

1.1 **Department of Labor and Industry**1.2 **Proposed Permanent Rules Adopting the 2012 International Building Code**1.3 **1305.0011 ADOPTION OF INTERNATIONAL BUILDING CODE BY**
1.4 **REFERENCE AND ADMINISTRATIVE AUTHORITY.**

1.5 Subpart 1. **General.** For purposes of this chapter, "IBC" means the ~~2006~~ 2012
1.6 edition of the International Building Code as promulgated by the International Code
1.7 Council, ~~Falls Church, Virginia Inc. (ICC), Washington, D.C.~~ The IBC is incorporated by
1.8 reference and made part of the Minnesota State Building Code except as qualified by the
1.9 applicable provisions in Minnesota Rules, chapter 1300, part 1305.0021, and as amended
1.10 in this chapter. Portions of this chapter reproduce ~~text and tables from the IBC~~ excerpts
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1.14 the commissioner of labor and industry. ~~The IBC is copyright 2006 by the International~~
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1.16 Subp. 2. **Mandatory chapters.** IBC chapters 2 through 33 and 35 must be
1.17 administered by any municipality that has adopted the Minnesota State Building Code,
1.18 except as qualified by the applicable provisions in Minnesota Rules, chapter 1300, and as
1.19 amended by this chapter. Amendments to IBC chapters 11 and 30 are incorporated by
1.20 reference in this rule chapter, but the actual amendments for those chapters are located
1.21 in Minnesota Rules, chapters 1341, the Minnesota Accessibility Code, and 1307, the
1.22 Minnesota Elevator Code, respectively. Referenced documents cited in IBC chapters 11
1.23 and 30, and Minnesota Rules, chapters 1307 and 1341, apply, unless otherwise stated or
1.24 deleted. For the complete application and mandatory requirements relating to IBC chapter
1.25 11, see Minnesota Rules, chapter 1341. For the complete application and mandatory
1.26 requirements relating to IBC chapter 30, see Minnesota Rules, chapter 1307.

2.1 Subp. 3. **Replacement chapters.** The following IBC chapters are deleted and
 2.2 replaced with the Minnesota Rules chapters listed in items A and B.

2.3 A. IBC chapter 1 and any references to State Building Code administration are
 2.4 deleted and replaced with Minnesota Rules, chapter 1300, Minnesota Administration Code.

2.5 B. IBC chapter 34 and any references to conservation or rehabilitation
 2.6 of existing buildings are deleted and replaced with Minnesota Rules, chapter 1311,
 2.7 Minnesota Building Conservation Code.

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

2.9 Subp. 5. **Flood hazard or floodproofing provisions.** Any flood hazard or
 2.10 floodproofing provisions in the IBC, and any reference to those provisions, are deleted in
 2.11 their entirety. Requirements for floodproofing are located in Minnesota Rules, chapter
 2.12 1335, Floodproofing Regulations.

2.13 **1305.0021 REFERENCES TO OTHER INTERNATIONAL CODE COUNCIL**
 2.14 **CODES.**

2.15 [For text of subps 1 and 2, see M.R.]

2.16 Subp. 3. **Residential code.** References to the International Residential Code in this
 2.17 code mean the Minnesota Residential Code, ~~adopted pursuant to~~ Minnesota Rules, chapter
 2.18 1309, and ~~adopted pursuant to~~ Minnesota Statutes, section 326B.106, subdivision 1.

2.19 Subp. 4. **Electrical code.** References to the International Code Council Electrical
 2.20 Code in this code mean the Minnesota Electrical Code, ~~adopted pursuant to~~ Minnesota
 2.21 Rules, chapter 1315, and ~~adopted pursuant to~~ Minnesota Statutes, section 326B.35.

2.22 Subp. 5. **Fuel gas code.** References to the International Fuel Gas Code in this code
 2.23 mean the Minnesota Mechanical Code, ~~adopted pursuant to~~ Minnesota Rules, chapter
 2.24 1346, and ~~adopted pursuant to~~ Minnesota Statutes, section 326B.106, subdivision 1.

3.1 Subp. 6. **Mechanical code.** References to the International Mechanical Code in this
3.2 code mean the Minnesota Mechanical Code, ~~adopted pursuant to Minnesota Rules, chapter~~
3.3 ~~1346,~~ and adopted pursuant to Minnesota Statutes, section 326B.106, subdivision 1.

3.4 Subp. 7. **Plumbing code.** References to the International Plumbing Code in this
3.5 code mean the Minnesota Plumbing Code, ~~adopted pursuant to Minnesota Rules, chapter~~
3.6 ~~4715,~~ and adopted pursuant to Minnesota Statutes, section 326B.106, subdivisions 1
3.7 and 2 326B.435.

3.8 Subp. 8. **Private sewage disposal code.** References to the International Private
3.9 Sewage Disposal Code in this code mean the Minnesota Pollution Control Agency's
3.10 minimum standards and criteria for individual sewage treatment systems ~~adopted pursuant~~
3.11 ~~to chapter, Minnesota Rules, chapters 7080, 7081, 7082, and 7083,~~ and adopted pursuant
3.12 to Minnesota Statutes, chapters 103F, 103G, 115, and 116.

3.13 Subp. 9. **Energy conservation code.** References to the International Energy
3.14 Conservation Code in this code mean the Minnesota Energy Code, ~~adopted pursuant to~~
3.15 Minnesota Rules, chapters 1322 and 1323, and adopted pursuant to Minnesota Statutes,
3.16 section 326B.115 326B.106, subdivision 1.

3.17 [For text of subp 10, see M.R.]

3.18 Subp. 11. **Fire code.** References to the International Fire Code in this code mean
3.19 the Minnesota State Fire Code, ~~adopted pursuant to Minnesota Rules, chapter 7511,~~ and
3.20 adopted pursuant to Minnesota Statutes, chapter 299F.

3.21 Subp. 12. **International Existing Building Code.** References to the International
3.22 Existing Building Code in this code mean Minnesota ~~State Building~~ Conservation Code
3.23 for Existing Buildings, adopted pursuant to Minnesota Rules, chapter 1311, and adopted
3.24 pursuant to Minnesota Statutes, section 326B.106, subdivision 1.

4.1 **1305.0030 ADMINISTRATIVE PROCEDURE CRITERIA.**

4.2 Procedures relating to the administration and enforcement of this code under
4.3 Minnesota Statutes, section ~~16B.57~~ 326B.101, are contained in Minnesota Rules, chapter
4.4 1300, Minnesota Administration Code, which governs the application of this code.

4.5 **1305.0202 SECTION 202, DEFINITIONS.**

4.6 Subpart 1. ~~Agricultural building~~ Amended definitions. The definition of
4.7 "agricultural building" in IBC Section 202 is amended as follows: IBC section 202 is
4.8 modified by amending the following definitions to read as follows:

4.9 **AGRICULTURAL BUILDING.** Pursuant to ~~Minnesota Statutes, section 326B.103,~~
4.10 ~~an agricultural building means a structure on agricultural land as defined in Minnesota~~
4.11 ~~Statutes, section 273.13, subdivision 23, that is designed, constructed, and used to house~~
4.12 ~~farm implements, livestock, or agricultural produce or products used by the owner, lessee,~~
4.13 ~~and sublessee of the building and members of their immediate families, their employees,~~
4.14 ~~and persons engaged in the pickup or delivery of agricultural products.~~ "Agricultural
4.15 building" means a building that meets the requirements of Minnesota Statutes, section
4.16 326B.103, subdivision 3.

4.17 **AISLE.** "Aisle" means that portion of an exit access that connects an aisle accessway to
4.18 an exit access doorway, corridor, or exit.

4.19 **ALTERNATING TREAD DEVICE.** A device standing between 50 and 70 degrees (0.87
4.20 and 1.22 rad) from horizontal, that has a series of steps usually attached to a center support
4.21 in an alternating manner so that the user does not have both feet on the same level at the
4.22 same time. A ships ladder in compliance with Minnesota Rules, part 1305.1209, shall
4.23 be considered equivalent to an alternating tread device.

4.24 **AMBULATORY CARE FACILITY.** "Ambulatory care facility" means buildings or
4.25 portions of buildings used to provide medical, surgical, psychiatric, nursing, or similar care
4.26 on a less than 24-hour basis to individuals who are rendered incapable of self-preservation
4.27 by the services provided. For the purposes of this chapter, federally certified end-stage

5.1 renal disease facilities (kidney dialysis facilities) located on the level of exit discharge
5.2 shall not be considered ambulatory care facilities.

5.3 **APPROVED.** "Approved" means approval by the building official, pursuant to the
5.4 Minnesota State Building Code, by reason of: inspection, investigation, or testing;
5.5 accepted principles; computer simulations; research reports; or testing performed by either
5.6 a licensed engineer or by a locally or nationally recognized testing laboratory.

