. Alternating tread devices are limited to an element  
74.5 of a means of egress in buildings of Groups F, H, and S from a mezzanine not more  
74.6 than 250 square feet (23 m<sup>2</sup>) in area and which serves not more than five occupants; in  
74.7 buildings of Groups I-3 from a guard tower, observation station, or control room not  
74.8 more than 250 square feet (23 m<sup>2</sup>) in area and for access to unoccupied roofs. Access to  
74.9 mechanical equipment or appliances on a roof shall be in accordance with IBC section  
74.10 1209.3.1 and the Minnesota Mechanical Code.  
74.11 (IFC sections 1009.13.1, 1009.13.2, and the exception still apply.)

74.12 Subp. 2. IFC section 1009.14. IFC section 1009.14 is amended to read:

74.13 1009.14 Ships ladders. Ships ladders constructed in accordance with Minnesota Rules,  
74.14 part 1305.1209, shall be permitted to be used as a means of egress component at the  
74.15 following locations:

74.16 1. Ships ladders are permitted to be used in Group I-3 occupancies for means of  
74.17 egress at control rooms or elevated facility observation stations not more than 250  
74.18 square feet (23 m<sup>2</sup>) in floor area.

74.19 2. Ships ladders are permitted to be used as a component for means of egress at  
74.20 recessed or elevated floors or platforms when the area served has an occupant load of  
74.21 five or fewer, and the space meets all of the following criteria:

74.22 2.1 Access to the area served is limited to building facilities staff, maintenance  
74.23 staff, employees, or other authorized personnel;

74.24 2.2 Required access to the area served is limited and periodic;

74.25 2.3 The area served is used for building maintenance service functions, or for  
74.26 equipment access or monitoring;

75.1 2.4 The area served is not required to have a second means of egress by other  
75.2 provisions of this code; and

75.3 2.5 The area served is not classified as a Group H occupancy.

75.4 3. Ships ladders are permitted to be used for access to unoccupied spaces in  
75.5 accordance with Minnesota Rules, part 1305.1209.

75.6 **7511.1013 SECTION 1013, GUARDS.**

75.7 Subpart 1. IFC section 1013.2. IFC section 1013.2 is amended by adding an  
75.8 exception as follows:

75.9 **Exception:**

75.10 8. In accordance with the Minnesota Bleacher Safety Act, Minnesota Statutes,  
75.11 section 326B.112, guards are not required on bleachers 55 inches or less in height.

75.12 Subp. 2. IFC section 1013.3. IFC section 1013.3 is amended by modifying  
75.13 exception 4 to read as follows:

75.14 4. The guard height in assembly seating areas shall be in accordance with section  
75.15 1028.14 and the Minnesota Bleacher Safety Act, Minnesota Statutes, section  
75.16 326B.112.

75.17 Subp. 3. IFC section 1013.8. IFC section 1013.8 is amended to read:

75.18 1013.8 Window sills. In occupancy groups R-1, R-2, R-3, one- and two-family,  
75.19 multiple-family dwellings, and townhouses, where the lowest part of the opening of  
75.20 an operable window is located more than 72 inches (1,829 mm) above the finished  
75.21 grade or other surface below, the lowest part of the window opening shall be at a  
75.22 height not less than 36 inches (914 mm) above the finished floor surface of the room  
75.23 in which the window is located. Operable sections of windows shall not permit  
75.24 openings that allow passage of a 4-inch-diameter (102 mm) sphere where such  
75.25 openings are located within 36 inches (914 mm) of the finished floor.

75.26 **Exceptions:**

- 76.1 1. Operable windows where the lowest part of the opening is located more than  
76.2 75 feet (22,860 mm) above the finished grade or other surface below and that are  
76.3 provided with window fall-prevention devices that comply with ASTM F 2006.  
76.4 2. Windows whose openings will not allow a 4-inch-diameter (102 mm) sphere  
76.5 to pass through the opening when the window is in its largest opened position.  
76.6 3. Openings that are provided with window fall-prevention devices that comply  
76.7 with ASTM F 2090.  
76.8 4. Windows that are provided with window opening control devices that comply  
76.9 with section 1013.8.1.  
76.10 5. Replacement windows for occupancy groups R-1, R-2, R-3, one- and  
76.11 two-family, multifamily dwellings, and townhouses located on or below the  
76.12 third story above grade plane.

76.13 **1013.8.1 Window opening control devices.** Window opening control devices  
76.14 shall comply with ASTM F 2090. The window opening control device, after  
76.15 operation to release the control device allowing the window to fully open, shall  
76.16 not reduce the minimum net clear opening area of the window unit to less than  
76.17 the area required by section 1029.2.

76.18 **7511.1014 SECTION 1014, EXIT ACCESS. [RENUMBERED TO PART 7511.1017]**

76.19 **7511.1015 SECTION 1015, EXIT AND EXIT ACCESS DOORWAYS.**

76.20 IFC section 1015.1 is amended to read:

76.21 **1015.1 Exit or exit access doorways required from spaces.** Two exits or exit access  
76.22 doorways from any space shall be provided where one of the following conditions exists:

76.23 1. The occupant load of the space exceeds the values in Table 1015.1.

76.24 **Exception Exceptions:**

76.25 a. In Groups R-2 and R-3 occupancies, one means of egress is permitted  
76.26 within and from individual dwelling units with a maximum occupant load of

77.1 ~~16 20~~ if the dwelling unit is equipped throughout with an automatic sprinkler  
77.2 system in accordance with Section 903.3.1.1 or 903.3.1.2.

77.3 b. Care suites in Group I-2 occupancies complying with section 407.4.3 of  
77.4 chapter 1305, the Minnesota Building Code.

77.5 2. The common path of egress travel exceeds the limitations of Section 1014.3.

77.6 3. Where required by Sections 1015.3, 1015.4, ~~and~~ 1015.5, and 1015.6.

77.7 4. When located in buildings used for educational purposes, laboratories and prep  
77.8 rooms that exceed 500 square feet in area and contain hazardous materials.

77.9 ~~Exception: Group I-2 occupancies shall comply with Section 1014.2.2.~~

77.10 Where a building contains mixed occupancies, each individual occupancy shall comply  
77.11 with the applicable requirements for that occupancy. Where applicable, cumulative  
77.12 occupant loads from adjacent occupancies shall be considered in accordance with the  
77.13 provisions of Section 1004.1.

77.14 **7511.1017 SECTION 1017, AISLES. [RENUMBERED FROM PART 7511.1014]**

77.15 IFC section ~~1014~~ 1017 and all subsections are deleted and replaced with the following:

77.16 ~~1014.4~~ **1017.1 Aisles and aisle accessways.** Aisles and aisle accessways serving as a  
77.17 portion of the exit access in the means of egress system shall comply with the requirements  
77.18 of this section. Aisles and aisle accessways shall be provided from all occupied portions  
77.19 of the exit access. Aisles and aisle accessways serving assembly areas, other than seating  
77.20 at tables, shall comply with Section ~~1024~~ 1028. Aisles and aisle accessways serving  
77.21 reviewing stands, grandstands, and bleachers shall comply with Section ~~1024~~ 1028.

77.22 ~~1014.4.1~~ **1017.2 Width determination.** Where tables or counters are served by fixed  
77.23 seats, the width of the aisle or aisle accessway shall be measured from the back of the  
77.24 seat. Where seating is located at a table or counter and is adjacent to an aisle or aisle  
77.25 accessway, the measurement of required clear width of the aisle or aisle accessway shall  
77.26 be made to a line 19 inches (483 mm) away from and parallel to the edge of the table or  
77.27 counter. The 19-inch (483 mm) distance shall be measured perpendicular to the side of

78.1 the table or counter. In the case of other side boundaries for aisle or aisle accessways, the  
78.2 clear width shall be measured to walls, tread edges, or other obstructions. The required  
78.3 width of aisles and aisle accessways shall be unobstructed.

78.4 **Exception:** Doors, when fully opened, and handrails shall not reduce the required  
78.5 width by more than 7 inches (178 mm). Doors in any position shall not reduce the  
78.6 required width by more than one-half. Other nonstructural projections such as trim  
78.7 and similar decorative features are permitted to project into the required width 1.5  
78.8 inches (38 mm) from each side.

78.9 ~~1014.4.1.1~~ **1017.2.1 Minimum aisle accessway width.** Aisle accessways shall  
78.10 provide a minimum 12 inches (305 mm) of width plus 0.5 inch (12.7 mm) of width  
78.11 for each additional 1 foot (305 mm), or fraction thereof, beyond 12 feet (3,658 mm)  
78.12 of aisle accessway length.

78.13 **Exception:** Portions of an aisle accessway having a length not exceeding 6 feet  
78.14 and used by a total of not more than four persons.

78.15 ~~1014.4.1.2~~ **1017.2.2 Minimum aisle width.** The minimum clear width shall be  
78.16 determined by Section 1005.1 for the occupant load served, but shall not be less  
78.17 than 36 inches (914 mm).

78.18 **Exception:** Nonpublic aisles serving less fewer than 50 people need not exceed  
78.19 28 inches (711 mm) in width.

78.20 **1017.3 Length.**

78.21 ~~1014.4.2~~ **1017.3.1 Aisle accessway length.** The length of travel along the aisle  
78.22 accessway shall not exceed 30 feet (9,144 mm) to an aisle or exit access doorway.

78.23 **1017.3.2 Aisle.** The length of travel along an aisle or combination aisle accessway  
78.24 and aisle to a point where a person has a choice of two or more paths of egress travel  
78.25 to separate exits or exit access doorways shall not exceed that permitted by Section  
78.26 1014.3 for common path of egress travel.

79.1 **7511.1018 SECTION 1018, CORRIDORS.**

79.2 **Subpart 1. IFC Table 1018.1.** IFC Table 1018.1 is amended as follows:

79.3 **TABLE 1018.1**

79.4 **CORRIDOR FIRE-RESISTANCE RATING**

79.5 **REQUIRED FIRE-RESISTANCE RATING**

79.6 (hours)

79.7 **OCCUPANT**  
 79.8 **LOAD SERVED**  
 79.9 **BY CORRIDOR**

**With sprinkler**  
**system<sup>c</sup>**

**Without sprinkler system**

79.10	<u>H-1, H-2, H-3</u>	<u>All</u>	<u>Not permitted</u>	<u>1</u>
79.11	<u>H-4, H-5</u>	<u>Greater than 30</u>	<u>Not permitted</u>	<u>1</u>
79.12	<u>A, B, E, F, M, S,</u>			
79.13	<u>U</u>	<u>Greater than 30</u>	<u>1</u>	<u>0</u>
79.14	<u>R</u>	<u>Greater than 10</u>	<u>1</u>	<u>0.5</u>
79.15	<u>I-2<sup>a</sup>, I-4</u>	<u>All</u>	<u>Not permitted</u>	<u>0</u>
79.16	<u>I-1, I-3</u>	<u>All</u>	<u>Not permitted</u>	<u>1<sup>b</sup></u>

79.17 **a. For requirements for occupancies in Group I-2, see IBC sections 407.2 and 407.3.**

79.18 **b. For a reduction in the fire-resistance rating for occupancies in Group I-3, see IBC**  
 79.19 **section 408.8.**

79.20 **c. Buildings equipped throughout with an automatic sprinkler system in accordance with**  
 79.21 **section 903.3.1.1 or 903.3.1.2, where allowed.**

79.22 **Subp. 2. IFC section 1018.6.** IFC section 1018.6 is amended by modifying the  
 79.23 **exceptions to read as follows:**

79.24 **Exceptions:**

79.25 **1. Foyers, lobbies, or reception rooms constructed as required for corridors shall**  
 79.26 **not be construed as intervening rooms if the aggregate area of these spaces does**  
 79.27 **not exceed 1,000 square feet per floor.**

80.1 2. Foyers, lobbies, or reception rooms that are more than 1,000 square feet per  
80.2 floor in aggregate area and other rooms or spaces that are constructed as required  
80.3 for corridors shall not be construed as intervening rooms when the rooms or  
80.4 spaces meet the following:

80.5 (a) The spaces are not occupied as dwelling units, sleeping units, incidental  
80.6 uses or hazardous uses.

80.7 (b) The rooms, spaces, or corridors are protected by an automatic smoke  
80.8 detection system that initiates alarm notification devices in all normally  
80.9 occupied rooms or spaces that use the corridor for a means of egress.

80.10 (c) The room or space is arranged so that it does not obstruct access to the  
80.11 required exits.

80.12 (d) Group R occupancies shall be provided with an automatic sprinkler  
80.13 system throughout to allow the use of exception #2.

80.14 **7511.1022 SECTION 1022, INTERIOR EXIT STAIRWAYS AND RAMPS.**

80.15 IFC section 1022.5 is amended to read as follows:

80.16 **1022.5 Penetrations.** Penetrations into and openings through interior exit stairways and  
80.17 ramps are prohibited except for required exit doors, equipment, and ductwork necessary  
80.18 for independent ventilation or pressurization, sprinkler piping, standpipes, electrical  
80.19 raceway for fire department communications systems, and electrical raceway serving the  
80.20 interior exit stairway or ramp and terminating at a steel box not exceeding 16 square  
80.21 inches (0.010 m<sup>2</sup>). Such penetrations shall be protected in accordance with Section 714  
80.22 of the International Building Code. There shall be no penetrations or communicating  
80.23 openings, whether protected or not, between any other interior exit stairways and ramps.

80.24 (The exception is deleted.)

80.25 **7511.1023 SECTION 1023, EXIT PASSAGEWAYS.**

80.26 IFC section 1023.6 is amended to read as follows:

81.1 1023.6 Penetrations. Penetrations into and openings through an exit passageway  
81.2 are prohibited except for required exit doors, equipment, and ductwork necessary for  
81.3 independent pressurization, sprinkler piping, standpipes, electrical raceway for fire  
81.4 department communication systems, and electrical raceway serving the exit passageway  
81.5 and terminating at a steel box not exceeding 16 square inches (0.010 m<sup>2</sup>). Such  
81.6 penetrations shall be protected in accordance with section 714 or the International  
81.7 Building Code. There shall be no penetrations or communicating openings, whether  
81.8 protected or not, between any other exit passageway.

81.9 7511.1025 .SECTION 1025, ASSEMBLY. [RENUMBERED TO PART 7511.1028,  
81.10 AS SUBPARTS 2, 3, AND 4]

81.11 7511.1028 SECTION 1028, MAINTENANCE OF THE MEANS OF EGRESS.  
81.12 [RENUMBERED TO PART 7511.1030]

81.13 7511.1028 SECTION 1028, ASSEMBLY. [SUBPARTS 2, 3, AND 4 MOVED FROM  
81.14 PART 7511.1025]

81.15 Subpart 1. IFC section 1028.1.1. IFC section 1028.1.1 is amended to read as follows:  
81.16 1028.1.1 Bleachers. Bleachers, grandstands, and folding and telescopic seating, that  
81.17 are not building elements, shall comply with International Code Council (ICC) 300,  
81.18 with the following amendments to ICC 300:

81.19 a. ICC 300 section 404.5 is amended by adding an exception as follows:

81.20 Exception: Aisles shall not be required to be more than 66 inches (1,676  
81.21 mm) in width when the following are satisfied:

81.22 1. the seating area served by such aisles is composed entirely of bleachers;

81.23 2. the row-to-row dimension is 28 inches (71 cm) or less; and

81.24 3. front egress is not limited.

81.25 b. ICC 300 section 405.1 is amended to read as follows:

82.1 405.1 Aisles. The minimum width of aisles shall be in accordance with section 404.5,  
82.2 but not less than that required by this section. An aisle is not required in seating facilities  
82.3 where all of the following conditions exist:

82.4 1. Seats are without backrest.

82.5 2. The rise from row to row does not exceed 6 inches (152 mm) per row.

82.6 Exception: Bleachers 55 inches or less in height.

82.7 3. The row-to-row spacing does not exceed 28 inches (711 mm) unless the seat  
82.8 boards and footboards are at the same elevation.

82.9 4. The number of rows does not exceed 16 rows in height.

82.10 5. The first seat board is not more than 12 inches (305 mm) above the ground  
82.11 floor or a cross aisle.

82.12 Exception: Bleachers 55 inches or less in height.

82.13 6. Seat boards have a continuous flat surface.

82.14 7. Seat boards provide a walking surface with a minimum width of 11 inches  
82.15 (279 mm).

82.16 8. Egress from seating is not restricted by rails, guards, or other obstructions.

82.17 c. ICC 300 section 405.6 is amended by adding an exception as follows:

82.18 3. Aisles serving bleachers in compliance with section 404.5.

82.19 d. ICC 300 section 408.1, item 1, is amended by modifying the exceptions  
82.20 to read as follows:

82.21 Exceptions:

82.22 1. Tiered seating that is located adjacent to a wall and the space between  
82.23 the wall and the tiered seating is less than 4 inches (102 mm) is not  
82.24 required to have a guard.

82.25 2. In accordance with the Minnesota Bleacher Safety Act, Minnesota  
82.26 Statutes, section 326B.112:

83.1 (a) bleachers must have vertical perimeter guards or other approved  
 83.2 guards that address climbability and are designed to prevent  
 83.3 accidents; and

83.4 (b) guards are not required on bleachers 55 inches (1,397 mm)  
 83.5 and less in height.