5.7 **CORRIDOR.** "Corridor" means an interior passageway having a length at least 3 times
5.8 its width, having walls, partitions, or other obstructions to exit travel over 6 feet (1829
5.9 mm) in height on 2 opposing sides and having openings from rooms or similar spaces.

5.10 **LIVE/WORK UNIT.** The definition of "Live/Work Unit" in IBC section 202 is deleted
5.11 in its entirety.

5.12 **OUTPATIENT CLINIC.** "Outpatient clinic" means a building or part of a building used to
5.13 provide medical care on a less than 24-hour basis to persons who are not rendered incapable
5.14 of self-preservation by the services provided, including federally certified endstage renal
5.15 dialysis facilities (kidney dialysis facilities) not classified as an ambulatory care facility.

5.16 **ROOF COVERING.** "Roof covering" means the covering applied to the roof deck for
5.17 weather resistance, fire classification, or appearance. Roof covering materials consist of
5.18 two basic types: roofing systems and prepared materials.

5.19 Subp. 2. ~~Townhouse~~ **Added definitions.** The definition of "townhouse" in IBC
5.20 Section 202 is deleted in its entirety. IBC section 202 is modified by adding the following
5.21 definitions:

5.22 **CODE.** For purposes of this chapter, "the code" or "this code" means Minnesota Rules,
5.23 chapter 1305, Adoption of the International Building Code.

5.24 **GUEST ROOM.** "Guest room" means a room or group of rooms used or intended to be
5.25 used for purposes of lodging by guests.

5.26 **ROOM.** "Room" means a space or area bounded by any obstruction over 6 feet (1829
5.27 mm) in height which at any time encloses more than 80 percent of the perimeter of the

6.1 area. In computing the unobstructed perimeter, openings less than 3 feet (914 mm) in clear
 6.2 width and less than 6 feet 8 inches (2032 mm) in height shall not be considered. Aisles
 6.3 and corridors shall not be construed to form rooms.

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

6.7 **1305.0302 CARE FACILITY CLASSIFICATIONS.**

6.8 **IBC section 302** is amended by adding Table 302.2 to read as follows:

6.9 **Table 302.2 Care facilities.** Occupancies for care facilities shall be classified in
 6.10 accordance with the following table.

6.11 **Table 302.2 Care Facilities**

<u>Type of Licensed Facility</u>	<u>Number or Type of Residents</u>	<u>IBC Occupancy Classification</u>	
<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>
	<u>Group Child Care Home < 24 hours per day</u>	<u>11-14 occupants maximum</u>	<u>R-3 dwelling unit</u>
	<u>Child Care Center < 24 hours per day</u>	<u>> 5 but ≤ 100 children < 2.5 years of age and each room at, and with, an exit at the level of exit discharge</u>	<u>E</u>
	<u>Child Care Center < 24 hours per day</u>	<u>More than 5 children > 2.5 years of age</u>	<u>E</u>
	<u>Child Care Center < 24 hours per day</u>	<u>More than 5 children ≤ 2.5 years of age</u>	<u>I-4</u>
<u>Adult Day Care</u>	<u>Family Adult Day Services</u>	<u>≤ 8 impaired adults</u>	<u>R-3 dwelling unit</u>
	<u>Adult Day Care Center < 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>

7.1		<u>Adult Day Care Center < 24</u>	<u>6 or more occupants, but</u>	<u>E</u>
7.2		<u>hours per day</u>	<u>having no more than 50</u>	
7.3			<u>percent of the occupants</u>	
7.4			<u>who are not capable of</u>	
7.5			<u>self-preservation</u>	
7.6	<u>Supervised</u>	<u>Class A-1</u>	<u>6 or fewer residents; all</u>	<u>R-3</u>
7.7	<u>Living</u>		<u>of whom are capable of</u>	<u>dwelling unit</u>
7.8	<u>Facilities</u>		<u>self-preservation</u>	
7.9		<u>Class A-2</u>	<u>7 to 16 residents; all of</u>	<u>R-4</u>
7.10			<u>whom are capable of</u>	
7.11			<u>self-preservation</u>	
7.12		<u>Class A-2</u>	<u>More than 16 residents; all</u>	<u>I-1</u>
7.13			<u>of whom are capable of</u>	
7.14			<u>self-preservation</u>	
7.15		<u>Class B-1</u>	<u>6 or fewer residents; all of</u>	<u>R-3</u>
7.16			<u>whom may not be capable</u>	
7.17			<u>of self-preservation</u>	
7.18		<u>Class B-2</u>	<u>7 to 16 residents; all of</u>	<u>R-4</u>
7.19			<u>whom may not be capable</u>	
7.20			<u>of self-preservation</u>	
7.21		<u>Class B-3</u>	<u>More than 16 residents; all</u>	<u>I-2</u>
7.22			<u>of whom may not be capable</u>	
7.23			<u>of self-preservation</u>	
7.24	<u>Hospice</u>	<u>Residential Hospice Facility</u>	<u>1-5 terminally ill persons</u>	<u>R-3</u>
7.25		<u>Residential Hospice Facility</u>	<u>6-12 terminally ill persons</u>	<u>R-4</u>
7.26	<u>Adult Foster</u>	<u>Adult Foster Care Home</u>	<u>1-5 impaired adults</u>	<u>R-3</u>
7.27	<u>Care</u>			<u>dwelling unit</u>
7.28	<u>Child Foster</u>	<u>Foster Care</u>	<u>1-6 foster children without</u>	<u>R-3</u>
7.29	<u>Care</u>		<u>severe disability or assisted</u>	<u>dwelling unit</u>
7.30			<u>medical technology</u>	
7.31		<u>Foster Care</u>	<u>1-4 foster children with</u>	<u>R-3</u>
7.32			<u>medical or special care</u>	<u>dwelling unit</u>
7.33			<u>services</u>	

8.1	<u>Housing</u>	<u>Housing with Services</u>	<u>1-5 adult residents ≥ 80</u>	<u>R-3</u>
8.2	<u>with Services</u>	<u>Establishment</u>	<u>percent 55 years of age</u>	<u>dwelling unit</u>
8.3	<u>Facility</u>	<u>Housing with Services</u>	<u>or older unless registered</u>	
8.4		<u>Establishment Providing</u>	<u>under MN Statutes, section</u>	
8.5		<u>Assisted Living Services</u>	<u>144D.025</u>	
8.6		<u>Housing with Services</u>	<u>6-16 adult residents ≥ 80</u>	<u>R-4</u>
8.7		<u>Establishment</u>	<u>percent 55 years of age</u>	
8.8		<u>Housing with Services</u>	<u>or older unless registered</u>	
8.9		<u>Establishment Providing</u>	<u>under MN Statutes, section</u>	
8.10		<u>Assisted Living Services</u>	<u>144D.025</u>	
8.11		<u>Housing with Services</u>	<u>16 adult residents ≥ 80</u>	<u>I-1</u>
8.12		<u>Establishment</u>	<u>percent 55 years of age</u>	
8.13		<u>Housing with Services</u>	<u>or older unless registered</u>	
8.14		<u>Establishment Providing</u>	<u>under MN Statutes, section</u>	
8.15		<u>Assisted Living Services</u>	<u>144D.025</u>	
8.16	<u>Boarding Care</u>	<u>Boarding Care Home</u>	<u>< 5 residents</u>	<u>R-3</u>
8.17				<u>dwelling unit</u>
8.18		<u>Boarding Care Home</u>	<u>6-16 residents</u>	<u>R-4</u>
8.19		<u>Boarding Care Home</u>	<u>> 16 residents</u>	<u>I-1</u>
8.20	<u>Boarding and</u>	<u>Boarding and Lodging</u>	<u>≤ 16 residents in sleeping</u>	<u>R-3</u>
8.21	<u>Lodging</u>		<u>rooms or ≤ 2 dwelling units</u>	
8.22			<u>in one building</u>	
8.23		<u>Boarding and Lodging</u>	<u>> 16 residents in sleeping</u>	<u>R-2</u>
8.24			<u>rooms or > 2 dwelling units</u>	
8.25			<u>in one building</u>	
8.26		<u>Boarding and Lodging < 30</u>	<u>Bed and Breakfast with 6 or</u>	<u>R-1</u>
8.27		<u>days</u>	<u>more sleeping units</u>	
8.28			<u>Boarding houses with > 10</u>	
8.29			<u>occupants</u>	
8.30		<u>Boarding and Lodging < 30</u>	<u>Bed and Breakfast with 5 or</u>	<u>R-3</u>
8.31		<u>days</u>	<u>fewer sleeping units</u>	<u>dwelling unit</u>
8.32			<u>Boarding houses with ≤ 10</u>	
8.33			<u>occupants</u>	