83.6 e. ICC 300 section 408.3 is amended to read as follows:

83.7 **408.3 Guard design.** Guards and their attachment shall be designed to resist the loads  
 83.8 indicated in section 303. Bleachers must have vertical perimeter guards or other approved  
 83.9 guards that address climbability and are designed to prevent accidents, in accordance with  
 83.10 the Minnesota Bleacher Safety Act, Minnesota Statutes, section 326B.112.

83.11 f. ICC 300 chapter 5 is deleted and replaced with the following:

83.12 All bleachers or bleacher open spaces over 55 inches (1,397 mm) above grade or the  
 83.13 floor below, and all bleacher guardrails, if any part of the guardrail is over 30 inches  
 83.14 (762 mm) above grade or the floor below, must be certified to conform with the safety  
 83.15 requirements contained in Minnesota Statutes, section 326B.112.

83.16 (IFC Section 1028.1.1.1 still applies.)

83.17 ~~Subpart 1~~ Subp. 2. IFC section ~~1025.6.4~~ **1028.6.4**. IFC section ~~1025.6~~ 1028.6  
 83.18 is amended by adding a section to read:

83.19 ~~1025.6.4~~ **1028.6.4** Width of means of egress for bleacher facilities. Aisles for  
 83.20 bleachers shall not be required to be more than 66 inches (167 cm) in width when  
 83.21 calculated in accordance with Section ~~1025.6.1~~ 1028.6.1 or ~~1025.6.3~~ 1028.6.3 when  
 83.22 the following conditions are satisfied:

- 83.23 1. The seating area served by such aisles is composed entirely of bleachers;
- 83.24 2. The row-to-row dimension is 28 inches (71 cm) or less; and
- 83.25 3. Front egress is not limited.

83.26 ~~Subp. 2~~ 3. IFC section ~~1025.9.5~~ **1028.9.5**. IFC section ~~1025.9.5~~ 1028.9.5 is amended  
 83.27 by adding an exception to read:

84.1 5. Aisles serving bleachers in compliance with Section ~~1025.6.4~~ 1028.6.4.

84.2 Subp. ~~3~~ 4. IFC section ~~1025.14~~ 1028.14. IFC section ~~1025.14~~ 1028.14 is amended  
84.3 to read:

84.4 ~~1025.14~~ 1028.14 **Assembly guards.** Assembly guards shall comply with Sections  
84.5 ~~1025.14.1~~ 1028.14.1 through ~~1025.14.3~~ 1028.14.3.

84.6 **Exception:** In accordance with the Minnesota Bleacher Safety Act, Minnesota  
84.7 Statutes, section 326B.112:

- 84.8 1. Guards are not required on bleachers 55 inches and less in height; and  
84.9 2. Bleachers must have vertical perimeter guards or other approved guards that  
84.10 address climbability and are designed to prevent accidents.

84.11 **7511.1029 SECTION 1029, EMERGENCY ESCAPE AND RESCUE.**

84.12 **Subpart 1. IFC section 1029.1.** IFC section 1029.1 is amended to read as follows:

84.13 **1029.1 General.** In addition to the means of egress required by this chapter, provisions  
84.14 shall be made for emergency escape and rescue openings in Group R occupancies.

84.15 Basements and sleeping rooms below the fourth story above grade plane shall have at least  
84.16 one exterior emergency escape and rescue opening in accordance with this section. Where  
84.17 basements contain one or more sleeping rooms, emergency egress and rescue openings  
84.18 shall be required in each sleeping room, but shall not be required in adjoining areas of  
84.19 the basement. Such opening shall open directly into a public way, public alley, or to a  
84.20 yard or court that opens to a public way.

84.21 **Exceptions:**

- 84.22 1. In other than Group R-2 occupancies in accordance with Table 1021.2(1),  
84.23 Stories with One Exit or Access to One Exit for R-2 Occupancies, and Table  
84.24 1021.2(2), Stories with One Exit or Access to One Exit for Other Occupancies,  
84.25 and Group R-3 occupancies as applicable in Section 101.2, buildings equipped

- 85.1 throughout with an approved automatic sprinkler system in accordance with  
85.2 Section 903.3.1.1 or 903.3.1.2.
- 85.3 2. In other than Group R-3 occupancies as applicable in Section 101.2, sleeping  
85.4 rooms provided with a door to a fire-resistance-rated corridor having access to  
85.5 two remote exits in opposite directions.
- 85.6 3. The emergency escape and rescue opening is permitted to open onto a balcony  
85.7 within an atrium in accordance with the requirements of IBC Section 404,  
85.8 provided the balcony provides access to an exit and the dwelling unit or sleeping  
85.9 unit has a means of egress that is not open to the atrium.
- 85.10 4. High-rise buildings in accordance with IBC Section 403.
- 85.11 5. Emergency escape and rescue openings are not required from basements or  
85.12 sleeping rooms which have an exit door or exit access door that opens directly into  
85.13 a public way, or to a yard, court, or exterior exit balcony that opens to a public way.
- 85.14 6. Basements without habitable spaces and having no more than 200 square feet  
85.15 (18.6 m<sup>2</sup>) in area shall not be required to have emergency escape windows.
- 85.16 7. Basements or basement bedrooms in Group R-3 occupancies when the  
85.17 building is protected by an automatic sprinkler system installed in accordance  
85.18 with section 903.3.
- 85.19 8. Basements in Group R-3 occupancies used only to house mechanical  
85.20 equipment and not exceeding total floor area of 200 square feet (18.58 m<sup>2</sup>).
- 85.21 9. Basements or basement bedrooms in Group R-3 occupancies that comply  
85.22 with all of the following conditions:
- 85.23 a. constructed prior to August 1, 2008;  
85.24 b. undergoing an alteration or repair;  
85.25 c. the entire basement area, when all portions of the means of egress to the  
85.26 level of exit discharge, and all areas on the level of exit discharge that are

86.1 open to the means of egress, is protected with an automatic sprinkler system  
86.2 in accordance with section 903.3.

86.3 Subp. 2. IFC section 1029.4. IFC section 1029.4 is amended to read as follows:

86.4 **1029.4 Operational constraints.** Emergency escape and rescue openings shall be  
86.5 operational from the inside of the room without the use of keys or tools. Bars, grilles,  
86.6 grates, or similar devices are permitted to be placed over emergency escape and rescue  
86.7 openings provided the minimum net clear opening size complies with section 1029.2  
86.8 and such devices shall be releasable or removable from the inside without the use of a  
86.9 key, tool, or force greater than that which is required for normal operation of the escape  
86.10 and rescue opening. Where such bars, grilles, grates, or similar devices are installed in  
86.11 existing buildings, smoke alarms shall be installed in accordance with section 907.2.11  
86.12 regardless of the valuation of the alteration.

86.13 **Exception:** Window opening control devices approved and installed in accordance  
86.14 with ASTM F 2090 that do not require the use of keys or tools to operate.

86.15 Subp. 3. IFC section 1029.6. IFC section 1029 is amended by adding the following  
86.16 subsection to read as follows:

86.17 **1029.6 Replacement windows.** Replacement windows installed in buildings regulated by  
86.18 the International Building Code shall be exempt from the minimum size and maximum sill  
86.19 height requirements of Sections 1029.2, 1029.2.1, and 1029.3, if the replacement window  
86.20 is the manufacturer's largest standard size window that will fit within the existing frame  
86.21 or existing rough opening. The replacement window shall be the same operating style  
86.22 as the existing window or a style that provides for an equal or greater window opening  
86.23 area than the existing window.

86.24 **1029.6.1 Licensed facilities.** Windows in rooms used for foster care or day care  
86.25 licensed or registered by the state of Minnesota shall comply with the provisions of  
86.26 Section 1029.6 or all of the following conditions, whichever is more restrictive:

86.27 (a) Minimum of 20 inches in clear opening width

- 87.1 (b) Minimum of 20 inches in clear opening height
- 87.2 (c) Minimum of 648 square inches (4.5 square feet) clear opening
- 87.3 (d) Maximum of 48 inches from the floor to the sill height.

87.4 **7511.1030, SECTION ~~1028~~ 1030, MAINTENANCE OF THE MEANS OF EGRESS.**

87.5 **[MOVED FROM PART 7511.1028]**

87.6 Subpart 1. IFC section ~~1028.2~~ 1030.2. IFC section ~~1028.2~~ 1030.2 is amended to read:

87.7 ~~1028.2~~ 1030.2 Reliability. Required exit accesses, exits or exit discharges shall be

87.8 continuously maintained free from obstructions or impediments to full instant use in

87.9 the case of fire or other emergency. Security devices affecting means of egress shall be

87.10 subject to approval of the fire code official.

87.11 1030.2.1 Security devices and egress locks. Security devices affecting means

87.12 of egress shall be subject to approval of the fire code official. Special locking

87.13 arrangements including access-controlled egress doors, security grills, locks and

87.14 latches, electromagnetically locked egress doors, and delayed egress locks shall

87.15 be installed and maintained as required by this chapter part or IFC Chapter 11,

87.16 as amended.

87.17 1030.2.2 Inspection and testing. Special locking arrangements, including

87.18 access-controlled egress doors, delayed egress locks, and electromagnetically locked

87.19 egress doors shall be tested as follows:

- 87.20 1. The primary release functions shall be tested monthly for operability.
- 87.21 2. Fire alarm and sprinkler system interconnects and other failsafe release
- 87.22 functions shall be tested at least annually for operability.
- 87.23 3. Testing shall be done by individuals who can demonstrate knowledge and
- 87.24 understanding of the operating components of the door being tested.
- 87.25 4. Deficiencies shall be corrected without delay. Written records of inspection
- 87.26 and testing shall be kept and available to the fire code official.

87.27 Subp. 2. IFC section ~~1028.3~~ 1030.3. IFC section ~~1028.3~~ 1030.3 is amended to read:

88.1 ~~1028.3~~ **1030.3 Obstructions.** A means of egress shall be free from obstructions that  
88.2 would prevent its use, including the accumulation of snow and ice. Means of egress shall  
88.3 remain free of any material or matter where its presence would obstruct or render the  
88.4 means of egress hazardous. No combustible storage is allowed in corridors or exit stairs.

88.5 Subp. 3. IFC section ~~1028.6~~ **1030.7.** IFC section ~~1028.6~~ **1030.7** is amended to read:  
88.6 ~~1028.6~~ **1030.7 Emergency escape openings.** Required emergency escape openings shall  
88.7 be maintained in accordance with the following: required emergency escape and rescue  
88.8 openings shall be operational from the inside of the room without the use of keys or tools.  
88.9 Bars, grilles, grates or similar devices are allowed to be placed over emergency escape  
88.10 and rescue openings provided the minimum net clear opening size complies with the this  
88.11 code that was in effect at the time of construction and such devices shall be releasable or  
88.12 removable from the inside without the use of a key, tool or force greater than that which is  
88.13 required for normal operation of the escape and rescue opening.

88.14 Exception: Window fall protection required by the building code.

88.15 **7511.1101 SECTION 1101, GENERAL.**

88.16 IFC section 1101 is amended and sections added to read:

88.17 **1101.1 Scope.** The provisions of IFC Chapter 11, as amended, shall apply to existing  
88.18 buildings constructed prior to the adoption of this code.

88.19 **1101.2 Intent.** The intent of IFC Chapter 11, as amended, is to provide a minimum degree  
88.20 of fire and life safety to persons occupying existing buildings by providing minimum  
88.21 construction requirements.

88.22 **1101.3 Permits.** Permits shall be required as set forth in Sections 105.6 and 105.7.

88.23 **1101.4 Owner notification.** When a building is found to be in noncompliance with IFC  
88.24 Chapter 11, as amended, the code official shall duly notify the owner of the building.  
88.25 Upon receipt of such notice, the owner shall, subject to the following time limits, take  
88.26 necessary actions to comply with the provisions of this chapter.

89.1 **1101.4.1 Construction documents.** Construction documents necessary to comply  
89.2 with IFC Chapter 11, as amended, shall be completed and submitted within a time  
89.3 schedule approved by the code official.

89.4 **1101.4.2 Completion of work.** Work necessary to comply with IFC Chapter 11, as  
89.5 amended, shall be completed within a time schedule approved by the code official.

89.6 **1101.4.3 Extension of time.** The code official is authorized to grant necessary  
89.7 extensions of time when it can be shown that the specified time periods are not  
89.8 physically practical or pose an undue hardship. The granting of an extension of time  
89.9 for compliance shall be based on the showing of good cause and subject to the filing  
89.10 of an acceptable systematic plan of correction with the code official.

89.11 **1101.5 Compliance option.** Existing buildings that meet the requirements of NFPA 101  
89.12 (Life Safety Code) or chapter 1309, the Minnesota Residential Code, or chapter 1305, the  
89.13 Minnesota Building Code, when applicable, shall be deemed as evidence of compliance  
89.14 with IFC Chapter 11, as amended.

89.15 **1101.6 Previous codes.** Protection features in existing buildings that comply with  
89.16 previous editions of the Fire Code or Building Code shall be considered as complying with  
89.17 IFC Chapter 11, as amended, if, in the opinion of the fire code official, such conditions  
89.18 do not constitute a distinct hazard to life.

89.19 **7511.1103 SECTION 1103, FIRE SAFETY REQUIREMENTS FOR EXISTING**  
89.20 **BUILDINGS.**

89.21 Subpart 1. **IFC section 1103.1.** IFC section 1103.1 is amended to read:

89.22 **1103.1 Required construction.** Existing buildings shall comply with the minimum  
89.23 provisions specified in Sections 1103.2 through 1106.3.2.1.

89.24 Table 1103.1 is deleted.

89.25 Subp. 2. **IFC section 1103.2.** IFC section 1103.2 is deleted.

89.26 Subp. 3. **IFC section 1103.3.** IFC section 1103.3 is deleted.

90.1 Subp. 4. IFC section 1103.4. IFC section 1103.4 is amended and sections added to  
 90.2 read:

90.3 1103.4 Vertical openings. Interior vertical shafts, including stairways, elevator hoistways,  
 90.4 and service and utility shafts, that connect two or more stories of a building, shall be  
 90.5 enclosed or protected as specified in Section 1103.4.1 and Table 1103.4.

90.6 1103.4.1 Fire-resistive-rated construction. Where one-hour fire-resistive rated  
 90.7 construction is required by IFC Chapter 11, as amended, it includes equivalent ratings  
 90.8 for openings in that construction. When openings are required to be protected,  
 90.9 opening protectives shall be maintained self-closing or automatic-closing by smoke  
 90.10 detection. Existing fusible-link-type automatic door-closing devices are permitted if  
 90.11 the fusible link rating does not exceed 135° F (57° C).

90.12 TABLE 1103.4

90.13 VERTICAL OPENING PROTECTION REQUIRED

<u>OCCUPANCY CLASSIFI- CATION</u>	<u>CONDITIONS</u>	<u>PROTECTION REQUIRED</u>
<u>Group I</u>	<u>Vertical openings connecting two or more stories</u>	<u>1-hour protection</u>
<u>All, other than Group I</u>	<u>Vertical openings connecting two stories</u>	<u>No protection required<sup>a,b</sup></u>
<u>All, other than Group I</u>	<u>Vertical openings connecting three to five stories</u>	<u>1-hour protection or automatic sprinklers throughout<sup>a,b</sup></u>
<u>All, other than Group I</u>	<u>Vertical openings connecting more than five stories</u>	<u>1-hour protection<sup>a,b</sup></u>
<u>All</u>	<u>Mezzanines open to the floor below</u>	<u>No protection required<sup>a,b</sup></u>
<u>All, other than Group I</u>	<u>Atriums and covered mall buildings</u>	<u>1-hour protection or automatic sprinklers throughout</u>

91.1	<u>All, other than Groups B and M</u>	<u>Escalator openings connecting four or less stories in a sprinklered building.</u>	<u>No protection required</u>
91.2		<u>Openings must be protected by a draft curtain and closely spaced sprinklers in accordance with NFPA 13.</u>	
91.3			
91.4			
91.5			
91.6	<u>Group B and M</u>	<u>Escalator openings in a sprinklered building protected by a draft curtain and closely spaced sprinklers in accordance with NFPA 13.</u>	<u>No protection required</u>
91.7			
91.8			
91.9			

91.10 <sup>a</sup> Vertical opening protection is not required for Group R-3 occupancies.

91.11 <sup>b</sup> Vertical opening protection is not required for open parking garages and ramps.

91.12 Subp. 5. IFC section 1103. IFC subsections 1103.4.2, 1103.4.3, 1103.4.4, 1103.4.5,  
 91.13 1103.4.6, and 1103.4.7 are deleted.

91.14 Subp. 6. IFC section 1103.5. IFC section 1103.5 is amended by adding new  
 91.15 subsections to read:

91.16 **1103.5.3 Basement access or sprinkler protection.** An approved automatic sprinkler  
 91.17 system shall be provided in the following occupancies located in basements when  
 91.18 such areas exceed 2,500 square feet (232.3 m<sup>2</sup>) in size and do not have 20 square feet  
 91.19 (1.86 m<sup>2</sup>) of opening entirely above the adjoining ground level in each 50 lineal feet  
 91.20 (15,240 mm) or fraction thereof of exterior wall on at least one side of the building:

- 91.21 1. Group A occupancies used as commercial drinking and dining establishments.
- 91.22 2. Group A occupancies used as bowling alleys.
- 91.23 3. Group E occupancies used for student occupancy.
- 91.24 4. Group I occupancies.
- 91.25 5. Group R-1 and R-2 occupancies having dwelling units or guest rooms.

91.26 Openings required by this section shall have a minimum dimension of 30 inches  
 91.27 (762 mm).

92.1 If any portion of the basement is located more than 75 feet (22.86 m) from required  
92.2 openings, the basement shall be provided with an approved automatic sprinkler  
92.3 system throughout.

92.4 **1103.5.4 Existing rubbish and linen chutes.** Existing rubbish and linen chutes that  
92.5 connect three or more stories shall be protected with automatic sprinklers installed  
92.6 and maintained in conformance with Section 903.2.11.2.

92.7 Subp. 7. **IFC section 1103.7.** IFC section 1103.7 is deleted and replaced with the  
92.8 following:

92.9 **1103.7 Fire alarm systems.** An approved fire alarm system shall be installed in existing  
92.10 buildings and structures in accordance with Sections 1103.7.1 through 1103.7.7.

92.11 In buildings containing mixed occupancies that are designed as separated uses  
92.12 (see Section 102.11), fire alarm and detection systems need only be installed in those  
92.13 occupancies where required by this section.

92.14 In areas protected by an approved, supervised automatic sprinkler system installed  
92.15 in accordance with Section 903.3.1.1 or 903.3.1.2, automatic fire detectors required by  
92.16 Section 1103.7 need not be provided. Where Section 1103.7 requires smoke detectors,  
92.17 such protection shall be installed.

92.18 **1103.7.1 Group A, general.** A fire alarm system shall be installed in accordance with  
92.19 Sections 1103.7.1 through 1103.7.1.3.1 in existing Group A occupancies having an  
92.20 occupant load of 300 or more.

92.21 **1103.7.1.1 Exemptions for Group A.** A fire alarm system is not required in  
92.22 Group A occupancies having the following conditions:

92.23 1. Assembly areas used solely for worship purposes.

92.24 2. A fire alarm system is not required when an approved automatic  
92.25 fire-sprinkler system is installed throughout the building.

92.26 3. Assembly uses located inside Group E occupancies shall have alarms as  
92.27 required for the Group E occupancy.

93.1 4. A-5 occupancies.

93.2 1103.7.1.2 Initiation. Initiation of the fire alarm system shall be by automatic  
93.3 means. Approved automatic fire detectors shall be installed in laundry rooms,  
93.4 boiler and furnace rooms, mechanical and electrical rooms, shops, kitchens,  
93.5 trash-collection rooms, storage rooms, and similar areas.

93.6 1103.7.1.3 Notification. The required fire alarm system shall activate an audible  
93.7 and visible notification appliance at a constantly attended location within the  
93.8 building for the purposes of initiating emergency action. A presignal feature  
93.9 and positive alarm sequencing in accordance with NFPA 72 are permitted.  
93.10 Occupant notification shall be by means of voice announcements, either live or  
93.11 prerecorded, initiated by the person in the constantly attended location.

93.12 1103.7.1.3.1 Exemption for voice evacuation. Where no constantly  
93.13 attended location exists, an automatic fire alarm system providing a general  
93.14 evacuation signal or an approved emergency voice/alarm communications  
93.15 system is permitted.

93.16 1103.7.2 Group E, general. A fire alarm system shall be installed in accordance with  
93.17 Sections 1103.7.2 through 1103.7.2.4 in existing Group E occupancies having an  
93.18 occupant load of 50 or more.

93.19 1103.7.2.1 Exemption for single classroom. A fire alarm system is not required  
93.20 for a building with a maximum area of 1,000 square feet (93 m<sup>2</sup>) that contains  
93.21 a single classroom and is located no closer than 20 feet (15,240 mm) from  
93.22 another building.

93.23 1103.7.2.2 Initiation. Initiation of the fire alarm system shall be by manual  
93.24 and automatic means. Approved automatic fire detectors shall be provided in  
93.25 laundry rooms, boiler and furnace rooms, mechanical and electrical rooms,  
93.26 shops, laboratories, kitchens, locker rooms, custodial closets, trash-collection  
93.27 rooms, storage rooms, lounges, and similar areas.

94.1 1103.7.2.2.1 Manual activation. The requirements for manual fire alarm  
94.2 pull boxes can be modified as follows:

94.3 1. In buildings equipped throughout by an approved, supervised fire  
94.4 sprinkler system, manual fire alarm boxes are only required in the main  
94.5 office and in a custodial area.

94.6 2. Where all corridors are protected by an approved automatic fire alarm  
94.7 system having smoke detection with alarm verification, manual fire  
94.8 alarm boxes are only required near exits serving shops, chemistry and  
94.9 physics laboratories, boiler rooms, industrial technology and industrial  
94.10 arts rooms, kitchens, custodian's offices, and main offices.

94.11 1103.7.2.3 Travel through adjoining rooms. Where the only means of egress  
94.12 travel from an interior room or rooms having an aggregate occupant load of  
94.13 more than ten occupants is through an adjoining or intervening room, automatic  
94.14 smoke detectors shall be installed throughout the common atmosphere through  
94.15 which the path of egress travel passes.

94.16 1103.7.2.3.1 Sprinkler protection. In buildings that are protected  
94.17 throughout by an approved automatic sprinkler system installed in  
94.18 accordance with Section 903.3.1.1, smoke detectors are not required in  
94.19 intervening or adjoining rooms.

94.20 1103.7.2.4 Notification. Activation of the fire alarm system or automatic  
94.21 sprinkler system shall initiate a general evacuation signal.

94.22 1103.7.3 Group I, general. A fire alarm system shall be installed in accordance with  
94.23 Sections 907.2.6 through 907.2.6.4.2 in existing Group I occupancies.

94.24 1103.7.4 Group R-1, general. A fire alarm system shall be installed in accordance  
94.25 with Sections 1103.7.4 through 1103.7.4.4.1 in existing Group R-1 occupancies where:

94.26 1. Any sleeping unit or dwelling unit is located two or more stories above the  
94.27 story containing the lowest level of exit discharge.

95.1 2. Any sleeping unit or dwelling unit is located more than one story below the  
95.2 highest level of exit discharge of exits serving the dwelling unit.

95.3 3. The building contains 20 or more guest rooms or dwelling units.

95.4 4. The building is used as a congregate living facility, dormitory, convent,  
95.5 monastery, fraternity, sorority, group home, or shelter and has an occupant load  
95.6 of 20 or more.

95.7 1103.7.4.1 Direct exits to exterior. A fire alarm system is not required in  
95.8 buildings that do not have interior corridors serving guest rooms and where  
95.9 each guest room has an exit door opening directly to an exterior exit access  
95.10 that leads directly to the exits.

95.11 1103.7.4.2 Initiation. Initiation of the fire alarm system shall be by automatic  
95.12 means. Approved automatic fire detectors shall be provided in boiler and furnace  
95.13 rooms, shops, laundry rooms, mechanical and electrical rooms, trash-collection  
95.14 rooms, storage rooms, gift shops, locker rooms, and similar areas. Automatic  
95.15 smoke detectors shall be provided in all common areas and interior corridors  
95.16 serving as required means of egress.

95.17 1103.7.4.2.1 Sprinkler protection. System fire and smoke detectors are not  
95.18 required when an approved automatic fire-extinguishing system is installed  
95.19 in accordance with Section 903.3.1.1 or 903.3.1 and a manual fire alarm box  
95.20 is provided at a constantly attended location. When a constantly attended  
95.21 location is not provided the manual fire alarm box shall be provided at the  
95.22 main exit.

95.23 1103.7.4.3 Notification. Activation of the fire alarm system or automatic  
95.24 sprinkler system shall initiate a general evacuation signal.

95.25 1103.7.4.4 Guest room smoke alarms. Guest room smoke alarms required by  
95.26 Section 1103.8 shall not be connected to a fire alarm system.

96.1 1103.7.4.4.1 Annunciation allowed. Connection of such alarms for annunciation  
96.2 is permitted.

96.3 1103.7.5 Group R-2, general. A fire alarm system shall be installed in accordance  
96.4 with Sections 1103.7.5 through 1103.7.5.3 in existing Group R-2 occupancies where:

96.5 1. Any sleeping unit or dwelling unit is located two or more stories above the  
96.6 story containing the lowest level of exit discharge;

96.7 2. Any sleeping unit or dwelling unit is located more than one story below the  
96.8 highest level of exit discharge of exits serving the dwelling unit;

96.9 3. The building contains more than 16 sleeping units or dwelling units; or

96.10 4. The building is used as a congregate living facility, dormitory, convent,  
96.11 monastery, fraternity, sorority, group home, or shelter and has an occupant load  
96.12 of 20 or more.

96.13 1103.7.5.1 Direct exits to exterior. A fire alarm system is not required in  
96.14 buildings that do not have interior corridors serving guest rooms and where  
96.15 each dwelling unit has an exit door opening directly to an exterior exit access  
96.16 that leads directly to the exits.

96.17 1103.7.5.2 Initiation. Initiation of the fire alarm system shall be by automatic  
96.18 means. Approved automatic fire detectors shall be provided in boiler and furnace  
96.19 rooms, shops, laundry rooms, mechanical and electrical rooms, trash-collection  
96.20 rooms, storage rooms, and similar areas. Automatic smoke detectors shall be  
96.21 provided in all common areas and interior corridors serving as required means  
96.22 of egress.

96.23 1103.7.5.2.1 Sprinkler protection. System fire and smoke detectors are not  
96.24 required when an approved automatic fire-extinguishing system is installed  
96.25 throughout the building.

96.26 1103.7.5.3 Notification. Activation of the fire alarm system or automatic  
96.27 sprinkler system shall initiate a general evacuation signal.

97.1 1103.7.5.4 Dwelling unit smoke alarms. Dwelling unit smoke alarms required  
 97.2 by Section 1103.8 shall not be connected to the building fire alarm system.

97.3 1103.7.5.4.1 Annunciation allowed. Connection of such alarms for  
 97.4 annunciation is permitted.

97.5 1103.7.6 Audible alarms. Audible alarm notification appliances shall be provided  
 97.6 and sound a distinctive sound that is not to be used for any purpose other than that of  
 97.7 a fire alarm. The audible alarm notification appliances shall provide a sound pressure  
 97.8 level of 15 decibels (dBA) above the average ambient sound level or 5 dBA above the  
 97.9 maximum sound level having a duration of at least 60 seconds, whichever is greater,  
 97.10 in every occupied space within the building. The maximum sound pressure level  
 97.11 for audible alarm notification appliances shall be 110 dBA at the minimum hearing  
 97.12 distance from the audible appliance. Where the average ambient noise is greater than  
 97.13 105 dBA, visible alarm notification appliances shall be provided in accordance with  
 97.14 NFPA 72 and audible alarm notification appliances shall not be required.

97.15 Subp. 8. IFC section 1103.8. IFC section 1103.8 is amended and sections added to  
 97.16 read:

97.17 1103.8 Single- and multiple-station smoke alarms. Single- and multiple-station smoke  
 97.18 alarms shall be installed in existing Group I-1 and R occupancies in accordance with  
 97.19 Table 1103.8.

97.20 TABLE 1103.8

97.21 SMOKE ALARM REQUIREMENTS

97.22 <u>Condition:</u>	97.23 <u>Location:</u>	<u>Power Supply:</u>	<u>Interconnection</u> <u>Required:</u>
98.1 <u>Existing</u>	<u>In hallways outside</u>	<u>If constructed on or</u>	<u>No</u>
98.2 <u>buildings that</u>	<u>sleeping rooms. In</u>	<u>after 8/1/1989, smoke</u>	<u>interconnection</u>
98.3 <u>do not have any</u>	<u>sleeping rooms. On each</u>	<u>alarms are required to be</u>	<u>is required for</u>
98.4 <u>smoke alarms</u>	<u>level of the building and in</u>	<u>hard-wired (120 volt).</u>	<u>battery-powered</u>
98.5 <u>(same as new).</u>	<u>basements. On ceiling or</u>		<u>alarms.</u>
	<u>wall (less than 12 inches</u>		

98.6

98.7 below ceiling). On center If constructed before  
 98.8 of ceiling above stairways. 8/1/1989, smoke alarms  
can be battery-powered.

---

98.14 Existing In hallways outside Smoke alarms are required No  
 98.15 buildings sleeping rooms. On each to be hard-wired (120 volt). interconnection  
 98.16 (constructed level and in basements. On is required.  
 98.17 on or after ceiling or wall (less than  
 98.18 8/1/1989). 12 inches below ceiling).

---

98.19 Existing In hallways outside Smoke alarms can be No  
 98.20 buildings sleeping rooms. On each battery-powered. interconnection  
 98.21 (constructed level and in basements. On is required.  
 98.22 before ceiling or wall (less than  
 98.23 8/1/1989). 12 inches below ceiling).

---

98.24 Replacement of Smoke alarms must be Power supply must be the Interconnection  
 98.25 smoke alarms installed in same locations same as the smoke alarms must be  
 98.26 in existing as originally installed. being replaced. provided if  
 98.27 buildings. the smoke  
 98.28 alarms being  
 98.29 replaced were  
 98.30 interconnected.

98.31 **1103.8.1 Replacement of smoke alarms.** Single and multiple-station smoke alarms  
 98.32 shall be replaced when:

- 98.33 1. They fail to respond to operability tests.  
 98.34 2. They exceed ten years from the date of manufacture.

98.35 Smoke alarms shall be replaced with smoke alarms having the same type of power  
 98.36 supply.

98.37 Subp. 9. **IFC section 1103.9.** IFC section 1103.9 is deleted and replaced with the  
 98.38 following:

98.39 **1103.9 Protection of existing cooking equipment.** Approved automatic fire-extinguishing  
 98.40 systems shall be provided for the protection of existing commercial-type cooking  
 98.41 equipment that produces grease-laden vapors in accordance with Section 904.

99.1 **7511.1104 SECTION 1104, MEANS OF EGRESS FOR EXISTING BUILDINGS.**

99.2 **Subpart 1. IFC section 1104.1.** IFC section 1104.1 is amended and sections added to  
99.3 **read:**

99.4 **1104.1 General.** Means of egress in existing buildings shall comply with the minimum  
99.5 **egress requirements when specified in Sections 1104.1 through 1104.23.**

99.6 **1104.1.1 Occupant loads.** The number of occupants shall be determined in  
99.7 **accordance with Section 1004.**

99.8 **1104.1.2 Egress width.** The minimum required egress width shall be determined in  
99.9 **accordance with Section 1005.1.**

99.10 **1104.1.3 Ceiling height.** The ceiling height in corridors shall be not less than 78  
99.11 **inches (1,981 mm).**

99.12 **1104.1.4 Special exiting provisions for younger students.** Rooms in Group E  
99.13 **occupancies used by preschool, kindergarten, first- or second-grade pupils, latchkey,**  
99.14 **child care, early childhood family education, teen parent, or similar programs shall be**  
99.15 **located as required by the Building Code.**

99.16 **Subp. 2. IFC section 1104.2.** IFC section 1104.2 is amended to read:

99.17 **1104.2 Elevators, escalators, and moving walks.** Elevators, escalators, and moving walks  
99.18 **can only be used as a component of a required means of egress where previously approved.**

99.19 **Subp. 3. IFC section 1104.3.** IFC section 1104.3 is amended and sections added to  
99.20 **read:**

99.21 **1104.3 Exit signs - general.** Exit signs shall comply with Sections 1104.3.1 through  
99.22 **1104.3.5.**

99.23 **1104.3.1 Where required.** Exit signs shall be provided where two or more exits  
99.24 **are required from a room, area, or story.**

99.25 **1104.3.2 Locations.** Exits and exit access doors shall be marked by an approved exit  
99.26 **sign readily visible from any direction of egress travel.**

100.1 1104.3.3 Main exits. Exit signs need not be provided for main exterior exit doors that  
100.2 are obviously and clearly identifiable as exits.

100.3 1104.3.4 Certain occupancies exempt. Exit signs are not required in housing areas  
100.4 of Group I-3 occupancies; in sleeping rooms or dwelling units in Group R-1, R-2, or  
100.5 R-3 occupancies; and in Group U occupancies.

100.6 1104.3.5 Exit sign illumination. Exit signs shall be internally illuminated, externally  
100.7 illuminated, or self-luminous. The face of an exit sign illuminated from an external  
100.8 source shall have an intensity of not less than 5 foot-candles (54 lux). Internally  
100.9 illuminated signs shall provide equivalent luminance and be listed for the purpose.  
100.10 Approved self-luminous signs that provide evenly illuminated letters shall have a  
100.11 minimum luminance of 0.06 foot-lamberts (0.21 cd/m<sup>2</sup>).

100.12 Subp. 4. IFC section 1104.5. IFC section 1104.5 is amended and sections added to  
100.13 read:

100.14 1104.5 Illumination - general. Normal and emergency illumination of the means of  
100.15 egress shall comply with Sections 1104.5.1 through 1104.5.3.

100.16 1104.5.1 Illumination required. The means of egress shall be illuminated at all  
100.17 times that the building space served by the means of egress is occupied. Natural  
100.18 lighting in the interior rooms or spaces can be used to satisfy this requirement during  
100.19 periods of daylight.

100.20 1104.5.1.1 Group U occupancies. Illumination is not required in Group U  
100.21 occupancies.