9.1	<u>Senior Housing</u>	<u>Senior Housing (See IBC</u>	<u>More than 2 dwelling units</u>	<u>R-2</u>
9.2		<u>310)</u>	<u>in one building</u>	
9.3		<u>Senior Housing (See IBC</u>	<u>2 dwelling units in one</u>	<u>R-3</u>
9.4		<u>310)</u>	<u>building</u>	
9.5		<u>Senior Housing (See IBC</u>	<u>1 dwelling unit</u>	<u>R-3</u>
9.6		<u>310)</u>		<u>dwelling unit</u>
9.7	<u>Congregate</u>	<u>Congregate Residence</u>	<u>≤ 16 residents</u>	<u>R-3</u>
9.8	<u>Residence</u>			
9.9		<u>Congregate Residence</u>	<u>17 or more residents</u>	<u>R-2</u>
9.10	<u>Day Services</u>	<u>Day Services Facility</u>	<u>Adult (over 18)</u>	<u>I-4</u>
9.11		<u>Day Services Facility</u>	<u>Ages 13-18</u>	<u>I-4</u>
9.12	<u>Chemical</u>	<u>Chemical Dependency</u>	<u>Not regulated</u>	<u>B</u>
9.13	<u>Dependency</u>	<u>Treatment Program -</u>		
9.14	<u>Treatment</u>	<u>Outpatient (< 24 hrs.)</u>		
9.15	<u>Programs</u>			
9.16		<u>Chemical Dependency</u>	<u>< 5 residents</u>	<u>R-3</u>
9.17		<u>Treatment Program -</u>		
9.18		<u>Residential</u>		
9.19		<u>Chemical Dependency</u>	<u>6-16 residents</u>	<u>R-4</u>
9.20		<u>Treatment Program -</u>		
9.21		<u>Residential</u>		
9.22		<u>Chemical Dependency</u>	<u>> 16 residents</u>	<u>I-1</u>
9.23		<u>Treatment Program -</u>		
9.24		<u>Residential</u>		

9.25 **1305.0308 INSTITUTIONAL GROUP I.**

9.26 Subpart 1. IBC section 308.2 308.3. IBC section 308.2 308.3 is amended to read
 9.27 as follows:

9.28 **308.2 308.3 Institutional Group I-1.** This occupancy ~~must~~ shall include buildings,
 9.29 structures, or ~~parts~~ portions thereof ~~housing for~~ for more than 16 persons, who reside
 9.30 on a 24-hour basis, ~~who because of age, mental disability, or other reasons, live in~~

10.1 a supervised residential environment ~~that provides personal~~ and receive custodial
 10.2 ~~care services. The occupants are capable of responding to an emergency situation~~
 10.3 ~~without physical assistance from staff. Examples of this group shall include, but~~
 10.4 ~~not be limited to, the following:~~

10.5 ~~residential board and care facilities~~ Alcohol and drug centers

10.6 Assisted living facilities

10.7 Boarding care

10.8 ~~halfway houses~~

10.9 Congregate care facilities

10.10 Convalescent facilities

10.11 Group homes

10.12 ~~congregate care facilities~~

10.13 Halfway houses

10.14 Housing with services

10.15 Residential board and care facilities

10.16 Social rehabilitation facilities

10.17 Supervised living facilities Class A-2

10.18 ~~alcohol and drug centers~~

10.19 ~~convalescent facilities~~

10.20 **308.3.1 Five or fewer persons receiving care.** A facility such as the above with
 10.21 five or fewer persons receiving such care shall be classified as Group R-3.

10.22 **308.3.2 Six to 16 persons receiving care.** A facility such as above, housing at
 10.23 least not fewer than six and not more than 16 persons receiving such care, shall
 10.24 be classified as Group R-4.

10.25 Subp. 2. **IBC section 308.3 308.4.** IBC section ~~308.3~~ 308.4 is amended to read
 10.26 as follows:

11.1 ~~308.3~~ **308.4 Institutional Group I-2.** This occupancy shall include buildings
 11.2 and structures used for medical, ~~surgical, psychiatric, nursing, or custodial care~~
 11.3 on a 24-hour basis for more than five persons who are ~~not capable~~ incapable of
 11.4 self-preservation. Examples of this group shall include, but not be limited to, the
 11.5 following:

11.6 Detoxification facilities

11.7 Foster care facilities

11.8 Hospitals

11.9 Nursing homes, ~~both intermediate-care facilities and skilled nursing facilities~~

11.10 ~~mental~~ Psychiatric hospitals

11.11 Supervised living facilities Class B-3

11.12 ~~detoxification facilities~~

11.13 **308.4.1 Five or fewer persons receiving care.** A facility such as the above with
 11.14 five or fewer persons receiving such care shall be classified as Group R-3.

11.15 Subp. 3. [See repealer.]

11.16 Subp. 4. IBC section 308.6.4. IBC section 308.6.4 is amended to read as follows:

11.17 **308.6.4 Five or fewer persons receiving care in a dwelling unit.** A facility such as
 11.18 the above within a dwelling unit and having five or fewer persons receiving custodial
 11.19 care shall be classified as a Group R-3 occupancy.

11.20 **1305.0310 SECTION 310 RESIDENTIAL GROUP R.**

11.21 **IBC section 310.1 is 310** and its subsections are amended to read as follows:

11.22 **310.1 Residential Group R.** Residential Group R includes, among others, the use of
 11.23 a building or structure, or a portion thereof, for sleeping purposes when not classified
 11.24 as an Institutional Group I. ~~Residential occupancies shall include the following:~~ This
 11.25 group shall not include buildings regulated by chapter 1309, the International Residential
 11.26 Building Code (IRC). However, the licensed uses specified in sections 310.5 and 310.6, as

12.1 amended by this part, are applicable to a building constructed in accordance with the IRC
 12.2 that houses a use that is required to be licensed.

12.3 **310.2 Definitions.** The following terms are defined in chapter 2:

12.4 Boarding house

12.5 Congregate living facility

12.6 Dormitory

12.7 Group home

12.8 Personal care service

12.9 Transient

12.10 **310.3 Residential Group R-1.** R-1 Residential occupancies containing sleeping units
 12.11 where the occupants are primarily transient in nature, including:

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

12.14 Boarding houses (transient) with more than ten occupants

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

12.16 Hotels (transient)

12.17 Motels (transient)

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

12.20 **310.4 Residential Group R-2.** R-2 Residential occupancies containing sleeping units
 12.21 or more than two dwelling units where the occupants are primarily permanent in nature,

12.22 including:

12.23 Apartment houses

12.24 Boarding houses (not transient nontransient) with more than 16 occupants

12.25 Congregate living facilities (nontransient) with more than 16 occupants

12.26 Convents

12.27 Dormitories

- 13.1 Fraternities and sororities
- 13.2 Hotels (nontransient)
- 13.3 Monasteries
- 13.4 Motels (nontransient)
- 13.5 Vacation timeshare properties
- 13.6 ~~Congregate living facilities with 16 or fewer occupants are permitted to comply with~~
- 13.7 ~~construction that complies with the requirements for Group R-3.~~
- 13.8 **310.5 Residential Group R-3.** R-3 Residential occupancies where the occupants are
- 13.9 primarily permanent in nature and not classified as R-1, R-2, R-4, or I including:
- 13.10 Assisted living facilities
- 13.11 ~~Buildings that do not contain more than two dwelling units~~
- 13.12 Boarding care homes
- 13.13 Boarding houses (nontransient) with 16 or fewer occupants
- 13.14 Boarding houses (transient) with 10 or fewer occupants
- 13.15 ~~adult~~ Care facilities that provide accommodations for five or fewer persons of any
- 13.16 ~~age for less than 24 hours receiving care~~
- 13.17 ~~child care facilities that provide accommodations for five or fewer persons of any~~
- 13.18 ~~age for less than 24 hours~~
- 13.19 Congregate living facilities (nontransient) with 16 or fewer persons occupants
- 13.20 ~~adult and child care facilities~~
- 13.21 Congregate living facilities (transient) with ten or fewer occupants
- 13.22 Dwelling units in mixed occupancy buildings
- 13.23 Family adult foster homes
- 13.24 Foster care
- 13.25 Housing with services
- 13.26 Residential hospice with five or fewer occupants

14.1 In new construction, Group R-3 occupancies shall meet the requirements for building
 14.2 durability of chapter 1309, the International Residential Building Code, parts 1309.0402;
 14.3 1309.0406, subpart 2; 1309.0702, subpart 2; 1309.0703, subpart 2a; 1309.0703, subpart 9,
 14.4 items A, B, and C; 1309.0903; and 2012 IRC section R703.8.1.