100.22 1104.5.1.2 Aisle accessways. Illumination is not required for aisle accessways.

100.23 1104.5.1.3 Dwelling units and sleeping rooms. Illumination is not required for  
100.24 dwelling units and sleeping rooms of Group I, R-1, R-2, and R-3 occupancies.

100.25 1104.5.2 Illumination level. Floors and other walking surfaces within the means of  
100.26 egress shall be illuminated according to Sections 1104.5.2.1 and 1104.5.2.2:

101.1 1104.5.2.1 General. The means of egress illumination level shall not be less than  
101.2 one foot-candle (11 lux) at the floor level.

101.3 1104.5.2.2 Assembly performances. In assembly occupancies, the illumination  
101.4 of the floors of exit access shall be at least 0.2 foot-candle (2.2 lux) during  
101.5 periods of performances or projections involving directed light.

101.6 1104.5.3 Illumination emergency power. The power supply for means of egress  
101.7 illumination shall normally be provided by the premises' electrical supply. In the  
101.8 event of power supply failure, illumination shall be automatically provided from an  
101.9 emergency system for the following occupancies where such occupancies require  
101.10 two or more means of egress:

101.11 1. Group A having 50 or more occupants. Assembly occupancies used  
101.12 exclusively as a place of worship and having an occupant load of less than 300  
101.13 are not required to have emergency illumination.

101.14 2. Group B buildings three or more stories in height, buildings with 100 or more  
101.15 occupants above or below the level of exit discharge, or buildings with 1,000 or  
101.16 more total occupants.

101.17 3. Group E in interior stairs, corridors, windowless areas with student occupancy,  
101.18 shops, and laboratories.

101.19 4. Group F having more than 100 occupants. Buildings used only during daylight  
101.20 hours that are provided with windows for natural light are not required to have  
101.21 emergency illumination.

101.22 5. Group I.

101.23 6. Group M buildings greater than 3,000 square feet (2,879 m<sup>2</sup>) in gross sales  
101.24 area or exceeding one story in height.

101.25 7. Group R-1. Where each guest room has direct access to the outside of the  
101.26 building at grade, emergency illumination is not required.

102.1 8. Group R-2. Where each living unit has direct access to the outside of the  
102.2 building at grade, emergency illumination is not required.

102.3 9. Group R-4. Where each sleeping room has direct access to the outside of the  
102.4 building at ground level, emergency illumination is not required.

102.5 The emergency power system shall provide power for not less than 30 minutes and  
102.6 consist of storage batteries, unit equipment, or an on-site generator. The installation  
102.7 of the emergency power system shall be in accordance with Section 604.

102.8 Subp. 5. IFC section 1104.6. IFC section 1104.6 is amended and sections added to  
102.9 read:

102.10 1104.6 Guards. Guards complying with this section shall be provided at the open sides of  
102.11 means of egress that are more than 30 inches (762 mm) above the floor or grade below.

102.12 Exception: Approved existing open guards.

102.13 1104.6.1 Height of guards. Guards shall form a protective barrier not less than 42  
102.14 inches (1,067 mm) high except for the following existing guards:

102.15 1. Existing guards on the open side of stairs, which are permitted to be not less  
102.16 than 30 inches (760 mm) high.

102.17 2. Existing guards within dwelling units, which are permitted to be not less  
102.18 than 36 inches (910 mm) high.

102.19 3. Existing guards in assembly areas.

102.20 4. Existing guards on stairs and balconies of buildings designated as historic  
102.21 structures, which are permitted to be not less than 24 inches (610 mm) high.

102.22 1104.6.2 Opening limitations. Open guards shall have balusters or ornamental  
102.23 patterns such that a 6-inch (152 mm) diameter sphere cannot pass through any opening  
102.24 up to a height of 34 inches (864 mm) except when one of the following conditions exist:

102.25 1. At elevated walking surfaces for access to and use of electrical, mechanical  
102.26 or plumbing systems or equipment, guards shall have balusters or be of solid

103.1 materials such that a sphere with a diameter of 21 inches (533 mm) cannot pass  
103.2 through any opening.

103.3 2. In occupancies in Group I-3, F, H, or S, the clear distance between intermediate  
103.4 rails measured at right angles to the rails shall not exceed 21 inches (533 mm).

103.5 Subp. 6. IFC section 1104.7. IFC section 1104.7 is amended and sections added to  
103.6 read:

103.7 **1104.7 Doors - general.** Except where modified by Section 1008.1.2, doors shall be of the  
103.8 side-hinged swing type. Doors shall swing in the direction of egress travel when serving  
103.9 an occupant load of 50 or more persons. The minimum width of each door opening shall  
103.10 be sufficient for the occupant load thereof. Locks and latches shall comply with Sections  
103.11 1008.1.9 through 1008.1.11.4.

103.12 **1104.7.1 Size of doors.** Except where modified by this section, each required means  
103.13 of egress door shall comply with the minimum dimensions specified herein. Doors  
103.14 shall provide a clear width of not less than 28 inches (711 mm). Where this section  
103.15 requires a minimum clear width of 28 inches (711 mm) and a door opening includes  
103.16 two door leaves without a mullion, one leaf shall provide a clear opening width of 28  
103.17 inches (711 mm). The maximum width of a swinging door leaf shall be 48 inches  
103.18 (1,219 mm) nominal. The height of doors shall not be less than 80 inches (2,032 mm).

103.19 **1104.7.1.1 Closets.** Door openings to storage closets less than 10 square feet  
103.20 (0.93 m<sup>2</sup>) in area shall not be limited by the minimum width.

103.21 **1104.7.1.2 Revolving doors.** Width of door leaves in revolving doors shall not be  
103.22 limited.

103.23 **1104.7.1.3 Dwelling units.** Door openings within a dwelling unit are permitted  
103.24 to be 78 inches (1,981 mm) in height.

103.25 **1104.7.1.4 Small rooms.** Exit access doors serving a room not larger than 70  
103.26 square feet (6.5 m<sup>2</sup>) are permitted to be 24 inches (610 mm) in door width.

104.1 1104.7.1.5 Health care facilities. The minimum clear width for doors in the  
104.2 means of egress from hospitals; nursing homes; limited care facilities; psychiatric  
104.3 hospital sleeping rooms; and diagnostic and treatment areas, such as x-ray,  
104.4 surgery, or physical therapy, shall be not less than 32 inches (810 mm) wide.  
104.5 Existing 34-inch (865 mm) doors shall be permitted. Existing 28-inch (710 mm)  
104.6 corridor doors in facilities where the fire plans do not require evacuation by bed,  
104.7 gurney, or wheelchair shall be permitted.

104.8 Subp. 7. IFC section 1104.10. IFC section 1104.10 is amended and sections added  
104.9 to read:

104.10 1104.10 Stair dimensions for existing stairs. Existing stairs in buildings shall be  
104.11 permitted to remain if the rise does not exceed 8.25 inches (210 mm) and the run is not  
104.12 less than 9 inches (229 mm). Existing stairs are permitted to have a minimum width of 36  
104.13 inches (914 mm) but not less than the width required for the number of occupants served  
104.14 as determined by Section 1005.1. Existing stairs can be rebuilt.

104.15 1104.10.1 Stair dimensions for replacement stairs. The replacement of an existing  
104.16 stairway in a structure shall not be required to comply with the new stairway  
104.17 requirements of Section 1009 where the existing space and construction will not  
104.18 allow a reduction in pitch or slope.

104.19 Subp. 8. IFC section 1104.12. IFC section 1104.12 is amended to read:

104.20 1104.12 Circular stairways. Existing circular stairs shall be allowed to continue in  
104.21 use provided the minimum depth of tread at the outside of the stair is at least 10 inches  
104.22 (254 mm).

104.23 Subp. 9. IFC section 1104.16. IFC section 1104.16 is amended and sections added  
104.24 to read:

104.25 1104.16 Fire escape stairs. Fire escape stairs shall comply with Sections 1104.16.1  
104.26 through 1104.16.7.

105.1 **1104.16.1 Existing means of egress.** Fire escape stairs shall be permitted in existing  
105.2 buildings but shall not constitute more than 50 percent of the required exit capacity.

105.3 **1104.16.2 Protection of openings.** Openings within 10 feet (3,048 mm) of fire escape  
105.4 stairs shall be protected by fire assemblies having a minimum 3/4-hour fire-resistance  
105.5 rating. In buildings equipped throughout with an approved automatic sprinkler  
105.6 system, opening protection is not required.

105.7 **1104.16.3 Dimensions.** Fire escape stairs shall meet the minimum width, capacity,  
105.8 riser height, and tread depth as specified in Table 1104.16.

105.9 **1104.16.4 Access.** Access to a fire escape from a corridor shall not be through  
105.10 an intervening room. Access to a fire escape stair shall be from a door or window  
105.11 meeting the criteria of Section 1005.3.2. Access to a fire escape stair shall be  
105.12 directly to a balcony, landing, or platform. These shall be no higher than the floor or  
105.13 windowsill level and no lower than 8 inches (203 mm) below the floor level or 18  
105.14 inches (457 mm) below the windowsill.

105.15 **1104.16.5 Materials and strength.** Components of fire escape stairs shall be  
105.16 constructed of noncombustible materials.

105.17 Fire escape stairs and balconies shall support the dead load plus a live load of not less  
105.18 than 100 pounds per square foot (4.78 kN/m<sup>2</sup>). Fire escape stairs and balconies shall  
105.19 be provided with a top and intermediate handrail on each side.

105.20 The fire code official is authorized to require testing or other satisfactory evidence  
105.21 that an existing fire escape stair meets the requirements of this section.

105.22 **1104.16.6 Termination.** The lowest balcony shall not be more than 18 feet (5,486  
105.23 mm) from the ground. Fire escape stairs shall extend to the ground or be provided  
105.24 with counterbalanced stairs reaching the ground. For fire escape stairs serving ten or  
105.25 fewer occupants, an approved fire escape ladder is allowed to serve as the termination  
105.26 for fire escape stairs.

106.1 1104.16.7 Maintenance. Fire escapes shall be kept clear and unobstructed at all  
 106.2 times and shall be maintained in good working order.

106.3 TABLE 1104.16

106.4 DIMENSIONS FOR EXISTING FIRE ESCAPE STAIRS

<u>Feature:</u>	<u>Serving More Than 10 Occupants</u>	<u>Serving 10 or Fewer Occupants</u>
<u>Minimum Width</u>	<u>22 inches</u>	<u>18 inches</u>
<u>Maximum Height of Risers</u>	<u>9 inches</u>	<u>12 inches</u>
<u>Minimum Tread Depth</u>	<u>9 inches</u>	<u>6 inches</u>

106.10 Subp. 10. IFC section 1104.17. IFC section 1104.17 is amended and sections  
 106.11 added to read:

106.12 1104.17 Corridors. Corridors and the openings therein shall provide an effective barrier  
 106.13 to resist the movement of smoke. Corridors, common path of travel, and travel distance  
 106.14 shall comply with Sections 1104.17.1 through 1104.17.4.2. Corridors complying with  
 106.15 Section 1018.1 need not be fire-resistance rated.

106.16 1104.17.1 Construction. Corridors shall be fire-resistance rated in accordance  
 106.17 with this section and Table 1104.17.1. Existing walls surfaced with wood lath and  
 106.18 plaster in good condition or 1/2-inch gypsum wallboard are acceptable for corridor  
 106.19 walls and ceilings. Where Table 1104.17.1 allows a sprinkler system in lieu of  
 106.20 fire-resistance-rated construction, the building shall be protected throughout with an  
 106.21 automatic sprinkler system in accordance with Section 903.3.1.1 or 903.3.1.2.

106.22 1104.17.1.1 Existing places of religious worship. In Group A occupancies used  
 106.23 as places of religious worship, existing corridor walls, ceilings, and opening  
 106.24 protection not in compliance with Section 1104.17.1 may be continued when  
 106.25 such buildings are protected with an approved automatic fire alarm system. The  
 106.26 fire alarm system shall include automatic smoke detection throughout the exit

107.1 system and approved detection in all boiler rooms, furnace rooms, mechanical  
 107.2 rooms, and storage rooms.

107.3 **1104.17.1.2 Existing Group B occupancies.** In office areas of Group B  
 107.4 occupancies not exceeding 10,000 square feet (929 m<sup>2</sup>) in size, existing corridor  
 107.5 walls, ceilings, and opening protection not in compliance with Section 1104.17.1  
 107.6 may be continued when such buildings are protected with an approved automatic  
 107.7 fire alarm system. The fire alarm system shall include automatic smoke detection  
 107.8 throughout the exit system and approved detection in all boiler rooms, furnace  
 107.9 rooms, mechanical rooms, and storage rooms.

107.10 **1104.17.1.3 Existing Group E occupancies.** In Group E occupancies, existing  
 107.11 corridor walls, ceilings, and opening protection not in compliance with Section  
 107.12 1104.17.1 may be continued when such buildings are protected with an approved  
 107.13 automatic fire alarm system that is monitored by a central, proprietary, or remote  
 107.14 station service. The fire alarm system shall include automatic smoke detection  
 107.15 throughout the exit system and approved detection in all rooms and areas other  
 107.16 than classrooms and offices.

107.17 **TABLE 1104.17.1**

107.18 **CORRIDOR FIRE-RESISTANCE RATING**

<u>Occupancy</u>	<u>Occupant Load Served by Corridor</u>	<u>Required Fire-Resistance Rating (hours)</u>	
		<u>Without sprinkler system</u>	<u>With sprinkler system</u>
<u>A, B, E, F, H, M, S, U</u>	<u>Greater than 30</u>	<u>1</u>	<u>0</u>
<u>I</u>	<u>Greater than 10</u>	<u>1 (see Section 1104.17.2.3)</u>	<u>0</u>
<u>R</u>	<u>Greater than 10</u>	<u>1</u>	<u>0</u>

107.27 **1104.17.2 Corridor openings.** Openings into corridors shall comply with Sections  
 107.28 1104.17.2.1 through 1104.17.2.3.

108.1 **1104.17.2.1 Doors.** Doors opening into corridors required by Table 1104.17.1 to  
108.2 be fire-resistance rated shall be protected by 20-minute fire assemblies or solid  
108.3 wood doors not less than 1-3/4 inches (45 mm) thick. Where the existing frame  
108.4 will not accommodate the 1-3/4 inches (45 mm) thick door, a 1-3/8 inches (35  
108.5 mm) thick solid bonded wood core door or equivalent insulated steel door shall be  
108.6 permitted. Doors shall be self-closing or automatic-closing by smoke detection.

108.7 **1104.17.2.2 Other openings.** Openings with fixed wired glass set in steel frames  
108.8 are permitted for corridor walls and ceilings. Transoms, louvers, and openings  
108.9 other than doors from corridors to rooms shall be automatic-closing by smoke  
108.10 detection or shall be covered with a minimum of 3/4-inch (19 mm) gypsum  
108.11 wallboard or equivalent material on the room side.

108.12 **1104.17.2.3 Existing Group I-2 and I-3 occupancies.** Patient room doors  
108.13 in corridors in Group I-2 occupancies and Group I-3 corridor doors need not  
108.14 be fire-resistance rated or self-closing where smoke barriers are provided in  
108.15 accordance with the Building Code or NFPA 101.

108.16 **1104.17.3 Corridor width.** The minimum corridor width shall be in accordance with  
108.17 Sections 1104.17.3.1 through 1104.17.3.2.

108.18 **1104.17.3.1 Minimum width.** The minimum corridor width shall be as  
108.19 determined by the occupant load calculations in Section 1005.3 but not less  
108.20 than 36 inches.

108.21 **1104.17.3.2 Minimum width in mechanical areas.** The minimum corridor  
108.22 width is allowed to be reduced to 24 inches (610 mm) for spaces providing  
108.23 access to electrical, mechanical, or plumbing systems.

108.24 **1104.17.4 Dead ends.** Where more than one exit or exit access doorway is required,  
108.25 the exit access shall be arranged such that dead ends do not exceed the limits specified  
108.26 in Sections 1104.17.4.1 through 1104.17.4.2 and Table 1104.17.4.

109.1 **1104.17.4.1 Wide corridors and dead-end provisions.** A dead-end passageway  
 109.2 or corridor shall not be limited in length where the length of the dead-end  
 109.3 passageway or corridor is less and 2.5 times the least width of the dead-end  
 109.4 passageway or corridor.

**TABLE 1104.17.4****COMMON PATH, DEAD-END, AND TRAVEL DISTANCE LIMITS (by occupancy)**

Occupancy	Common Path Limit		Dead-End Corridor Limit		Travel Distance Limit	
	Unspr (feet)	Spr (feet)	Unspr (feet)	Spr (feet)	Unspr (feet)	Spr (feet)
Group A	<u>20/75<sup>a</sup></u>	<u>20/75<sup>a</sup></u>	<u>20<sup>b</sup></u>	<u>20<sup>b</sup></u>	<u>200</u>	<u>250</u>
Group B	<u>75</u>	<u>100</u>	<u>50</u>	<u>50</u>	<u>200</u>	<u>300</u>
Group E	<u>75</u>	<u>75</u>	<u>50</u>	<u>50</u>	<u>200</u>	<u>250</u>
Groups F-1, S-1 <sup>d</sup>	<u>75</u>	<u>100</u>	<u>50</u>	<u>50</u>	<u>200</u>	<u>250</u>
Groups F-2, S-2 <sup>d</sup>	<u>75</u>	<u>100</u>	<u>50</u>	<u>50</u>	<u>300</u>	<u>400</u>
Group H-1	<u>25</u>	<u>25</u>	<u>0</u>	<u>0</u>	<u>75</u>	<u>75</u>
Group H-2	<u>50</u>	<u>100</u>	<u>0</u>	<u>0</u>	<u>75</u>	<u>100</u>
Group H-3	<u>50</u>	<u>100</u>	<u>20</u>	<u>20</u>	<u>100</u>	<u>150</u>
Group H-4	<u>75</u>	<u>75</u>	<u>20</u>	<u>20</u>	<u>150</u>	<u>175</u>
Group H-5	<u>75</u>	<u>75</u>	<u>20</u>	<u>50</u>	<u>150</u>	<u>200</u>
Group I-1	<u>75</u>	<u>75</u>	<u>20</u>	<u>20</u>	<u>200</u>	<u>250</u>
Group I-2 (Health Care)	<u>N/R</u>	<u>N/R</u>	<u>N/R</u>	<u>N/R</u>	<u>150</u>	<u>200<sup>e</sup></u>
Group I-3	<u>100</u>	<u>100</u>	<u>N/R</u>	<u>N/R</u>	<u>150<sup>e</sup></u>	<u>200<sup>e</sup></u>
Group I-4 (Day Care)	<u>N/R</u>	<u>N/R</u>	<u>20</u>	<u>20</u>	<u>200</u>	<u>250</u>
Group M (Covered Mall)	<u>75</u>	<u>100</u>	<u>50</u>	<u>50</u>	<u>200</u>	<u>400</u>

110.1	<u>Group M</u>	<u>75</u>	<u>100</u>	<u>50</u>	<u>50</u>	<u>200</u>	<u>250</u>
110.2	<u>(Mercantile)</u>						
110.3	<u>Group R-1</u>	<u>75</u>	<u>75</u>	<u>50</u>	<u>50</u>	<u>200</u>	<u>250</u>
110.4	<u>(Hotels)</u>						
110.5	<u>Group R-2</u>	<u>75</u>	<u>75</u>	<u>50</u>	<u>50</u>	<u>200</u>	<u>250</u>
110.6	<u>(Apart-</u>						
110.7	<u>ments)</u>						
110.8	<u>Groups</u>	<u>N/R</u>	<u>N/R</u>	<u>N/R</u>	<u>N/R</u>	<u>N/R</u>	<u>N/R</u>
110.9	<u>R-3, R-4</u>						
110.10	<u>Group U</u>	<u>75</u>	<u>100</u>	<u>20</u>	<u>50</u>	<u>300</u>	<u>400</u>

110.11 "Unspr" means unsprinklered and "Spr" means sprinklered.

110.12 For SI: 1 foot = 304.8 mm.

110.13 a. 20 feet for common path serving more than 50 persons; 75 feet for common path  
 110.14 serving 50 or fewer persons.

110.15 b. See Section 1024.9.5 for dead-end aisles in Group A occupancies.

110.16 c. This dimension is for the total travel distance, assuming incremental portions have fully  
 110.17 utilized their allowable maximums. For travel distance within the room, and from the  
 110.18 room exit access door to the exit, see the appropriate occupancy chapter.

110.19 d. See the International Building Code for special requirements on spacing of doors  
 110.20 in aircraft hangers.

110.21 N/R = No requirements.

110.22 Subp. 11. IFC section 1104.18. IFC section 1104.18 is amended to read:

110.23 **1104.18 Exit access travel distance.** Exits shall be located so that the maximum length  
 110.24 of exit access travel, measured from the most remote point to an approved exterior  
 110.25 exit, vertical exit enclosure, horizontal exit, or exit passageway along the natural and  
 110.26 unobstructed path of egress travel, does not exceed the distances given in Table 1104.17.4.

110.27 Subp. 12. IFC section 1104.19. IFC section 1104.19 is amended to read:

111.1 1104.19 Common path of egress travel. The common path of egress travel shall not  
 111.2 exceed the distances given in Table 1104.17.4.

111.3 Subp. 13. IFC section 1104.20. IFC section 1104.20 is amended to read:

111.4 1104.20 Stairway discharge identification. A stairway in an exit enclosure that continues  
 111.5 below the level of exit discharge shall be arranged and marked to make the direction of  
 111.6 egress to a public way readily identifiable. Stairs that continue one-half story beyond the  
 111.7 level of exit discharge need not be provided with barriers where the exit discharge is  
 111.8 obvious.

111.9 Subp. 14. IFC section 1104.21. IFC section 1104.21 is amended to read:

111.10 1104.21 Exterior stairway protection. Exterior exit stairs shall be separated from the  
 111.11 interior of the building as required in Section 1026.6.

111.12 Subp. 15. IFC section 1104.22. IFC section 1104.22 is amended and sections  
 111.13 added to read:

111.14 1104.22 Minimum aisle width. The minimum clear width of aisles and aisle accessways  
 111.15 shall be in accordance with this section and Table 1104.22.

111.16 1104.22.1 Aisle and aisle accessway width. Aisles and aisle accessway widths shall  
 111.17 be as determined by the occupant load calculations in Section 1005.3, but not less  
 111.18 than the widths shown in Table 1104.22.

111.19 TABLE 1104.22

111.20 MINIMUM AISLE AND AISLE ACCESSWAY WIDTHS

	<u>Condition</u>	<u>Minimum Width (in inches)</u>
111.22 111.23	<u>Aisle accessways serving seating areas having 50 or fewer seats, tables, or desks</u>	<u>24 inches (610 mm)</u>
111.24 111.25	<u>Aisle accessways serving seating areas more than 50 seats, tables, or desks</u>	<u>30 inches (760 mm)</u>
111.26	<u>Aisle accessways serving employee areas only</u>	<u>24 inches (610 mm)</u>
111.27 111.28	<u>Level or ramped aisles having seating on each side and serving 50 or fewer seats</u>	<u>36 inches (914 mm)</u>

112.1	<u>Level or ramped aisles having seating on each side and</u>	<u>42 inches (1,067 mm)</u>
112.2	<u>serving more than 50 seats</u>	
112.3	<u>Level or ramped aisles having seating on one side and</u>	<u>30 inches (760 mm)</u>
112.4	<u>serving 60 or fewer seats</u>	
112.5	<u>Level or ramped aisles having seating on one side and</u>	<u>36 inches (914 mm)</u>
112.6	<u>serving more than 60 seats</u>	
112.7	<u>Aisle stairs having seating on each side and serving 50 or</u>	<u>36 inches (914 mm)</u>
112.8	<u>fewer seats</u>	
112.9	<u>Aisle stairs having seating on each side and serving more</u>	<u>42 inches (1,067 mm)</u>
112.10	<u>than 50 seats</u>	
112.11	<u>Aisle stairs having seating on one side and serving 60 or</u>	<u>30 inches (760 mm)</u>
112.12	<u>fewer seats</u>	
112.13	<u>Aisle stairs having seating on one side and serving more</u>	<u>36 inches (914 mm)</u>
112.14	<u>than 60 seats</u>	
112.15	<u>Aisle stair – distance between seating and aisle handrail or</u>	<u>20 inches (508 mm)</u>
112.16	<u>guard when the aisle is subdivided</u>	

112.17 Subp. 16. IFC section 1104.23. IFC section 1104.23 is amended to read:  
 112.18 1104.23 Stairway floor number signs. Existing stairs shall be marked in accordance  
 112.19 with Section 1022.9.

112.20 Subp. 17. IFC section 1104.24. IFC section 1104.24 is amended and sections  
 112.21 added to read:  
 112.22 1104.24 Number of means of egress or exits. The number of means of egress doors or  
 112.23 exits from a room, area, story, or building shall be in accordance with Sections 1104.24.1  
 112.24 through 1104.24.4 and Table 1104.24.

112.25 Where two or more means of egress doors or exits are required from a room or area,  
 112.26 such doors shall be separated from each other by a distance not less than one-third of the  
 112.27 length of the maximum overall diagonal dimension of the area served.

112.28 1104.24.1 Number based on capacity. Two means of egress doors or exits are  
 112.29 required from rooms, areas, stories, or buildings when the number of occupants  
 112.30 exceeds the values shown in Table 1104.24.

113.1 1104.24.1.1 Dormitories. Dormitory sleeping rooms having an exit doorway  
 113.2 direct to the exterior are not required to have a second exit or exit access doorway  
 113.3 provided that:

- 113.4 a. The room has 16 or fewer occupants;
- 113.5 b. The travel distance from any point in the room to the exit doorway does  
 113.6 not exceed 30 feet;
- 113.7 c. The room is not located more than two stories above grade;
- 113.8 d. The room is not located on a level below grade; and
- 113.9 e. The room is provided with an emergency escape window in accordance  
 113.10 with Sections 1029.2 through 1029.5 and the escape window is separated  
 113.11 from the exit doorway in accordance with Section 1015.2.1.

113.12 1104.24.2 Three egress doors or exits required. Three means of egress doors  
 113.13 or exits are required from rooms, areas, stories, or buildings when the number of  
 113.14 occupants exceeds 501 persons.

113.15 1104.24.3 Four egress doors or exits required. Four means of egress doors or  
 113.16 exits are required from rooms, areas, stories, or buildings when the number of  
 113.17 occupants is 1,001 or more persons.

113.18 1104.24.4 Group E laboratories. Group E science laboratories containing  
 113.19 hazardous materials shall have two exits when exceeding 1,000 square feet (93  
 113.20 m<sup>2</sup>) in size.

113.21 **TABLE 1104.24**

113.22 **TWO EGRESS DOORS OR EXITS REQUIRED**

<u>Occupancy</u>	<u>Number of Occupants</u>
A, B, E, F, M, S, U	50 occupants
H, I, R	10 Occupants
R (dormitories)	16 Occupants (see 1104.23.1.1)

114.1 Subp. 18. IFC section 1104.25. IFC section 1104.25 is amended and sections  
114.2 added to read:  
114.3 1104.25 Escape windows. In Group R and Group I-1 occupancies, escape windows shall  
114.4 be provided, installed, and maintained in rooms used for sleeping below the fourth story.  
114.5 A readily accessible escape window shall be provided from basement levels occupied as a  
114.6 licensed family or group family child care home. Escape windows shall be in accordance  
114.7 with this section.

114.8 1104.25.1 Escape windows not required. Emergency escape windows are not  
114.9 required for the following conditions:

- 114.10 1. If the room has a door that leads directly to the exterior of the building.
- 114.11 2. In dwellings and structures constructed prior to July 1, 1972, provided they  
114.12 are not licensed by Minnesota or used for transient lodging.
- 114.13 3. If the building is protected throughout by an approved, automatic sprinkler  
114.14 system.
- 114.15 4. From rooms of existing buildings having two separate means of escape,  
114.16 provided that the means of escape are independent of each other and they pass  
114.17 through only one adjacent nonlockable room or area.
- 114.18 5. In Group R hotels or motels constructed prior to April 11, 1983.

114.19 1104.25.2 Minimum size and dimensions. Escape window openings shall have a  
114.20 minimum net clear opening area of 4.5 square feet (648 square inches). Opening  
114.21 height and width dimensions shall not be less than 20 inches.

114.22 1104.25.3 Maximum height from floor. The maximum height from the floor to the  
114.23 window sill opening shall not exceed 48 inches.

114.24 1104.25.4 Emergency escape windows under decks and porches. Emergency  
114.25 escape windows are allowed to be installed under decks and porches provided the  
114.26 location of the deck allows the emergency escape window to be fully opened and  
114.27 provides a path not less than 36 inches in height to a yard or court.

115.1 1104.25.5 Window wells. An escape window opening with a finished sill height  
115.2 below the adjacent ground level shall be provided with a window well in accordance  
115.3 with Sections 1104.25.5 through 1104.25.5.2.

115.4 1104.25.5.1 Minimum size. The minimum horizontal area of the window well  
115.5 shall be 9 square feet, with a minimum dimension of 36 inches. The area of the  
115.6 window well shall allow the emergency escape and rescue opening to be fully  
115.7 opened.

115.8 1104.25.5.2 Ladders or steps. Window wells with a vertical depth of more  
115.9 than 44 inches shall be equipped with an approved permanently affixed ladder  
115.10 or steps. Ladders or rungs shall have an inside width of at least 12 inches, shall  
115.11 project at least 3 inches from the wall and shall be spaced not more than 18  
115.12 inches on center vertically for the full height of the window well. The ladder or  
115.13 steps shall not encroach into the required dimensions of the window well by  
115.14 more than 6 inches. The ladder or steps shall not be obstructed by the emergency  
115.15 escape and rescue opening. Ladders or steps required by this section are exempt  
115.16 from the stairway requirements of Section 1009.

115.17 7511.1106 SECTION 1106, SEPARATION OF OCCUPANCIES AND  
115.18 HAZARDOUS AREAS.

115.19 IFC chapter 11 is amended by adding section 1106 to read:

115.20 1106.1 General. Mixed occupancies within the same building and hazardous areas shall  
115.21 be separated in accordance with Sections 1106.2 through 1106.3.2.1.

115.22 1106.2 Occupancy separations. Occupancy separations shall be provided in buildings  
115.23 containing Group I and Group R occupancies as specified in Sections 1106.2.1 through  
115.24 1106.2.3. These separations shall be constructed and maintained in accordance with the  
115.25 Building Code. Existing wood lath and plaster in good condition or 1/2-inch (12.7 mm)  
115.26 gypsum wallboard is acceptable where one-hour occupancy separations are required.

116.1 1106.2.1 Door openings. Where one-hour fire-resistant construction is required,  
116.2 openings shall be protected by listed fire doors, insulated steel doors, 1-3/8-inch thick  
116.3 (35 mm) or 1-3/4-inch thick (45 mm) solid wood doors, or fixed wired glass set in  
116.4 steel frames. Doors shall be self-closing or automatic-closing by smoke detection.

116.5 1106.2.2 Group I-1 and Group I-2 occupancies. Group I-1 and Group I-2  
116.6 occupancies shall be separated from other occupancies as specified in the Building  
116.7 Code.

116.8 1106.2.3 Group I-3 occupancies. Group I-3 occupancies shall be separated from  
116.9 other occupancies as specified in the Building Code.

116.10 1106.2.3.1 Group I-3 compliance options. Occupancy separations need not be  
116.11 provided for Group I-3 occupancies in the following conditions:

- 116.12 1. In buildings that are protected throughout by an approved automatic  
116.13 sprinkler system, one-hour fire-resistance-rated construction is permitted.  
116.14 2. In buildings that are protected throughout by an approved automatic  
116.15 sprinkler system, openings for the passage of materials between the Group  
116.16 I-3 and adjacent occupancies are not required to be fire-resistance rated  
116.17 when such openings are not more than 4 feet (1,219 mm) above the floor  
116.18 and are provided with a metal cover or door.

116.19 1106.2.4 Group R occupancies. Group R occupancies and the exits therefrom  
116.20 shall be separated from Group A, B, M, S, and U occupancies by at least one-hour  
116.21 fire-resistance-rated construction. Group R occupancies shall be separated from all  
116.22 other occupancies as specified in the Building Code.

116.23 1106.2.4.1 Group R compliance options. Occupancy separations need not be  
116.24 provided for Group R occupancies in the following conditions:

- 116.25 1. In buildings that are protected throughout by an approved automatic  
116.26 sprinkler system, one-hour occupancy separations need not be provided.

- 117.1 2. An occupancy separation need not be provided between Group A and  
117.2 Group R occupancies if the building is provided with a fire alarm system  
117.3 having automatic smoke detection throughout the Group A occupancy.
- 117.4 3. Fire-resistance-rated opening protection need not be provided between  
117.5 Group A and Group R occupancies when such openings are designed to  
117.6 resist the passage of smoke and the openings are protected by an approved  
117.7 automatic sprinkler system.
- 117.8 4. An occupancy separation need not be provided where two or more  
117.9 occupancies occur in the same building or structure and are so intermingled  
117.10 that separations are impracticable provided that the exit provisions and  
117.11 protection requirements for the more restrictive occupancy are provided.
- 117.12 5. An occupancy separation need not be provided between a Group R-3  
117.13 occupancy with sleeping accommodations for ten or fewer persons and  
117.14 Group B or Group M occupancies which are accessory if interconnected  
117.15 smoke alarms are provided. At least one smoke alarm shall be located in the  
117.16 Group B or Group M occupancy and additional alarms may be needed in  
117.17 accordance with manufacturer's instructions. Smoke alarms in the sleeping  
117.18 areas shall be located as specified in Section 1103.8 and shall be audible  
117.19 in all sleeping areas.
- 117.20 **1106.3 Incidental use areas.** Incidental use areas shall be separated from the rest of  
117.21 the building in accordance with this section. Incidental use areas are defined as shops,  
117.22 laboratories containing hazardous materials, storage rooms exceeding 100 square feet in  
117.23 size, laundry rooms exceeding 100 square feet in size, and rooms containing boilers or  
117.24 central heating plants where the largest piece of fuel equipment exceeds 400,000 BTU  
117.25 per hour input.
- 117.26 **1106.3.1 Separation required.** Incidental use areas in Groups A, B, E, F, H, I, M,  
117.27 R-1, R-2, and S occupancies shall be separated from the rest of the building by not

118.1 less than a one-hour fire barrier. Existing wood lath and plaster in good condition or  
 118.2 1/2-inch (12.7 mm) gypsum wallboard is acceptable where one-hour fire barriers are  
 118.3 required. Storage rooms need not be separated in Groups F, M, or S occupancies.