14.5 **310.5.1 Care facilities within a dwelling.** Section 310.5.1 is deleted in its entirety.

14.6 **310.6 Residential Group R-4.** This occupancy shall include buildings, structures, or
 14.7 portions thereof for more than five but not more than 16 persons, excluding staff, who
 14.8 reside on a 24-hour basis in a supervised residential environment and receive custodial
 14.9 care. The persons receiving care are capable of self-preservation. This group shall include
 14.10 the following:

14.11 Alcohol and drug centers

14.12 Boarding care homes

14.13 Congregate care facilities

14.14 Group homes

14.15 Halfway houses

14.16 Housing with services (including those that provide assisted living services)

14.17 Residential board and care facilities

14.18 Residential hospice with 12 or fewer occupants

14.19 Social rehabilitation facilities

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

14.22 **1305.0402 SECTION 402, COVERED MALL AND OPEN MALL BUILDINGS.**

14.23 Subpart 1. IBC section 402.7 402.4.2.2.2. IBC section 402.7 402.4.2.2 is amended
 14.24 by adding a subsection to read as follows:

14.25 **402.7.4 402.4.2.2.2 Property lines.** Property lines may be platted
 14.26 between an anchor building and a covered mall building separated
 14.27 in accordance with section 402.7.3 402.4.2.2 without requiring the

15.1 construction of a party wall if there are legal agreements recorded
15.2 with the deed for each of the separate properties. These recorded
15.3 agreements shall require that buildings as divided by property lines be
15.4 in conformance with the applicable provisions of the State Building
15.5 Code, as if the buildings were a single building on a single piece of
15.6 property. In addition, the agreement must state that no individual
15.7 building or property owner may modify any portion of the building in
15.8 any way that would not comply with the State Building Code.

15.9 Subp. 2. [Repealed, 32 SR 7]

15.10 Subp. 3. IBC section 402.7.2. IBC section 402.7.2 is amended to read as follows:

15.11 402.7.2 Smoke control. Where a covered mall building contains an atrium, a
15.12 smoke control system shall be provided in accordance with section 404.5.

15.13 Exception: Smoke control is not required in covered mall buildings where
15.14 an atrium connects only two stories.

15.15 Covered mall buildings exceeding 50,000 square feet (4645 m²) in floor area,
15.16 excluding anchor buildings, not provided with an approved smoke control
15.17 system, shall be provided with a postfire smoke exhaust system in accordance
15.18 with Minnesota Rules, part.1305.0916.

15.19 **1305.0403 SECTION 403, HIGH-RISE BUILDINGS.**

15.20 Subpart 1. IBC Section 403.3.2 403.2.1.2. IBC Section 403.3.2 403.2.1.2 is deleted
15.21 in its entirety.

15.22 Subp. 2. [See repealer.]

15.23 Subp. 3. IBC section 403.4.8.2. IBC section 403.4.8.2 is amended to read as follows:

15.24 403.4.8.2 Standby power loads. The following are classified as standby
15.25 power loads:

- 16.1 1. Power and lighting for the fire command center required by section
- 16.2 403.4.6;
- 16.3 2. Ventilation and automatic fire detection equipment for smokeproof
- 16.4 enclosures; and
- 16.5 3. Passenger elevators serving occupied floors more than 75 feet (22860
- 16.6 mm) above the lowest level of fire department vehicle access.

16.7 **1305.0406 SECTION 406, MOTOR VEHICLE-RELATED OCCUPANCIES.**

16.8 Subpart 1. IBC section 406.4.5. IBC section 406.4.5 is amended by adding a new
16.9 exception to read as follows:

- 16.10 3. Unoccupied portions of nonpublic parking garages shall not be required
- 16.11 to be nonabsorbent.

16.12 Subp. 2. IBC section 406.5.7. IBC Section ~~406.3.8~~ 406.5.7 is amended to read
16.13 as follows:

16.14 ~~406.3.8~~ 406.5.7 Means of egress. Where persons other than parking attendants are
16.15 permitted, open parking garages shall meet the means of egress requirements of Chapter
16.16 10. Where no persons other than parking attendants are permitted, there shall not be less
16.17 than two 36-inch wide (914 mm) exit stairways:

16.18 **1305.0407 SECTION 407, GROUP I-2.**

16.19 **IBC section 407.2.1** is amended to read as follows:

16.20 **407.2.1 Spaces of ~~unlimited area open to the corridor.~~** ~~In an I-2 occupancy,~~
16.21 Spaces constructed as required for corridors shall be permitted to be open to a
16.22 corridor, only ~~where~~ when all the following criteria are met:

- 16.23 1. The spaces are not occupied for ~~patient~~ as care recipient sleeping rooms,
- 16.24 treatment rooms, ~~hazardous or incidental use areas as defined in~~ uses in
- 16.25 accordance with section ~~508.2~~ 509 or hazardous uses.

- 17.1 2. The open space is protected by an automatic fire detection system
17.2 installed in accordance with section 907.
- 17.3 3. The corridors onto which the spaces open, in the same smoke
17.4 compartment, are protected by an automatic fire detection system installed
17.5 in accordance with section 907, or the smoke compartment in which the
17.6 spaces are located is equipped throughout with quick response sprinklers
17.7 in accordance with section 903.3.2.
- 17.8 4. The space is arranged so as not to obstruct access to the required exits.

17.9 **1305.0408 SECTION 408, GROUP I-3.**

17.10 Subpart 1. [See repealer.]

17.11 Subp. 2. IBC section 408.9 408.7. IBC section 408 is amended by adding a
17.12 subsection to read as follows:

17.13 408.9 408.7 Security Glazing. In Group I-3 occupancies, windows and doors in
17.14 1-hour fire barriers constructed in accordance with section 707; 2-hour fire barriers
17.15 constructed in accordance with section 707 used for horizontal exits; fire partitions
17.16 constructed in accordance with section 708; and smoke barriers constructed in
17.17 accordance with section 709 shall be permitted to have security glazing installed
17.18 provided that the following conditions are met:

- 17.19 1. Individual panels of glazing in door assemblies shall not exceed 1296 square
17.20 inches (0.84 m²).
- 17.21 2. The glazing shall be protected on both sides by an automatic sprinkler system.
17.22 The sprinkler system shall be designed to, when actuated, wet completely the
17.23 entire surface of any glazing affected by fire.

17.24 Exception: Fire partitions or smoke barriers with 1/4-inch (6.4 mm) wire
17.25 glass in a security glazing assembly.

- 18.1 3. The glazing shall be in a gasketed frame and installed in such a manner that
18.2 the framing system will deflect without breaking (loading) the glass before the
18.3 sprinkler system operates.
- 18.4 4. Obstructions such as curtain rods, drapery traverse rods, curtains, drapes, or
18.5 similar materials shall not be installed between the automatic sprinklers and
18.6 the glazing.
- 18.7 5. Security glazing in fire partitions, 1-hour fire barriers enclosing fire command
18.8 centers, and smoke barriers, shall not be limited to 25 percent of the area of the
18.9 common wall with any room.

18.10 ~~408.9.1 Corridors. In restraint areas of fully sprinklered detention and correction~~
18.11 ~~facilities, the area of glazing in one-hour corridor walls is not restricted if one of the~~
18.12 ~~following conditions is met:~~

18.13 ~~1. All glazing is approved 1/4-inch thick (6.4 mm) wired glass, has approved 1/4-inch~~
18.14 ~~thick (6.4 mm) wired glass in a security glazing assembly, or other approved fire-tested~~
18.15 ~~glazing material set in steel frames; or~~

18.16 ~~2. Laminated security glazing may be used if the glass is protected on both sides by~~
18.17 ~~a sprinkler system equipped with listed quick-response sprinkler heads. The sprinkler~~
18.18 ~~system shall be designed to wet the surface of the glass wall when actuated.~~

18.19 ~~408.9.2 Other. When necessary to maintain direct visual supervision by facility staff,~~
18.20 ~~laminated security glazing may be used in fire-resistive wall and door assemblies, up to a~~
18.21 ~~two-hour fire protection rating, if all of the following conditions are met:~~

18.22 ~~1. The fire-resistive wall or door assembly is not part of a required fire wall. For~~
18.23 ~~vertical exit enclosure, refer to Section 408.3.6;~~

18.24 ~~2. The glazing is protected on both sides by a sprinkler system equipped with listed~~
18.25 ~~quick-response sprinklers. The sprinkler system shall completely wet the entire surface~~
18.26 ~~of the glass wall when actuated;~~

19.1 ~~3. The area of the glazing does not exceed 25 percent of the common wall of the~~
19.2 ~~area requiring supervision; and~~

19.3 ~~4. The area of glazing in fire-resistive door assemblies is limited to 1,296 square~~
19.4 ~~inches (0.836 m²) per light.~~

19.5 Subp. 3. **IBC section 408.9.** IBC section 408 is amended by adding a new subsection
19.6 to read as follows:

19.7 **408.9 Windowless buildings.** For the purposes of this section, a windowless building
19.8 or portion of a windowless building is one with nonopenable or readily breakable
19.9 windows or with skylights or exterior doors provided in all resident areas of the
19.10 exit access with an occupant load greater than 50. Windowless buildings shall be
19.11 provided with an engineered smoke control system to provide a tenable environment
19.12 for exiting from the smoke compartment in the area of fire origin in accordance with
19.13 section 909 for each windowless smoke compartment.

19.14 **1305.0413 SECTION 413, COMBUSTIBLE STORAGE.**

19.15 IBC section 413 is amended by adding a subsection to read as follows:

19.16 **413.3 Fire protection of floors.** In addition to the requirements of this section, the
19.17 fire protection of floors in Groups I-1, R-1, R-2, and R-3 occupancies shall comply
19.18 with the requirements of section 420.6.

19.19 **1305.0419 SECTION 419, LIVE/WORK UNITS.**

19.20 IBC section 419, Live/Work Units, is deleted in its entirety.

19.21 **1305.0420 SECTION 420, GROUP I-1, R-1, R-2, R-3.**

19.22 Subpart 1. **IBC section 420.1.** IBC section 420.1 is amended to read as follows:

19.23 **420.1 General.** Occupancies in Groups I-1, R-1, R-2, and R-3 shall comply with the
19.24 provisions of sections 420.1 through 420.6 and other applicable provisions of this code.

19.25 (Sections 420.2 to 420.5 remain unchanged.)

20.1 Subp. 2. IBC section 420.6. IBC section 420 is amended by adding a subsection
20.2 to read as follows:

20.3 **420.6 Fire protection of floors.** Floor assemblies, not required elsewhere in this
20.4 code to be fire-resistance rated, shall be provided with 1/2-inch (12.7 mm) gypsum
20.5 wallboard membrane, 5/8-inch (16 mm) wood structural panel membrane, or
20.6 equivalent on the underside of the floor framing member.

20.7 **Exceptions:**

20.8 1. Floor assemblies located directly over a space protected by an automatic
20.9 sprinkler system in accordance with NFPA 13D, or other approved equivalent
20.10 sprinkler system.

20.11 2. Floor assemblies located directly over a crawl space not intended for storage
20.12 or fuel-fired appliances.

20.13 3. Portions of the floor assemblies in Group R-3 can be unprotected when
20.14 complying with the following:

20.15 a. The aggregate area of the unprotected portions shall not exceed 80 square
20.16 feet per story; and

20.17 b. Fire blocking in accordance with section 717.2 shall be installed along
20.18 the perimeter of the unprotected portion to separate the unprotected portion
20.19 from the remainder of the floor assembly.

20.20 4. Wood floor assemblies in Group R-3 occupancies using dimension lumber
20.21 or structural composite lumber equal to or greater than 2-inch by 10-inch
20.22 (50.8 mm by 254 mm) nominal dimension, or other approved floor assemblies
20.23 demonstrating equivalent fire performance.

20.24 **1305.0425 SECTION 425, GROUP E OCCUPANCIES.**

20.25 IBC chapter 4 is amended by adding a section and subsections to read as follows:

20.26 SECTION 425

20.27 GROUP E OCCUPANCIES

21.1 **425.1 Applicability.** This section applies to Group E school buildings containing
21.2 uses described in this section. School buildings shall comply with this section and all
21.3 other applicable provisions of this code, as provided by Minnesota Statutes, section
21.4 123B.51, subdivision 7.

21.5 **425.2 Use of school buildings by lower grades.** In addition to the occupancy and
21.6 construction requirements in this code, this section applies to those special uses and
21.7 occupancies described in this section.

21.8 **425.2.1 School buildings equipped with approved automatic fire sprinkler**
21.9 **and fire alarm systems.** Rooms used by preschool, kindergarten, and first and
21.10 second grade students for classrooms, latchkey, day care, early childhood family
21.11 education, teen parent, or other programs conducted in the building may be
21.12 located on any floor level below the fourth story if the following conditions exist:

21.13 1. The building is protected throughout with an approved automatic fire
21.14 sprinkler system; and

21.15 2. The building is protected throughout with an approved automatic fire
21.16 alarm system having automatic smoke detection devices installed throughout
21.17 the exit system within every room or area used for purposes other than a
21.18 classroom or office.

21.19 **425.2.2 School buildings equipped with either an approved automatic fire**
21.20 **sprinkler system or a fire alarm system.** Rooms shall be located on the story of
21.21 exit discharge when used for the purposes of classroom, latchkey, day care, early
21.22 childhood education, teen parent, or other programs conducted in the building
21.23 by preschool, kindergarten, or first grade students. Rooms shall be located on
21.24 the story of exit discharge or one story above when used for any purpose by
21.25 second grade students.

21.26 Rooms occupied by preschool, kindergarten, first, or second grade students,
21.27 when used for the programs described in this section, may be located on

22.1 floor levels other than those designated above if one of the following
22.2 conditions is met:

22.3 1. An approved automatic fire sprinkler system is provided throughout
22.4 the building and the use of the affected room or space is limited to one
22.5 grade level at a time and exiting is provided from the room or space
22.6 that is independent from the exiting system used by students above
22.7 second grade; or

22.8 2. An approved automatic fire alarm system is installed throughout the
22.9 building consisting of automatic smoke detection installed throughout
22.10 the exit system and within all rooms and areas other than classroom
22.11 and office areas, and the use of the affected room or space is limited
22.12 to one grade level at a time, and exiting is provided from the room
22.13 or space that is independent from the exiting system used by students
22.14 above second grade.

22.15 For the purposes of this subpart, pupils from the second grade down are
22.16 considered one grade level.

22.17 425.2.3 Accessory spaces. Accessory spaces, including spaces used for
22.18 gymnasiums, cafeterias, media centers, auditoriums, libraries, and band and choir
22.19 rooms, used on a temporary basis by preschool, kindergarten, first, and second
22.20 grade students are permitted to be located one level above or one level below the
22.21 story of exit discharge, if the building is protected throughout by an approved
22.22 automatic sprinkler system or an approved corridor smoke detection system.

22.23 **1305.0507 SECTION 507, UNLIMITED AREA BUILDINGS.**

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

22.25 Subp. 2. **IBC section 507.3.** The exceptions listed in IBC section 507.3 are not
22.26 amended. The first sentence of IBC section 507.3 is amended to read as follows:

23.1 **507.3 Sprinklered, one-story.** The area of a one-story above-grade plane building
 23.2 of Group B, F, M, or S occupancy or a one-story above-grade plane Group A-4
 23.3 building, of other than Type V construction, shall not be limited when the building is
 23.4 provided with an automatic sprinkler system throughout in accordance with Section
 23.5 903.3.1.1 and is surrounded and adjoined by public ways or yards not less than 60
 23.6 feet (18,288 mm) in width.

23.7 Subp. 3. **IBC section 507.4.** IBC section 507.4 is amended to read as follows:

23.8 **507.4 Two story.** The area of a two-story above-grade plane building of Group B, F,
 23.9 M, or S occupancy shall not be limited when the building is equipped throughout with
 23.10 an automatic sprinkler system in accordance with section 903.3.1.1, and is surrounded
 23.11 and adjoined by public ways or yards not less than 60 feet (18,288 mm) in width.

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

23.13 **1305.0508 MIXED USE AND OCCUPANCY.**

23.14 ~~IBC Section 508.3.3.4 is amended by adding an exception as follows:~~

23.15 ~~**Exception:** An occupancy separation need not be provided between a child or adult~~
 23.16 ~~day care use and a Group A-3 church building.~~

23.17 IBC section 508.1 is amended by deleting exception 3.

23.18 **1305.0603 SECTION 603, COMBUSTIBLE MATERIALS IN TYPE I AND TYPE**
 23.19 **II CONSTRUCTION.**

23.20 IBC section 603.1 is amended by adding an item to the numerical list as follows:

23.21 26. When not exceeding 24 inches above the roof deck, wood is permitted to
 23.22 be used in roof construction for equipment support, building or roof system
 23.23 joints, skylight or mechanical equipment, curbs, cants, blocking and backing,
 23.24 and for parapet or roof edge construction.

23.25 **1305.0714 SECTION 714, PENETRATIONS.**

23.26 IBC section 714.4.1.2 is amended by modifying exception 7 as follows:

24.1 7. The ceiling membrane of 1- and 2-hour fire-resistance-rated
24.2 horizontal assemblies is permitted to be interrupted with the double
24.3 wood top plate of a wall assembly, provided that all penetrating
24.4 items through the double top plates are protected in accordance
24.5 with section 714.4.1.1.1 or 714.4.1.1.2.