118.4 **1106.3.2 Sprinkler protection in lieu of separation.** Incidental use areas in Groups  
 118.5 A, B, E, F, H, M, and S occupancies need not be separated when the incidental use  
 118.6 area is protected with automatic sprinklers.

118.7 **1106.3.2.1 Groups I and R occupancies.** Incidental use areas in Groups I and R  
 118.8 occupancies need not be separated when the incidental use area is protected with  
 118.9 automatic sprinklers and the construction of such areas is capable of resisting the  
 118.10 passage of smoke. Doors to such areas shall be a minimum of one-hour fire-rated,  
 118.11 solid-core wood doors or insulated steel doors. Doors shall be self-closing or  
 118.12 automatic-closing by smoke detection.

118.13 **7511.1408 SECTION 1408, OWNER'S RESPONSIBILITY FOR FIRE**  
 118.14 **PROTECTION. [RENUMBERED TO PART 7511.3308]**

118.15 **7511.2206 SECTION 2206, FLAMMABLE AND COMBUSTIBLE LIQUID**  
 118.16 **MOTOR FUEL-DISPENSING FACILITIES. [RENUMBERED TO PART 7511.2306]**

118.17 **7511.2210 SECTION 2210, MARINE MOTOR FUEL-DISPENSING FACILITIES.**  
 118.18 **[RENUMBERED TO PART 7511.2310]**

118.19 **7511.2306 SECTION 2306, GENERAL FIRE PROTECTION AND LIFE SAFETY**  
 118.20 **FEATURES. [RENUMBERED TO PART 7511.3206]**

118.21 **7511.2306 SECTION 2206 2306, FLAMMABLE AND COMBUSTIBLE LIQUID**  
 118.22 **MOTOR FUEL-DISPENSING FACILITIES. [MOVED FROM PART 7511.2206]**

118.23 Subpart 1. IFC section ~~2206.2.3~~ 2306.2.3. IFC section ~~2206.2.3~~ 2306.2.3 is amended  
 118.24 by adding exceptions to Item 1 to read:

118.25 **Exceptions:**

118.26 1. When approved by the fire chief, other aboveground tanks that comply  
 118.27 with Chapter ~~34~~ 57 are allowed to be used for outside, above-grade

119.1 storage and dispensing of Class I liquids, provided the tanks are located in  
119.2 accordance with Table ~~2206.2.3~~ 2306.2.3.  
119.3 2. Existing nonprotected tanks are designed, fabricated and constructed in  
119.4 accordance with Section ~~3404.2.7~~ 5704.2.7 and not exceeding 6,000 gallons  
119.5 individual capacity and 18,000 gallons aggregate capacity are allowed to be  
119.6 located not less than 30 feet from the nearest dispenser and the nearest side  
119.7 of any public way, property line, building or combustible storage located  
119.8 on the same property.

119.9 Subp. 2. IFC section ~~2206.2.3~~ 2306.2.3. IFC section ~~2206.2.3~~ 2306.2.3 is amended  
119.10 by adding an exception to Item 2 to read:

119.11 **Exception:** 2. Existing nonprotected tanks designed, fabricated and  
119.12 constructed in accordance with Section ~~3404.2.7~~ 5704.2.7 and not exceeding  
119.13 10,000 gallons individual capacity and 30,000 gallons aggregate capacity  
119.14 are allowed to be located not less than 30 feet from the nearest dispenser and  
119.15 the nearest side of any public way, property line, building or combustible  
119.16 storage located on the same property.

119.17 Subp. 3. IFC section ~~2206.2.3~~ 2306.2.3. IFC section ~~2206.2.3~~ 2306.2.3 is amended  
119.18 by adding Items ~~5~~ 6 and ~~6~~ 7 to read:

119.19 ~~5.~~ 6. For operations not open to the public and for resort operations serving  
119.20 registered guests only, which dispense Class I liquids from one tank having a  
119.21 capacity of 560 gallons (2,120 L) or less, having the dispenser located on or  
119.22 adjacent to the tank is permitted. Such tanks shall be located in accordance  
119.23 with Table ~~2206.2.3~~ 2306.2.3.

119.24 ~~6.~~ 7. For operations not open to the public and for resort operations serving  
119.25 registered guests only, which dispense Class II liquids from two tanks  
119.26 having a capacity of up to 1,000 gallons (3,785 L) each, having the dispenser

120.1 located on or adjacent to the tank is permitted. Such tanks shall be located in  
120.2 accordance with Table ~~2206.2.3~~ 2306.2.3.

120.3 Subp. 4. IFC Table ~~2206.2.3~~ 2306.2.3. IFC Table ~~2206.2.3~~ 2306.2.3 is amended by  
120.4 modifying footnote "a" to read:

120.5 a. When approved by the fire chief, dispensing devices are permitted to be  
120.6 installed on top of or adjacent to protected aboveground tanks or tanks in vaults.

120.7 **7511.2307 SECTION 2307, LIQUEFIED PETROLEUM GAS MOTOR**  
120.8 **FUEL-DISPENSING FACILITIES.**

120.9 **IFC section 2307.** IFC section 2307 is deleted and replaced with the following:

120.10 **2307.1 General.** Motor fuel-dispensing facilities for liquefied petroleum gas (LP-gas) fuel  
120.11 shall be constructed and installed in accordance with NFPA 58 and this section.

120.12 **2307.2 Approvals.** Storage vessels and equipment used for the storage or dispensing of  
120.13 LP-gas shall be approved or listed in accordance with Sections 2307.2.1 and 2307.2.2.

120.14 **2307.2.1 Approved equipment.** Containers, pressure relief devices (including  
120.15 pressure relief valves), pressure regulators, and piping for LP-gas shall be approved.

120.16 **2307.2.2 Listed equipment.** Hoses, hose connections, vehicle fuel connections,  
120.17 dispensers, LP-gas pumps, and electrical equipment used for LP-gas shall be listed.

120.18 **2307.3 Dispensing.** Motor fuel-dispensing operations for LP-gas shall comply with  
120.19 Section 2304 and NFPA 58.

120.20 **In addition, the following requirements shall apply:**

120.21 **1. The filling of portable containers is prohibited.**

120.22 **2. The filling of tanks on recreational vehicles other than those used for engine fuel**  
120.23 **systems is prohibited.**

120.24 **3. No smoking or open flame is permitted within 25 feet of any dispenser operations.**

120.25 **2307.4 Vehicle impact protection.** Vehicle impact protection for LP-gas storage  
120.26 containers, pumps, and dispensers shall be provided in accordance with Section 2306.7.3  
120.27 **or 312.**

121.1 2307.5 Self-service fueling of motor vehicles. Self-service LP-gas dispensing systems  
121.2 shall be controlled by key, code, or access card issued to trained persons and shall be  
121.3 limited to the filling of permanently mounted fuel containers on LP-gas powered vehicles.

121.4 2307.6 Operational requirements. Self-service LP-gas dispensing systems shall comply  
121.5 with the operational requirements of Section 2305.

121.6 2307.6.1 Training. The owner of the LP-gas motor fuel-dispensing facility shall  
121.7 provide for the safe operation of the system and the training of users.

121.8 2307.7 Emergency shutoff switch. The LP-gas motor fuel-dispensing system shall be  
121.9 provided with an emergency shutoff distinctly labeled as EMERGENCY LP-GAS FUEL  
121.10 SHUTOFF installed in accordance with Section 2303.2.

121.11 2307.8 Overfilling. LP-gas containers shall not be filled in excess of the fixed outage  
121.12 installed by the manufacturer or the weight stamped on the tank.

121.13 7511.2310 SECTION 2210 2310, MARINE MOTOR FUEL-DISPENSING  
121.14 FACILITIES. [RENUMBERED FROM PART 7511.2210]

121.15 IFC section ~~2210.3.1~~ 2310.3.1 is deleted.

121.16 7511.2402 SECTION 2404, SPRAY FINISHING.

121.17 IFC section 2404.2 is amended to read:

121.18 2404.2 Location of spray-finishing operations. Spray-finishing operations conducted  
121.19 in buildings used for Group A, E, I, or R occupancies shall be located in a spray room  
121.20 protected with an approved automatic sprinkler system installed in accordance with  
121.21 Section 903.3.1.1 and separated vertically and horizontally from other areas in accordance  
121.22 with the International Building Code. In other occupancies, spray-finishing operations  
121.23 shall be conducted in a spray room, spray booth, or spraying space approved for such use.

121.24 Exceptions:

121.25 1. Automobile undercoating spray operations and spray-on automotive lining  
121.26 operations conducted in areas with approved natural or mechanical ventilation shall

122.1 be exempt from the provisions of Section 2404 when approved and where utilizing  
122.2 Class IIIA or IIIB combustible liquids.

122.3 2. In buildings other than Group A, I, or R occupancies, approved limited spraying  
122.4 space in accordance with Section 2404.9.

122.5 3. Resin application areas used for manufacturing of reinforced plastics complying  
122.6 with Section 2409 shall not be required to be located in a spray room, spray booth,  
122.7 or spraying space.

122.8 **7511.2701 SECTION 2701, GENERAL. [RENUMBERED TO PART 7511.5001]**

122.9 **7511.2703 SECTION 2703, GENERAL REQUIREMENTS. [RENUMBERED TO**  
122.10 **PART 7511.5003]**

122.11 Subpart 1. [See repealer.]

122.12 Subp. 2. [Renumbered to part 7511.5003]

122.13 **7511.3006 SECTION 3006, MEDICAL GAS SYSTEMS. [RENUMBERED TO**  
122.14 **PART 7511.5306]**

122.15 **7511.3201 SECTION 3201, GENERAL. [RENUMBERED TO PART 7511.5501]**

122.16 **7511.3206 SECTION ~~2306~~ 3206, GENERAL FIRE PROTECTION AND LIFE**  
122.17 **SAFETY FEATURES. [MOVED FROM PART 7511.2306]**

122.18 IFC section ~~2306.1~~ 3206.1 is amended to read:

122.19 **2306.1 3206.1 General.** Fire-protection and life-safety features for high-piled storage  
122.20 areas shall be in accordance with Section ~~2306~~ 3206. Nationally recognized standards or  
122.21 guidelines, as applicable, are allowed to be used when approved by the fire chief.

122.22 **Exception:** Limited high-piled storage areas in Group M occupancies not exceeding  
122.23 five percent of the total square footage of the building or not exceeding 2,500 square  
122.24 feet (232 m<sup>2</sup>) in size, whichever is less, need not be separated by fire-resistance-rated  
122.25 construction and need not comply with the smoke and heat removal and draft curtain

123.1 requirements of this article when these buildings are protected throughout by an  
 123.2 approved automatic sprinkler system.

123.3 **7511.3301 SECTION 3301, GENERAL. [RENUMBERED TO PART 7511.5601]**

123.4 **7511.3308 SECTION 3308, FIREWORKS DISPLAY. [RENUMBERED TO PART**  
 123.5 **7511.5608]**

123.6 **7511.3308 SECTION ~~1408~~ 3308, OWNER'S RESPONSIBILITY FOR FIRE**  
 123.7 **PROTECTION. [MOVED FROM PART 7511.1408]**

123.8 IFC section ~~1408~~ 3308 is amended by adding a section to read:

123.9 **1408.8 3308.8 Construction barriers.** Where construction, remodeling or demolition is  
 123.10 taking place involving the use of cutting and welding, temporary heating with open flames,  
 123.11 or flammable-liquid-fueled equipment, such areas shall be separated from occupied areas  
 123.12 of a building by materials that will resist the spread of fire and smoke as specified for  
 123.13 draft-stopping materials in the Building Code.

123.14 **7511.3404 SECTION 3404, STORAGE. [RENUMBERED TO PART 7511.5704]**

123.15 **7511.3406 SECTION 3406, SPECIAL OPERATIONS. [RENUMBERED TO PART**  
 123.16 **7511.5706]**

123.17 **7511.4600 CHAPTER 46 - ADULT DAY CARE, RESIDENTIAL HOSPICE**  
 123.18 **FACILITIES, AND SUPERVISED LIVING FACILITIES. [RENUMBERED TO**  
 123.19 **PART 7511.8100]**

123.20 **7511.5001 SECTION ~~2701~~ 5001, GENERAL. [MOVED FROM PART 7511.2701]**

123.21 IFC section ~~2701.1~~ 5001.1 is amended by adding a section to read:

123.22 **2701.1.2 5001.1.2 Medical gases.** The storage, handling, transferring and use of  
 123.23 medical gases intended for inhalation or sedation at hospitals, nursing homes and  
 123.24 similar facilities shall be in accordance with NFPA 99 and the general provisions of  
 123.25 Sections ~~2701, 2703.2.6~~ 5001, 5003.2.6 through ~~2703.2.6.2~~ 5003.2.6.2, and ~~2703.9~~  
 123.26 5003.9 through ~~2703.9.4~~ 5003.9.4. Compressed gases shall also comply with Chapter  
 123.27 ~~30~~ 53. Cryogenic fluids shall also comply with Chapter ~~32~~ 55.

124.1 **7511.5003 SECTION 2703 5003, GENERAL REQUIREMENTS. [MOVED FROM**  
124.2 **PART 7511.2703, SUBPART 2]**

124.3 ~~Subp. 2. Section 2703.8.3.4.~~ IFC section ~~2703.8.3~~ 5003.8.3 is amended by adding a  
124.4 section to read:

124.5 ~~2703.8.3.6~~ 5003.8.3.6 **Hazardous materials above the third floor in**  
124.6 **laboratories in Group B, E or I-2 occupancies.** Control areas containing  
124.7 laboratories located above the third floor in Group B, E or I-2 occupancies may  
124.8 be exempted from the provisions of Sections ~~2703.8.3.1, 2703.8.3.3~~ 5003.8.3.1,  
124.9 5003.8.3.3, and ~~2703.8.3.4~~ 5003.8.3.4 provided the following conditions are met:

- 124.10 1. The buildings containing the laboratories are equipped throughout with  
124.11 automatic sprinkler protection installed in accordance with Section 903.3.1.1.
- 124.12 2. Control areas containing laboratories located above the third floor are  
124.13 separated from each other and other portions of the building by a fire barrier  
124.14 having a fire-resistance rating of not less than two hours.
- 124.15 3. The maximum amount of hazardous materials in storage and use in control  
124.16 areas containing laboratories does not exceed 10 percent of the maximum  
124.17 allowable quantities listed in Tables ~~2703.1.1(1)~~ 5003.1.1(1) and ~~2703.1.1(2)~~  
124.18 5003.1.1(2) with all increases allowed in the footnotes of those tables.
- 124.19 4. The maximum number of control areas containing laboratories shall not  
124.20 exceed 5 per floor.

124.21 **7511.5306 SECTION 3006 5306, MEDICAL GAS SYSTEMS. [MOVED FROM**  
124.22 **PART 7511.3006]**

124.23 IFC section ~~3006.4~~ 5306.4 is amended to read:

124.24 ~~3006.4~~ 5306.4 **Medical gases.** The storage, handling, transferring and use of medical  
124.25 gases in portable cylinders and containers and medical gas systems including, ~~but not~~  
124.26 ~~limited to,~~ distribution piping, supply manifolds, connections, pressure regulators, and

125.1 relief devices and valves, shall comply with NFPA 99 and the general provisions of this  
125.2 IFC Chapter 53, as amended.

125.3 ~~7511.3201~~ 7511.5501 SECTION ~~3201~~ 5501, GENERAL. [MOVED FROM PART  
125.4 7511.3201]

125.5 IFC section ~~3201.1~~ 5501.1 is amended by adding a section to read:

125.6 ~~3201.1.1~~ 5501.1.1 **Medical gases.** The storage, handling, transferring and use of  
125.7 oxidizing cryogenic fluids used as medical gases shall comply with NFPA 99 and the  
125.8 general provisions of this IFC Chapter 55, as amended.

125.9 7511.5601 SECTION ~~3301~~ 5601, GENERAL. [MOVED FROM PART 7511.3301]

125.10 IFC section ~~3301.2~~ 5601.2 and all subsections are deleted.

125.11 7511.5608 SECTION ~~3308~~ 5608, FIREWORKS DISPLAY. [MOVED FROM PART  
125.12 7511.3308]

125.13 ~~Subpart 1. IFC section 3308.1.1.~~ IFC section ~~3308.1~~ 5608.1 is amended by adding a  
125.14 section to read:

125.15 ~~3308.1.1~~ 5608.1.1 **Displays.** Permits are required to conduct a fireworks display.  
125.16 A fireworks display is only permitted when supervised by a pyrotechnic operator  
125.17 certified by the state fire marshal. Unless specifically exempted by the jurisdiction,  
125.18 the sponsor of the proposed fireworks display must submit a written application for  
125.19 permit at least fifteen (15) days in advance of the date of the display. In addition to the  
125.20 information required in Section ~~3308.2~~ 5608.2, the permit application shall include  
125.21 the number, type and size of the fireworks to be discharged. For proximate audience  
125.22 displays, the plans required by Section ~~3308.2~~ 5608.2 shall also show the fallout  
125.23 radius for each pyrotechnic device used during the display. At the time of permit  
125.24 application, the fire chief shall be consulted regarding requirements for standby fire  
125.25 apparatus and personnel.