24.6 **1305.0717 SECTION 717, DUCTS AND AIR TRANSFER OPENINGS.**

24.7 Subpart 1. IBC section 717.5.3. IBC section 717.5.3 is amended by adding exception
24.8 6 as follows:

24.9 6. Fire dampers, smoke dampers, and combination fire/smoke dampers are
24.10 not required in laboratory hood exhaust duct penetrations of shaft enclosures
24.11 where laboratory ventilation systems are installed in accordance with NFPA
24.12 45.

24.13 Subp. 2. IBC section 717.6.1. IBC section 717.6.1 is amended to read as follows:

24.14 **717.6.1 Through penetrations.** In occupancies other than Groups I-2 and I-3,
24.15 a duct constructed of approved materials in accordance with the International
24.16 Mechanical Code that penetrates a fire-resistance-rated floor or floor/ceiling
24.17 assembly that connects not more than two stories is permitted without a shaft
24.18 enclosure protection, provided a listed fire damper is installed at the floor line or
24.19 the duct is protected in accordance with section 714.4. For air transfer openings,
24.20 see section 712.1.8.

24.21 **Exceptions:**

24.22 1. A duct is permitted to penetrate three floors or less without a fire damper
24.23 at each floor, provided the duct meets all of the following requirements:
24.24 a. The duct shall be contained and located within the cavity of a wall
24.25 and shall be constructed of steel having a minimum wall thickness
24.26 of 0.0187 inches (0.4712 mm) (No. 26 gage) or the duct shall be

25.1 protected by an approved through-penetration firestop system installed
25.2 and tested in accordance with ASTM E 814 or UL 1479. The approved
25.3 through-penetration firestop system shall have an F rating or T rating
25.4 of not less than the required rating of the horizontal assembly being
25.5 penetrated.

25.6 b. The duct shall open into only one dwelling or sleeping unit and the
25.7 duct system shall be continuous from the unit to the exterior of the
25.8 building.

25.9 c. The duct shall not exceed 4-inch (102 mm) nominal diameter and the
25.10 total area of such ducts shall not exceed 100 square inches (0.065 m²)
25.11 in any 100 square feet (9.3 m²) of floor area.

25.12 d. The annular space around the duct is protected with materials that
25.13 prevent the passage of flame and hot gases sufficient to ignite cotton
25.14 waste where subjected to ASTM E 119 or UL 263 time temperature
25.15 conditions under a minimum positive pressure differential of 0.01 inch
25.16 (2.49 Pa) of water at the location of the penetration for the time period
25.17 equivalent to the fire-resistance rating of the construction penetrated.

25.18 e. Grille openings located in a ceiling of a fire-resistance-rated
25.19 floor/ceiling or roof/ceiling assembly shall be protected with a listed
25.20 ceiling radiation damper installed in accordance with section 717.6.2.1.

25.21 2. In Groups I-2 and I-3 occupancies, a duct constructed of approved
25.22 materials in accordance with the International Mechanical Code that
25.23 penetrates a fire-resistance-rated floor or floor/ceiling assembly that connects
25.24 not more than two stories is permitted without a shaft enclosure protection,
25.25 provided a listed smoke/fire damper is installed at the floor line.

26.1 **1305.0901 SECTION 901, GENERAL.**

26.2 **IBC section 901.6.2, Fire alarm systems**, is amended by deleting the section in its
 26.3 entirety.

26.4 **1305.0903 ~~[F]~~ SECTION 903, AUTOMATIC SPRINKLER SYSTEMS.**

26.5 Subpart 1. [See repealer.]

26.6 Subp. 1a. **IBC ~~[F]~~ section ~~903.2.7~~ 903.2.8**. IBC ~~[F]~~ section ~~903.2.7~~ 903.2.8 is
 26.7 amended to read as follows:

26.8 **~~903.2.7 Group R.~~** An automatic sprinkler system installed in accordance with
 26.9 section ~~903.3.1~~ shall be provided throughout all buildings containing a Group R
 26.10 occupancy where one of the following conditions exists:

26.11 1. The combined area on all floors, including mezzanines, exceeds 9,250 square
 26.12 feet (859.3 m²); or

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

26.14 **Exceptions:**

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

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

26.19 3. ~~Attached garages need not be sprinklered throughout if a dry sprinkler is installed~~
 26.20 ~~within 5 feet (1524 mm) of the door opening between the garage and attached~~
 26.21 ~~residence.~~

26.22 ~~For the purposes of this section, fire walls, party walls, or attached multiple fire-resistive~~
 26.23 ~~exterior walls shall not constitute separate buildings.~~

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

27.1 **903.2.8 Group R.** An automatic sprinkler system installed in accordance with
27.2 section 903.3 shall be provided throughout all buildings with a Group R fire area.

27.3 **Exceptions:**

27.4 1. A Group R-1 or R-2 fire area or combined fire areas less than or equal to
27.5 9,250 square feet of building area. For the purposes of this provision, fire
27.6 walls, party walls, or attached multiple fire-resistive exterior walls shall
27.7 only create separate buildings where providing separation from occupancies
27.8 other than Group R.

27.9 2. Group R-3 or R-4 dwelling unit with less than 4,500 square feet of
27.10 building area, excluding garages.

27.11 3. An automatic fire sprinkler system shall not be required if additions or
27.12 alterations are made to existing Group R-3 or R-4 buildings or a portion
27.13 thereof that do not have an automatic sprinkler system installed, unless
27.14 required by a Minnesota license.

27.15 **903.2.8.1 Group R-3 or R-4 congregate residences.** An automatic sprinkler
27.16 system installed in accordance with section 903.3.1.3 shall be permitted in
27.17 Group R-3 or R-4 congregate residences with 16 or fewer residents.

27.18 **903.2.8.2 State licensed facilities.** Group R-3 or R-4 occupancies
27.19 containing facilities licensed by the state of Minnesota shall be provided
27.20 with an automatic sprinkler system as required by applicable licensing
27.21 provisions or this section, whichever is more restrictive.

27.22 **903.2.8.3 Residential hospice facilities.** An automatic sprinkler system
27.23 installed in accordance with NFPA 13 shall be provided throughout all
27.24 buildings with a Group R-3 or R-4 fire area containing a residential hospice
27.25 facility.

28.1 **Exception:** An automatic sprinkler system installed in accordance
28.2 with section 903.3.1.2 or 903.3.1.3 shall be allowed, provided that all
28.3 habitable spaces and closets are sprinklered.

28.4 Subp. 1b. ~~IBC [F] section 903.2.12.1~~ 903.2.11.4. IBC [F] section 903.2.12.1
28.5 903.2.11.4 is amended to read by deleting the section in its entirety and replacing it with
28.6 the following:

28.7 ~~903.2.12.1~~ 903.2.11.4 Fire protection for exhaust systems. Any portion of
28.8 an exhaust system utilizing combustible components or having the potential
28.9 for combustible residue build-up on the inside or where required by other
28.10 sections of this code, where the duct cross-sectional area is greater than or
28.11 equal to 75 square inches (480 cm²), shall be provided with an automatic
28.12 extinguishing system within the duct and at the duct intake, hood, enclosure,
28.13 or canopy, or shall be constructed of material listed for use without sprinkler
28.14 protection. Where required by the International Mechanical Code, automatic
28.15 sprinklers shall be provided in ducts having a cross-sectional area of 75
28.16 square inches (480 cm²) or more and that convey flammable or combustible
28.17 components or that have the potential for combustible residue buildup on
28.18 the inside. When sprinkler protection is installed, and where the application
28.19 of water constitutes a serious life or fire hazard, a means shall be provided
28.20 to prevent water accumulation in the duct or the flow of water back to a
28.21 process where the application of water constitutes a serious life or fire hazard
28.22 equipment, appliances, machinery, or any apparatus.

28.23 Subp. 2. [Repealed, 32 SR 7]

28.24 Subp. 2a. IBC [F] section 903.3.1. IBC [F] section 903.3.1 is amended as follows:

29.1 **903.3.1 Standards.** Sprinkler systems shall be designed and installed in
29.2 accordance with section 903.3.1.1 unless otherwise permitted by sections
29.3 903.3.1.2 and 903.3.1.3 and other chapters of this code, as applicable.
29.4 Automatic sprinkler systems installed in state-licensed or state-registered
29.5 facilities shall be installed in accordance with this code and by the appropriate
29.6 licensing or registration provisions of other Minnesota state agencies.

29.7 Subp. 2b. ~~IBC [F] section 903.3.1.1.1.~~ IBC [F] section 903.3.1.1.1 is amended by
29.8 adding a new item 7 to the list of exempt locations to read as follows:

29.9 7. Sprinkler protection shall not be installed in elevator shafts, elevator pits,
29.10 or elevator machine rooms.

29.11 **Exception to #7:** Health care occupancies that are licensed by the
29.12 Minnesota Department of Health or that participate in Title XVIII
29.13 (Medicare) or Title XIX (Medicaid) of the Social Security Act.

29.14 Subp. 3. [Repealed, 32 SR 7]

29.15 Subp. 3a. ~~[F] section 903.3.1.2.1.~~ IBC [F] section 903.3.1.3. IBC [F] section
29.16 ~~903.3.1.2.1~~ 903.3.1.3 is amended to read as follows:

29.17 ~~**903.3.1.2.1 Protection of decks and balconies.** Decks and balconies~~
29.18 ~~greater than 6 feet (1.8 m) above grade, greater than 4 feet (1.2 m) deep,~~
29.19 ~~and with an area greater than 40 square feet (3.72 m²) attached to new~~
29.20 ~~Group R-1 and R-2 occupancy buildings protected in accordance with~~
29.21 ~~section 903.3.1.2 that are three or more stories in height and with 30~~
29.22 ~~or more units shall be protected with sprinklers under the balcony or~~
29.23 ~~deck framing and under attic caves when both of the following two~~
29.24 ~~conditions exist:~~

29.25 ~~1. The building has an unsprinklered attic; and~~

29.26 ~~2. The building has combustible siding.~~

30.1 **903.3.1.3 NFPA 13D sprinkler systems.** Automatic sprinkler systems
30.2 installed in Group R-3 and R-4 occupancies shall be permitted to be
30.3 installed throughout in accordance with NFPA 13D.

30.4 Subp. 4. IBC [F] section ~~903.3.1~~ **903.3.1.4.** IBC [F] section 903.3.1 is amended by
30.5 adding a section to read as follows:

30.6 **903.3.1.4 Buildings of undetermined use.** When fire sprinkler systems
30.7 are required in buildings of undetermined use, they shall be designed and
30.8 installed to have a sprinkler density of not less than that required for an
30.9 Ordinary Hazard Group 2 use with a minimum design area of 3,000 square
30.10 feet (279 m²). Use is considered undetermined if not specified at the time
30.11 a permit is issued. Where a subsequent occupancy requires a system with
30.12 greater capability, it shall be the responsibility of the owner to upgrade the
30.13 system to the required density for the new hazard, use, or occupancy.

30.14 Subp. 5. IBC [F] section ~~903.3.1~~ **903.3.1.5.** IBC [F] section 903.3.1 is amended
30.15 by adding a subsection to read as follows:

30.16 **903.3.1.5 Special sprinkler design criteria.** When fire sprinkler systems
30.17 are required in areas containing the following uses, they shall be designed
30.18 and installed to have a sprinkler density of not less than that required for
30.19 an Ordinary Hazard Group 2 use:

- 30.20 1. Chemistry labs; or
30.21 2. Wrestling rooms or gymnastic rooms.

30.22 Subp. 5a. IBC [F] section ~~903.3.1~~ **903.3.1.6.** IBC [F] section 903.3.1 is amended
30.23 by adding a subsection to read as follows:

30.24 **903.3.1.6 Modifications to sprinkler standards.** The sprinkler installation
30.25 standards as referenced in sections 903.3.1.1, 903.3.1.2, and 903.3.1.3 are
30.26 modified as follows:

31.1 **903.3.1.6.1 Hose stream requirements.** When, in the opinion of
31.2 the fire chief, an adequate alternate water supply for hose stream
31.3 requirements is provided or available, the water supply requirements
31.4 for the sprinkler system hose stream demands may be modified.

31.5 ~~**903.3.1.6.2 Elevator shafts and equipment.** Sprinkler protection shall~~
31.6 ~~not be installed in elevator shafts, elevator pits, or elevator machine~~
31.7 ~~rooms.~~

31.8 **903.3.1.6.3 Swimming pools.** Sprinkler protection need not be
31.9 provided on the ceiling of rooms containing swimming pools when
31.10 the pool area is used exclusively for swimming purposes and when
31.11 sprinklers are provided around the perimeter of the pool area.

31.12 **903.3.1.6.4 NFPA 13 modifications.**

31.13 Sections 8.15.8.2 and 8.17.2.5 of NFPA 13 are revised to read:

31.14 **8.15.8.2 Linen closets and pantries.** Sprinklers are not required in linen
31.15 closets and pantries within dwelling units that meet the following conditions:

- 31.16 1. The area of the space does not exceed 12 square feet (1.1 m²);
- 31.17 2. the least dimension does not exceed 3 feet (0.9 m);
- 31.18 3. the walls and materials are surfaced with noncombustible or limited
31.19 combustible materials; and
- 31.20 4. the closet or pantry contains no mechanical equipment, electrical
31.21 equipment, or electrical appliances.

31.22 **8.17.2.5 Valves.**

31.23 **8.17.2.5.1 Fire department connection.** A listed check valve shall be
31.24 installed in each fire department connection.

31.25 **8.17.2.5.1.1 Maximum pipe length.** There shall be a maximum of 25
31.26 feet (7.6 m) of pipe between the check valve and the fire department
31.27 connection inlet.

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

32.3 **8.17.2.5.1.2 Check valve location.** The check valve shall be located to
32.4 minimize freezing potential.

32.5 **903.3.1.6.5 Vestibules.** Sprinkler protection is not required in vestibules
32.6 that meet all of the following conditions:

- 32.7 1. the vestibule is 225 square feet or less in floor area;
- 32.8 2. the vestibule is of noncombustible or limited combustible
32.9 construction;
- 32.10 3. the vestibule has glazing allowing vision into vestibule;
- 32.11 4. the vestibule's only purpose is ingress and egress; and
- 32.12 5. the vestibule contains no fueled equipment, flammable or
32.13 combustible liquids, or furniture.

32.14 Subp. 6. [Repealed, 32 SR 7]

32.15 Subp. 6a. IBC [F] section 903.3.7. IBC [F] section 903.3 is amended by adding
32.16 a subsection to read as follows:

32.17 **903.3.7 Sprinkler system design pressure safety margin.** For new sprinkler
32.18 systems or additions to existing sprinkler systems, the available water supply
32.19 shall exceed the sprinkler system demand, including hose stream requirements,
32.20 by 5 psi (0.34 bars) or more.

32.21 Subp. 7. IBC [F] section 903.4. IBC [F] section 903.4 is amended by adding an
32.22 exception to read as follows:

32.23 8. For existing sprinkler systems, monitoring is required when the number of
32.24 sprinklers is 100 or more.

32.25 Subp. 8. IBC [F] section 903.4 903.4.4. IBC [F] section 903.4 is amended by adding
32.26 a section to read as follows:

33.1 **903.4.4 Valve security.** All valves controlling water supplies for automatic
33.2 sprinklers shall be locked or secured in the open position.

33.3 **Exception:** Valves located in a room or space when access is limited to
33.4 essential personnel only.

33.5 **1305.0905 [F] SECTION 905, STANDPIPE SYSTEMS.**

33.6 Subpart 1. **IBC [F] section 905.2 905.2.1.** IBC [F] section 905.2 is amended by
33.7 adding a ~~subsection~~ subsections to read as follows:

33.8 **905.2.1 Modification to standards.** In buildings other than high rise that are
33.9 protected throughout by an automatic sprinkler system installed in accordance
33.10 with sections 903.3.1.1 and 903.3.1.2, a Class I or III standpipe system need
33.11 only meet the pressure requirements for the sprinkler system when such systems
33.12 comply with sections 905.2.1.1 through 905.2.1.5:

33.13 **905.2.1.1 Municipal water supply.** A municipal water supply capable of
33.14 supplying the required standpipe flow rate with a residual pressure not less
33.15 than 20 psi (1.4 bars) through a fire hydrant shall be provided. A fire hydrant
33.16 shall be located within 300 feet (91 m) of the building's fire department
33.17 connection.

33.18 **905.2.1.2 System testing and pipe size.** The standpipe system shall be
33.19 able to provide the pressure and flow rate required by NFPA 14 when the
33.20 standpipe system is supported by local fire department apparatus through
33.21 the fire department connection as verified with hydraulic calculations. The
33.22 hydraulic calculations are to be performed between the hydraulically most
33.23 demanding standpipe hose connection and the fire department connection.
33.24 Pipe sizes shall not be less than the minimum requirements in NFPA 14.

33.25 **905.2.1.3 Design pressure.** A maximum design pressure of 150 psi (10.3
33.26 bars) is permitted at the fire department connection when the standpipe is
33.27 supported by local fire department apparatus.