125.26 **Exception:** Jurisdictions are authorized to not require permits for displays  
125.27 involving the use of smoke pots, flash pots and theatrical flash powder for

126.1 ceremonial, theatrical and musical productions. Such displays must be conducted  
126.2 in accordance with this code.

126.3 ~~Subp. 2. IFC section 3308.11. IFC section 3308.11 is deleted.~~

126.4 **7511.5609 SECTION 5609, TEMPORARY STORAGE OF FIREWORKS.**

126.5 **IFC section 5609.1. IFC section 5609.1 is deleted.**

126.6 **7511.5704 SECTION 3404 5704, STORAGE. [MOVED FROM PART 7511.3404]**

126.7 Subpart 1. ~~IFC section 3404.1.1 5704.1.1. IFC section 401.1 5704.1~~ is amended by  
126.8 adding a section to read:

126.9 **3404.1.1 5704.1.1 Application of sprinkler protection tables.** Tables 3404.3.6.3  
126.10 ~~(4) 5704.3.6.3 (4)~~ through ~~3404.3.6.3 (8) 5704.3.6.3 (8)~~ shall only apply to liquids  
126.11 stored in metal containers and tanks. For liquids stored in nonmetallic containers,  
126.12 nonmetallic portable tanks or rigid nonmetallic intermediate bulk containers, sprinkler  
126.13 protection shall be designed and installed in accordance with criteria based on  
126.14 full-scale fire testing conducted at an approved testing laboratory or based on other  
126.15 nationally recognized fire safety standards approved by the code official.

126.16 Subp. 2. ~~IFC section 3404.2.11.3 5704.2.11.3. IFC section 3404.2.11.3 5704.2.11.3~~  
126.17 is amended by adding sections to read:

126.18 **3404.2.11.3.1 5704.2.11.3.1 Burial depth.** The maximum burial depth for  
126.19 underground storage tanks shall be specified by the tank manufacturer,  
126.20 marked on the tank, and in accordance with NFPA 30.

126.21 **3404.2.11.3.2 5704.2.11.3.2 Minimum depth of cover.** Underground tanks  
126.22 shall be covered with not less than 24 inches (600 mm) of earth, or not less  
126.23 than 12 inches (300 mm) of earth on top of which shall be placed a slab  
126.24 of reinforced concrete not less than 4 inches (100 mm) thick. Where the  
126.25 tanks are subjected to traffic, they shall be protected against damage from  
126.26 vehicles passing over them by at least 36 inches (900 mm) of earth cover,

127.1 or 18 inches (450 mm) of well-tamped earth plus either 6 inches (150 mm)  
127.2 of reinforced concrete or 8 inches (200 mm) of asphaltic concrete. When  
127.3 asphaltic or reinforced concrete paving is used as part of the protection, it  
127.4 shall extend at least 12 inches (300 mm) horizontally beyond the outline  
127.5 of the tank in all directions.

127.6 Subp. 3. IFC section ~~3404.3.1.2~~ 5704.3.1.2. IFC section ~~3404.3.1~~ 5704.3.1 is  
127.7 amended by adding a section to read:

127.8 ~~3404.3.1.2~~ 5704.3.1.2 **Rigid nonmetallic intermediate bulk containers.**

127.9 The design, construction and capacity of rigid nonmetallic intermediate bulk  
127.10 containers for the storage of flammable and combustible liquids shall be in  
127.11 accordance with this section and NFPA 30. When inside buildings, rigid  
127.12 nonmetallic intermediate bulk containers containing flammable or combustible  
127.13 liquids shall be subjected to a standard fire test that demonstrates acceptable  
127.14 inside storage fire performance and shall be listed and labeled in accordance with  
127.15 UL 2368, Standard for Fire Exposure Testing of Intermediate Bulk Containers  
127.16 for Flammable and Combustible Liquids, 2001.

127.17 Subp. 4. IFC section ~~3404.3.3.11~~ 5704.3.3.11. IFC section ~~3404.3.3~~ 5704.3.3 is  
127.18 amended by adding a section to read:

127.19 ~~3404.3.3.11~~ 5704.3.3.11 **Fire-extinguishing systems.** Automatic sprinkler and  
127.20 foam-water systems provided for the protection of container, intermediate bulk  
127.21 container and portable tank storage shall be of the wet pipe, deluge or preaction  
127.22 type. If preaction systems are used, they shall be designed so that water or foam  
127.23 solution discharges immediately from the sprinkler opened by heat from a fire.

128.1 7511.5706 SECTION 3406 5706, SPECIAL OPERATIONS. [MOVED FROM  
 128.2 PART 7511.3406]

128.3 Subpart 1. IFC section ~~3406.5.1.18~~ 5706.5.1.18. IFC section ~~3406.5.1.18~~  
 128.4 5706.5.1.18 is amended by adding an exception to read:

128.5 4. Facilities where all control valves are locked in the closed position or  
 128.6 the power supply to the pumps is locked in the off position in an approved  
 128.7 manner to prevent the dispensing of liquids by unauthorized persons.

128.8 Subp. 2. IFC section ~~3406.5.4~~ 5706.5.4. IFC section ~~3406.5.4~~ 5706.5.4 is amended  
 128.9 to read:

128.10 ~~3406.5.4~~ 5706.5.4 **General.** Class I liquids shall be transferred from a tank vehicle or  
 128.11 tank car only into an approved atmospheric tank or approved portable tank, except  
 128.12 as provided in Sections ~~3406.5.4.1~~ 5706.5.4.1 through ~~3406.5.4.4~~ 5706.5.4.4. Class  
 128.13 II and III-A liquids shall be transferred from a tank vehicle or tank car only into an  
 128.14 approved atmospheric tank, approved container or approved portable tank, except as  
 128.15 provided in Sections ~~3406.5.4.1~~ 5706.5.4.1 through ~~3406.5.4.4~~ 5706.5.4.4.

128.16 Subp. 3. IFC section ~~3406.5.4.1~~ 5706.5.4.1. IFC section ~~3406.5.4.1~~ 5706.5.4.1  
 128.17 is amended to read:

128.18 ~~3406.5.4.1~~ 5706.5.4.1 **Marine craft and special equipment.** Liquids  
 128.19 intended for use as motor fuels are allowed to be transferred from tank  
 128.20 vehicles into the fuel tanks of marine craft and motor vehicles when  
 128.21 approved by the fire chief, and when:

- 128.22 1. The tank vehicle's specific function is that of supplying fuel to motor  
 128.23 vehicles;
- 128.24 2. The operation is not performed where the public has access or where  
 128.25 there is unusual exposure to life or property;
- 128.26 3. The distance between the tank vehicle and vehicle being refueled  
 128.27 does not exceed 50 feet in length; and

129.1 4. All equipment is approved for use with the fuel being transferred.

129.2 **7511.6101 CHAPTER 61, LIQUEFIED PETROLEUM GASES.**

129.3 Chapter 61 is deleted in its entirety and replaced with the following:

129.4 **CHAPTER 61**

129.5 **LIQUEFIED PETROLEUM GASES**

129.6 **SECTION 6101**

129.7 **NFPA STANDARD NO. 58 INCORPORATED**

129.8 **6101.1 Incorporation by reference.** The storage, handling, transportation, and use of  
129.9 liquefied petroleum gas and the installation of all equipment pertinent to systems for such  
129.10 uses shall be designed, constructed, installed, operated, and maintained in accordance with  
129.11 the provisions of the National Fire Protection Association Standard No. 58, Standard for  
129.12 the Storage and Handling of Liquefied Petroleum Gases (Quincy, Massachusetts, 2011).  
129.13 Standard No. 58, as amended by Section 6102, is incorporated by reference, is not subject  
129.14 to frequent change, and is available at the State Law Library, 25 Rev. Dr. Martin Luther  
129.15 King Jr. Blvd., St. Paul, Minnesota 55155.

129.16 **SECTION 6102**

129.17 **AMENDMENTS TO NFPA STANDARD NO. 58**

129.18 **6102.1 Amendments.** NFPA 58 shall apply to the storage, handling, transportation, and  
129.19 use of liquefied petroleum gas and the installation of all equipment pertinent to systems  
129.20 for such uses, except as amended by this section.

129.21 **1. Section 6.4.5.7.** Section 6.4.5.7 of NFPA Standard No. 58 is amended to read:

129.22 **6.4.5.7.** No horizontal separation shall be required between aboveground  
129.23 LP-Gas containers and underground tanks containing flammable or combustible liquids  
129.24 installed in accordance with Chapter 57 of the International Fire Code.

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

129.26 **6.4.5.10** The minimum separation between LP-Gas containers and liquefied  
129.27 hydrogen containers shall be in accordance with Chapter 55 of the International Fire Code.

130.1 3. Table 6.5.3. Footnote "b" of Table 6.5.3 of NFPA Standard No. 58 is amended to  
130.2 read:

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

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

130.6 6.6.7.1. Installation of containers on roofs of buildings shall be prohibited.

130.7 5. Section 6.6.7.2. Section 6.6.7.2 of NFPA Standard No. 58 is deleted.

130.8 6. Section 6.19.11.1. Section 6.19.11.1 of NFPA Standard No. 58 is deleted.

130.9 7. Section 6.22.2.1. Section 6.22.2.1 of NFPA Standard No. 58 is amended to read:

130.10 6.22.2.1 Electrical equipment and wiring shall be of a type specified by and  
130.11 shall be installed in accordance with the Minnesota Electrical Code for ordinary locations  
130.12 except that fixed electrical equipment in classified areas shall comply with Section 6.22.2.2.

130.13 8. Section 6.22.2.2. The first sentence of Section 6.22.2.2 of NFPA Standard No. 58  
130.14 is amended to read:

130.15 6.22.2.2 Fixed electrical equipment and wiring installed within the classified  
130.16 areas specified in Table 6.22.2.2 shall comply with Table 6.22.2.2 and shall be installed in  
130.17 accordance with the Minnesota Electrical Code.

130.18 9. Section 10.2.3. Section 10.2.3 of NFPA Standard No. 58 is amended to read:

130.19 10.2.3 Structure or building heating. Heating shall be by steam or hot water  
130.20 radiation or other heating transfer medium with the heat source located outside the building  
130.21 or structure (see Section 6.20, Ignition Source Control), or by electrical appliances listed for  
130.22 Class I, Group D, Division 2 locations, in accordance with the Minnesota Electrical Code.

130.23 **7511.7900 AMENDMENTS TO APPENDICES OF INTERNATIONAL FIRE**  
130.24 **CODE.**

130.25 Subpart 1. [See repealer.]

130.26 Subp. 2. IFC Appendix H K. The IFC is amended by adding an Appendix H K to  
130.27 read:

131.1 The provisions contained in this appendix are not mandatory unless specifically  
131.2 referenced in the local adopting ordinance.

131.3 **APPENDIX H K**

131.4 **FIRES OR BARBECUES ON BALCONIES OR PATIOS**

131.5 **SECTION 1 - OPEN FLAME AND FUEL STORAGE PROHIBITED**

131.6 **1.1 Open Flame Prohibited.** In any structure containing three or more dwelling units,  
131.7 no person shall kindle, maintain, or cause any fire or open flame on any balcony above  
131.8 ground level, or on any ground floor patio within 15 feet (4572 mm) of the structure.

131.9 **1.2 Fuel Storage Prohibited.** No person shall store or use any fuel, barbecue, torch,  
131.10 or other similar heating or lighting chemical or device in the locations designated in  
131.11 Section 1.1.

131.12 **Exception:** Listed electric or gas-fired barbecue grills that are permanently mounted  
131.13 and wired or plumbed to the building's gas supply or electrical system and that maintain  
131.14 a minimum clearance of 18 inches (457 mm) on all sides, unless listed for lesser  
131.15 clearances, may be installed on balconies and patios when approved by the fire chief.

131.16 Subp. 3. [See repealer.]

131.17 Subp. 4. [See repealer.]

131.18 Subp. 5 IFC Appendix L. The IFC is amended by adding an appendix to read  
131.19 as follows:

131.20 The provisions contained in this appendix are not mandatory unless specifically  
131.21 referenced in the local adopting ordinance.

131.22 **APPENDIX L**

131.23 **EMERGENCY RESPONDER RADIO COVERAGE**

131.24 L101 Emergency responder radio coverage in existing buildings. Existing buildings  
131.25 that do not have approved radio coverage for emergency responders within the building  
131.26 based upon the existing coverage levels of the public safety communication systems

132.1 of the jurisdiction at the exterior of the building, shall be equipped with such coverage  
132.2 according to one of the following:

- 132.3 1. Whenever an existing wired communication system cannot be repaired or is being  
132.4 replaced, or where not approved.  
132.5 2. Within a time frame established by the adopting authority.

132.6 Exception: Where it is determined by the fire code official that the radio  
132.7 coverage system is not needed.

132.8 L102 Emergency responder radio coverage in new buildings. All new buildings shall  
132.9 have approved radio coverage for emergency responders within the building based upon  
132.10 the existing coverage levels of the public safety communication systems of the jurisdiction  
132.11 at the exterior of the building. This section shall not require improvement of the existing  
132.12 public safety communication systems.

132.13 Exceptions:

- 132.14 1. Where approved by the building official and the fire code official, a wired  
132.15 communication system in accordance with Section 907.2.13.2 shall be permitted  
132.16 to be installed or maintained in lieu of an approved radio coverage system.  
132.17 2. Where it is determined by the fire code official that the radio coverage system  
132.18 is not needed.  
132.19 3. In facilities where emergency responder radio coverage is required and such  
132.20 systems, components, or equipment required could have a negative impact on the  
132.21 normal operations of that facility, the fire code official shall have the authority to  
132.22 accept an automatically activated emergency responder radio coverage system.  
132.23 4. Where it is determined to be unreasonably burdensome to implement an  
132.24 approved radio coverage system.

132.25 L103 Permit required. A construction permit for the installation of or modification  
132.26 to emergency responder radio coverage systems and related equipment is required.

133.1 Maintenance performed in accordance with this code is not considered a modification and  
133.2 does not require a permit.

133.3 **L104 Technical requirements.** Systems, components, and equipment required to provide  
133.4 emergency responder radio coverage system shall comply with Sections L104.1 through  
133.5 L104.2.6.

133.6 **L104.1 Radio signal strength.** The building shall be considered to have acceptable  
133.7 emergency responder radio coverage when signal strength measurements in 95  
133.8 percent of all areas on each floor of the building meet the signal strength requirements  
133.9 in Sections L104.1.1 and L104.1.2.

133.10 **L104.1.1 Minimum signal strength into the building.** A minimum signal  
133.11 strength of -95 dBm shall be receivable within the building at a hip-worn device.

133.12 **L104.1.2 Minimum signal strength out of the building.** A minimum signal  
133.13 strength of -95 dBm shall be received by the agency's radio system when  
133.14 transmitted from within the building from a hip-worn device.

133.15 **L104.2 System design.** The emergency responder radio coverage system shall be  
133.16 designed in accordance with Sections L104.2.1 through L104.2.6.

133.17 **L104.2.1 In-building coverage systems allowed.** Buildings and structures  
133.18 which cannot support the required level of radio coverage shall be equipped  
133.19 with a radiating cable system, a distributed antenna system with Federal  
133.20 Communications Commission (FCC)-certified repeaters, bi-directional  
133.21 amplifiers, picocells or their equivalents, or other system approved by the fire  
133.22 code official in order to achieve the required adequate radio coverage.

133.23 **L104.2.2 Technical criteria.** The fire code official shall maintain a document  
133.24 providing the specific technical information and requirements for the emergency  
133.25 responder radio coverage system. This document shall contain the various  
133.26 frequencies required, the location of radio sites, effective radiated power of radio  
133.27 sites, and other supporting technical information.

134.1 **L104.2.3 Secondary power.** Emergency responder radio coverage systems shall  
134.2 be provided with an approved secondary source of power. The secondary power  
134.3 supply shall be capable of operating the emergency responder radio coverage  
134.4 system for a period of at least 24 hours. When primary power is lost, the power  
134.5 supply to the emergency responder radio coverage system shall automatically  
134.6 transfer to the secondary power supply.

134.7 **L104.2.4 In-building coverage system requirements.** If used, in-building  
134.8 coverage systems shall meet the following requirements:

134.9 1. All in-building coverage system components shall be contained in a  
134.10 National Electrical Manufacturer's Association (NEMA) 4-type waterproof  
134.11 cabinet.

134.12 2. Battery systems used for the emergency power source shall be contained  
134.13 in a NEMA 4-type waterproof cabinet.

134.14 3. The in-building coverage system and battery system shall be electrically  
134.15 supervised and monitored by a supervisory service, or when approved by  
134.16 the fire code official, shall sound an audible signal at a constantly attended  
134.17 location.

134.18 4. Equipment shall have FCC certification prior to installation.

134.19 **L104.2.5 Additional frequencies and change of frequencies.** The emergency  
134.20 responder radio coverage system shall be capable of modification or expansion in  
134.21 the event frequency changes are required by the FCC or additional frequencies  
134.22 are made available by the FCC, or public safety entities operating in a given  
134.23 jurisdiction make modifications, changes, or upgrades to their communication  
134.24 system(s) that change the frequencies such systems utilize.

134.25 **L104.2.6 Availability.** The in-building coverage system, in general, shall operate  
134.26 according to its intended specification with "5-9s" availability of 99.999 percent

135.1 of each year; i.e., no critical component of the system shall be out of normal  
135.2 operation for more than 5.26 minutes of each year.

135.3 **L105 Installation requirements.** The installation of the public safety radio coverage  
135.4 system shall be in accordance with Sections L105.1 through L105.5.

135.5 **L105.1 Approval prior to installation.** Amplification systems capable of operating  
135.6 on frequencies licensed to any public safety agency by the FCC shall not be installed  
135.7 without prior coordination and approval of the fire code official.

135.8 **L105.2 Minimum qualifications of personnel.** The minimum qualifications of  
135.9 the system designer and lead installation personnel shall include at least one of the  
135.10 following:

135.11 1. Certification of in-building system training issued by a nationally recognized  
135.12 organization or school.

135.13 2. A certificate issued by the manufacturer of the equipment being installed.

135.14 These qualifications shall not be required where demonstration of adequate skills and  
135.15 experience satisfactory to the fire code official is provided.

135.16 **L105.3 Acceptance test procedure.** When an emergency responder radio coverage  
135.17 system is required, and upon completion of installation, the building owner shall have  
135.18 the radio system tested to ensure that two-way coverage on each floor of the building  
135.19 is a minimum of 95 percent. The test procedure shall be conducted as follows:

135.20 1. Each floor of the building shall be divided into a grid of 20 approximately  
135.21 equal test areas.

135.22 2. The test shall be conducted using a calibrated handheld or hip-worn device  
135.23 of the latest brand and model used by the agency talking through the agency's  
135.24 radio communications system.

135.25 3. Failure of a maximum of two nonadjacent test areas shall not result in failure  
135.26 of the test.

- 136.1 4. In the event that three of the test areas fail the test, in order to be more  
136.2 statistically accurate, the floor shall be permitted to be divided into 40 equal test  
136.3 areas. Failure of a maximum of four nonadjacent test areas shall not result in  
136.4 failure of the test. If the system fails the 40-area test, the system shall be altered  
136.5 to meet the 95 percent coverage requirement.
- 136.6 5. A test location approximately in the center of each test area shall be selected  
136.7 for the test, with the radio enabled to verify two-way communications to and from  
136.8 the outside of the building through the public agency's radio communications  
136.9 system. Once the test location has been selected, that location shall represent the  
136.10 entire test area. Failure in the selected test location shall be considered failure of  
136.11 that test area. Additional test locations shall not be permitted.
- 136.12 6. The gain values of all amplifiers, if applicable, shall be measured and the  
136.13 test measurement results shall be kept on file with the building owner so that  
136.14 the measurements can be verified during annual tests. In the event that the  
136.15 measurement results become lost, the building owner shall be required to rerun  
136.16 the acceptance test to reestablish the gain values.
- 136.17 7. As part of the installation, a spectrum analyzer or other suitable test equipment  
136.18 shall be utilized to ensure spurious oscillations are not being generated by the  
136.19 subject in-building coverage system. This test shall be conducted at time of  
136.20 installation and subsequent annual inspections.
- 136.21 8. A test shall be considered a "failure" when a transmission from the test device  
136.22 within the building fails to deliver intelligible audio or data to the appropriate  
136.23 public safety dispatch center or equivalent as would be expected during normal  
136.24 operation; and/or when a transmission from a public safety dispatch center or  
136.25 equivalent fails to deliver intelligible audio or data to the test device within the  
136.26 building as would be expected during normal operation.

137.1 **L105.4 FCC compliance.** The emergency responder radio coverage system  
137.2 installation and components shall also comply with all applicable federal regulations  
137.3 including FCC 47 CFR Part 90.219.

137.4 **L106 Maintenance.** The emergency responder radio coverage system shall be maintained  
137.5 operational at all times in accordance with Sections L106.1 through L106.4.

137.6 **L106.1 Testing and proof of compliance.** The emergency responder radio coverage  
137.7 system shall be inspected and tested annually or whenever structural changes occur  
137.8 including additions or remodels that could materially change the original field  
137.9 performance tests. Testing shall consist of the following:

- 137.10 1. In-building coverage test as described in Section L105.3.
- 137.11 2. Signal boosters in-building coverage systems shall be tested to ensure that the  
137.12 gain is the same as it was upon initial installation and acceptance.
- 137.13 3. Backup batteries and power supplies shall be tested under load of a period of  
137.14 one hour to verify that they will properly operate during an actual power outage.  
137.15 If, within the one-hour test period, the battery exhibits symptoms of failure,  
137.16 the test shall be extended for additional one hour periods until the integrity of  
137.17 the battery can be determined.
- 137.18 4. All other active components shall be checked to verify operation within the  
137.19 manufacturer's specifications.
- 137.20 5. At the conclusion of the testing, a report, which shall verify compliance with  
137.21 Section L105.3, shall be submitted to the fire code official.

137.22 **L106.2 Additional frequencies.** The building owner shall modify or expand the  
137.23 emergency responder radio coverage system at their expense in the event frequency  
137.24 changes are required by the FCC or additional frequencies are made available by the  
137.25 FCC, or public safety entities operating in a given jurisdiction make modifications,  
137.26 changes, or upgrades to their communication system(s) that change the frequencies

138.1 such systems utilize. Prior approval of a public safety radio coverage system on  
 138.2 previous frequencies does not exempt this section.

138.3 **L106.3 Field testing.** Agency personnel shall have the right to enter onto the  
 138.4 property at any reasonable time to conduct field testing to verify the required level  
 138.5 of radio coverage.

138.6 **L106.4 Planned outages.** Any planned outages of the in-building coverage system,  
 138.7 such as for replacement or upgrade of the system, shall be done with the written  
 138.8 approval of an entity legitimately representing public safety agencies operating within  
 138.9 the jurisdiction, such as a county sheriff.

138.10 **7511.8000 PURPOSE AND SCOPE. [RENUMBERED TO PART 7511.8400]**

138.11 **7511.8010 PRESSURIZED FLAMMABLE GAS. [RENUMBERED TO PART**  
 138.12 **7511.8410]**

138.13 **7511.8020 WARNING SYMBOL REQUIRED. [RENUMBERED TO PART**  
 138.14 **7511.8420]**

138.15 **7511.8030 SYMBOL DESIGN. [RENUMBERED TO PART 7511.8430]**

138.16 **7511.8040 SYMBOL PLACEMENT. [RENUMBERED TO PART 7511.8440]**

138.17 **7511.8100 CHAPTER 81 - ADULT DAY CARE CENTERS, RESIDENTIAL**  
 138.18 **HOSPICE FACILITIES AND SUPERVISED LIVING FACILITIES. [MOVED**  
 138.19 **FROM PART 7511.4600]**

138.20 The IFC is amended by adding Chapter ~~46~~ 81 to read:

138.21 **CHAPTER ~~46~~ 81**

138.22 **ADULT DAY CARE CENTERS, RESIDENTIAL HOSPICE FACILITIES**  
 138.23 **AND SUPERVISED LIVING FACILITIES**

138.24 **SECTION ~~4601~~ 8101**

138.25 **GENERAL**

138.26 **~~4601.1~~ 8101.1 Requirements.** Adult day care centers, residential hospice facilities and  
 138.27 supervised living facilities shall meet the requirements of this chapter.

SECTION ~~4602~~ 8102

## ADULT DAY CARE CENTERS

139.1  
139.2  
139.3 ~~4602.1~~ 8102.1 **Classification of adult day care centers.** Adult day care centers are  
139.4 classified in accordance with the following and must meet the fire safety requirements for  
139.5 the designated occupancy classification.

139.6 ~~4602.1.1~~ 8102.1.1 **Serving only participants capable of self-preservation.**

139.7 Centers serving only participants who are capable of taking appropriate action for  
139.8 self-preservation under emergency conditions shall meet all applicable requirements  
139.9 for Group E occupancies.

139.10 ~~4602.1.2~~ 8102.1.2 **Serving only participants not capable of self-preservation.**

139.11 Centers serving only participants who are not capable of taking appropriate action for  
139.12 self-preservation under emergency conditions shall meet all applicable requirements for  
139.13 Group I-4 occupancies.

139.14 ~~4602.1.3~~ 8102.1.3 **Serving both participants capable and participants not capable**

139.15 **of self-preservation.** Centers serving a population that includes both participants  
139.16 who are capable and participants who are not capable of taking appropriate action for  
139.17 self-preservation under emergency conditions shall meet the occupancy requirements  
139.18 for Group I-4 or Group E occupancies. In addition to the requirements for Group E  
139.19 occupancies, the center shall meet the requirements set forth in Sections ~~4602.1.3.1~~  
139.20 8102.1.3.1 through ~~4602.1.3.4~~ 8102.1.3.4.

139.21 ~~4602.1.3.1~~ 8102.1.3.1 **Population.** Not more than 50 percent of the center's  
139.22 licensed capacity shall be made up of participants who are not capable of taking  
139.23 appropriate action for self-preservation under emergency conditions.

139.24 ~~4602.1.3.2~~ 8102.1.3.2 **Location.** The center must be located on a floor level with  
139.25 all exits directly to grade without any intervening stairs.

139.26 ~~4602.1.3.3~~ 8102.1.3.3 **Fire alarm and detection.** The center shall be protected  
139.27 with a complete automatic fire detection system consisting of automatic smoke detection

140.1 in all corridors and at the top of all stairways and automatic detection in boiler and furnace  
140.2 rooms, kitchens, storage rooms, ~~janitor~~ custodial closets, laundries, and other hazardous  
140.3 areas. In buildings equipped with manual fire alarm systems, the manual fire alarm and  
140.4 automatic detection systems shall be electrically interconnected.

140.5 ~~4602.1.3.4~~ 8102.1.3.4 **Evacuation time.** The center shall demonstrate the ability  
140.6 to evacuate the entire population of the center within three minutes.

#### 140.7 **SECTION ~~4603~~ 8103**

#### 140.8 **RESIDENTIAL HOSPICE FACILITIES**

140.9 ~~4603.1~~ 8103.1 **Classification of residential hospice facilities.** Residential hospice  
140.10 facilities meeting the fire-protection provisions of Chapter ~~22~~ 32 of the National Fire  
140.11 Protection Association Standard No. 101 (Quincy, Massachusetts, ~~1997~~ 2000) for  
140.12 impractical evacuation capabilities shall be classified as Group R-4 occupancies, if serving  
140.13 six to 12 persons, or as Group R-3 occupancies, if serving five or fewer persons. For  
140.14 purposes of this section, Standard No. 101 (~~1997~~ 2000) Chapter ~~22~~ 32 is incorporated by  
140.15 reference, is not subject to frequent change and is available at the State Law Library, 25  
140.16 Rev. Dr. Martin Luther King Jr. Blvd., St. Paul, Minnesota 55155.

#### 140.17 **SECTION ~~460~~ 8104**

#### 140.18 **SUPERVISED LIVING FACILITIES**

140.19 ~~4604.1~~ 8104.1 **Classification of supervised living facilities.** Supervised living facilities  
140.20 are classified in accordance with Chapter 2 and must meet the fire safety requirements for  
140.21 the designated occupancy classification.

140.22 ~~4604.1.1~~ 8104.1.1 **Class A-1 supervised living facilities.** Class A-1 supervised  
140.23 living facilities must meet Group R-3 occupancy requirements.

140.24 ~~4604.1.2~~ 8104.1.2 **Class A-2 supervised living facilities.** Class A-2 supervised  
140.25 living facilities housing not more than 16 persons, excluding staff, must meet Group R-4  
140.26 occupancy requirements. Class A-2 supervised living facilities housing more than 16  
140.27 persons, excluding staff, must meet Group I-1 occupancy requirements.

141.1 ~~4604.1.3~~ 8104.1.3 **Class B-1 supervised living facilities.** Class B-1 supervised  
 141.2 living facilities meeting the fire-protection provisions of Chapter ~~21~~ 32 of the National  
 141.3 Fire Protection Association Standard No. 101 (Quincy, Massachusetts, ~~1985~~ 2000) for  
 141.4 impractical evacuation capabilities shall be classified as Group R-3 occupancies. For the  
 141.5 purposes of Sections ~~4604.1.3~~ 8104.1.3 and ~~4604.1.4~~ 8104.1.4, Standard No. 101 (~~1985~~  
 141.6 2000) Chapter ~~21~~ 32 is incorporated by reference, is not subject to frequent change and  
 141.7 is available at the State Law Library, 25 Rev. Dr. Martin Luther King Jr. Blvd., Saint  
 141.8 Paul, Minnesota 55155.

141.9 ~~4604.1.4~~ 8104.1.4 **Class B-2 supervised living facilities.** Class B-2 supervised  
 141.10 living facilities meeting the fire-protection provisions of Chapter ~~21~~ 32 of the National  
 141.11 Fire Protection Association Standard No. 101 (Quincy, Massachusetts, ~~1985~~ 2000) for  
 141.12 impractical evacuation capabilities shall be classified as Group R-4 occupancies.

141.13 ~~4604.1.5~~ 8104.1.5 **Class B-3 supervised living facilities.** Class B-3 supervised living  
 141.14 facilities must meet Group I-2 occupancy requirements.

141.15 **7511.8400 PURPOSE AND SCOPE. [RENUMBERED FROM PART 7511.8000]**

141.16 Subpart 1. **Purpose.** The purpose of parts ~~7511.8000 to 7511.8040~~ 7511.8400 to  
 141.17 7511.8440 is to prescribe the standard abbreviation and symbol required to be displayed  
 141.18 on the exterior of any vehicle carrying liquefied petroleum gas fuel or natural gas in a  
 141.19 concealed tank.

141.20 Subp. 2. **Scope.** The scope of parts ~~7511.8000 to 7511.8040~~ 7511.8400 to 7511.8440  
 141.21 is intended to be consistent with Minnesota Statutes, section 169.762.

141.22 **7511.8410 PRESSURIZED FLAMMABLE GAS. [RENUMBERED FROM PART**  
 141.23 **7511.8010]**

141.24 "Pressurized flammable gas" includes liquefied petroleum gas, compressed natural  
 141.25 gas, and liquefied natural gas.

142.1 **7511.8420 WARNING SYMBOL REQUIRED. [RENUMBERED FROM PART**  
 142.2 **7511.8020]**

142.3 The marking required by Minnesota Statutes, section 169.762, must be displayed on  
 142.4 the exterior of a vehicle carrying pressurized flammable gas in a concealed area, whether  
 142.5 the gas is the primary fuel or secondary fuel.

142.6 **7511.8430 SYMBOL DESIGN. [RENUMBERED FROM PART 7511.8030]**

142.7 Subpart 1. **Design.** The required warning symbol must be of a design illustrated  
 142.8 as follows:



Compressed natural  
gas



Liquefied petroleum  
gas



Liquefied natural  
gas

142.9 Subp. 2. **Specifications.** The following specifications apply to each of the warning  
 142.10 symbols:

142.11 A. The symbol must be diamond-shaped, 2-1/2 inches in height, and four inches  
 142.12 in width at its highest and widest points respectively.

142.13 B. The letters and border must be silver in color.

142.14 C. The background must be black in color.

142.15 D. The letters within the symbol must be a minimum of one inch in height.

142.16 E. The entire symbol, including letters, background, and border, must be made  
 142.17 of reflectorized material and not fade or wash away when exposed to weather or other  
 142.18 adverse elements.

142.19 ~~7511.8040~~ **7511.8440 SYMBOL PLACEMENT. [MOVED FROM PART 7511.8040]**

142.20 A minimum of two warning symbols is required to be displayed. The warning  
 142.21 symbols must be displayed in the places specified in item A. If the symbols cannot be

143.1 clearly displayed or effectively applied to those locations they may be displayed in the  
143.2 places specified in item B. Display at least two symbols as follows:

143.3       A. one warning symbol on the extreme left (driver's) side of the rear-facing  
143.4 portion of the rear bumper, and one warning symbol on the extreme right (passenger) side  
143.5 of the front-facing portion of the front bumper; or

143.6       B. one warning symbol at least 12 inches but not more than 30 inches above the  
143.7 ground on the rear of the vehicle near the left (driver's) side and one warning symbol at  
143.8 least 12 inches but not more than 30 inches above the ground on the front of the vehicle  
143.9 near the right (passenger) side.

143.10 **REPEALER.** Minnesota Rules, parts 7511.0090, subpart 2; 7511.0106; 7511.0607;  
143.11 7511.0610; 7511.0704; 7511.0705; 7511.0903, subpart 8; 7511.0907, subparts 1, 12, 14,  
143.12 16, 17, 18, 19, 20, 21, 22, 23, and 24; 7511.0909, subpart 1; 7511.1002; 7511.1019;  
143.13 7511.1026; 7511.1027; 7511.2703, subpart 1; 7511.3401; 7511.3402; 7511.3405;  
143.14 7511.3800; 7511.4500; and 7511.7900, subparts 1, 3, and 4, are repealed.

# Office of the Revisor of Statutes

## Administrative Rules



**TITLE:** Proposed Permanent Rules Adopting the International Fire Code

**AGENCY:** Department of Labor and Industry

**MINNESOTA RULES:** Chapter 7511

The attached rules are approved for  
publication in the State Register



Sheree Speer  
Senior Assistant Revisor