34.1 **905.2.1.4 Hose connection.** At least one 2-1/2 inch (64 mm) hose connection
34.2 shall be provided on the exterior of the building at the fire department
34.3 connection for each 250 gpm (980 L/min) of required standpipe flow.

34.4 **905.2.1.5 Automatic sprinkler system demand.** The automatic sprinkler
34.5 system demand, including the inside hose stream demand from NFPA 13, is
34.6 to be provided by the municipal water supply system without requiring fire
34.7 department pumping into the system.

34.8 Subp. 2. **IBC [F] section 905.3.2 905.3.2.1.** IBC [F] section 905.3.2 is amended by
34.9 adding a ~~section~~ subsection to read as follows:

34.10 **905.3.2.1 Group A exhibition.** Class III automatic standpipes shall be
34.11 provided in Group A-3 Occupancies where the floor area used for exhibition
34.12 exceeds 12,000 square feet (1115 m²).

34.13 Subp. 3. **IBC [F] section 905.3.4.** IBC [F] sections 905.3.4 and 905.3.4.1 are
34.14 amended by deleting the sections in their entirety.

34.15 Subp. 4. [Repealed, 32 SR 7]

34.16 Subp. 5. [Repealed; 32 SR 7]

34.17 Subp. 6. **IBC [F] section 905.3.8 905.3.9.** IBC [F] section 905.3 is amended by
34.18 adding a subsection to read as follows:

34.19 **905.3.8 905.3.9 Detention and correctional facilities.** Regardless of the height
34.20 of the building or number of stories, every building in a Group I-3 detention and
34.21 correctional facility, where 50 or more persons are under restraint or security
34.22 under Occupancy Condition 3, 4 or 5, shall be provided with a Class III automatic
34.23 wet or semiautomatic dry standpipe system.

34.24 **Exception:** Combined systems meeting the provisions of section 905.2 may
34.25 be used.

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

35.3 Standpipes shall be located in accordance with section 905. In addition, standpipes
 35.4 shall be located so that it will not be necessary to extend hose lines through smoke barriers.
 35.5 When located in cell complexes, standpipes may be located in secured pipe chases.

35.6 Subp. 6a. IBC [F] section 905.3.9 905.3.10. IBC [F] section 905.3 is amended
 35.7 by adding a subsection to read as follows:

35.8 905.3.9 905.3.10 Group R-2 occupancies small hose connections. ~~Class III wet~~
 35.9 ~~standpipes~~ Small hose connections shall be installed in Group R-2 occupancies
 35.10 three or more stories in height where any portion of the building's interior area
 35.11 is more than 200 feet (60,960 mm) of travel, vertically or horizontally, from
 35.12 the nearest point of fire department vehicle access. ~~Standpipes~~ Small hose
 35.13 connections required by this section shall ~~be installed in enclosed stairways.~~
 35.14 comply with the following:

- 35.15 1. Supply one 1-1/2-inch (38-mm) fire hose valve at each floor level or
 35.16 intermediate stair landing in each required and enclosed stairway.
- 35.17 2. The water for the small hose connections shall be supplied separately
 35.18 from the sprinkler system protecting that area so that the small hose
 35.19 connections are still functional if the water supply to the sprinkler system is
 35.20 shut down following fire extinguishment.
- 35.21 3. The piping shall be a minimum of 1-1/2 inch (38 mm).
- 35.22 4. The water shall be supplied from a wet-pipe sprinkler system only.
- 35.23 5. The piping shall be comprised of metallic piping and hose valve
 35.24 connections.

35.25 Permanent signage shall be required which reads "Fire Department Overhaul Hose
 35.26 Connection" at each connection in the building. If a separate standpipe system is provided,
 35.27 a sign shall also be provided at the exterior FD connection.

36.1 Subp. 7. IBC [F] section 905.5.1. IBC [F] section 905.5.1 is deleted.

36.2 **1305.0906 SECTION 906, PORTABLE FIRE EXTINGUISHERS.**

36.3 IBC [F] section 906.1 is amended to read as follows:

36.4 906.1 General. Portable fire extinguishers shall be provided in occupancies and
36.5 locations as required by the Minnesota State Fire Code.

36.6 **1305.0907 [F] SECTION 907, FIRE ALARM AND DETECTION SYSTEMS.**

36.7 Subpart 1. [See repealer.]

36.8 Subp. 1a. IBC [F] section 907.2. IBC [F] section 907.2 is amended to read as follows:

36.9 907.2 Where required in - new buildings and occupancies structures. An approved
36.10 manual, automatic, or manual and automatic fire alarm system shall be provided in
36.11 new buildings and occupancies in accordance with sections 907.2.1 through 907.2.24
36.12 and NFPA 72. For the purposes of sections 907.2.1 through 907.2.24, fire barrier
36.13 walls or fire walls shall not define separate buildings. In buildings containing mixed
36.14 occupancies that are designed as separated uses in accordance with section ~~508.3.3~~
36.15 508.4, fire alarm and detection systems need only be installed in those occupancies
36.16 where required by this section.

36.17 **Exception:** In areas protected by an approved, supervised automatic sprinkler
36.18 system installed in accordance with section 903.3.1.1 or 903.3.1.2, automatic fire
36.19 detectors required by section 907.2 need not be provided. Where section 907.2
36.20 requires smoke detectors, such protection shall be installed.

36.21 Subp. 2. [Repealed, 32 SR 7]

36.22 Subp. 2a. IBC [F] section 907.2.1. IBC [F] section 907.2.1 is amended to read
36.23 as follows:

36.24 907.2.1 Group A, general. A fire alarm system shall be installed in accordance
36.25 with sections 907.2.1 through 907.2.1.3 in Group A occupancies having an
36.26 occupant load of 300 or more.

- 37.1 **Exceptions:**
- 37.2 1. Assembly areas used solely for worship purposes.
- 37.3 2. A fire alarm system is not required when an approved automatic
- 37.4 fire-extinguishing system is installed throughout the building.
- 37.5 3. Assembly uses within Group E occupancies shall have alarms as required
- 37.6 for the Group E occupancy.
- 37.7 4. Group A-5 occupancies. See also section 907.2.11.

37.8 Subp. 3. **IBC [F] section 907.2.1.1.** IBC [F] section 907.2.1.1 is amended to read

37.9 as follows:

37.10 **907.2.1.1 Initiation.** Initiation of the fire alarm system shall be by automatic

37.11 means. Approved automatic fire detectors shall be installed in laundry

37.12 rooms, boiler and furnace rooms, mechanical and electrical rooms, shops,

37.13 kitchens, trash collection rooms, storage rooms, and similar areas.

37.14 Subp. 4. **IBC [F] section 907.2.1.2.** IBC [F] section 907.2.1.2 is amended to read

37.15 as follows:

37.16 **907.2.1.2 Notification.** The required fire alarm system shall activate an

37.17 audible and visible notification appliance at a constantly attended location

37.18 within the building for the purposes of initiating emergency action. A

37.19 presignal feature and positive alarm sequencing in accordance with NFPA

37.20 72 are permitted.

37.21 Occupant notification shall be by means of voice announcements, either live

37.22 or prerecorded, initiated by the person in the constantly attended location.

37.23 **Exception:** Where no constantly attended location exists, an automatic

37.24 fire alarm system providing a general evacuation signal or an approved

37.25 emergency voice/alarm communications system is permitted.

38.1 Subp. 5. **IBC [F] section 907.2.1.3.** IBC [F] section 907.2.1 is amended by adding a
38.2 section to read as follows:

38.3 **907.2.1.3 System initiation in Group A occupancies with an occupant**
38.4 **load of 1,000 or more.** Activation of the fire alarm system in Group A
38.5 occupancies with an occupant load of 1,000 or more shall immediately
38.6 initiate an approved prerecorded message announcement using an approved
38.7 emergency voice/alarm communications system in accordance with NFPA
38.8 72.

38.9 **Exception:** Where approved, the prerecorded announcement is allowed
38.10 to be manually deactivated for a period of time, not to exceed 3 minutes,
38.11 for the sole purpose of allowing a live voice announcement from an
38.12 approved constantly attended location.

38.13 Subp. 6. **IBC [F] section 907.2.2.** IBC [F] section 907.2.2 is amended to read as
38.14 follows:

38.15 **907.2.2 Group B, general.** A fire alarm system shall be installed in accordance
38.16 with sections 907.2.2 through 907.2.2.3 in Group B occupancies where:

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

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

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

39.1 Subp. 7. **IBC [F] section ~~907.2.2~~ 907.2.2.1.** IBC [F] section 907.2.2.1 is amended
39.2 ~~by adding a section to read as follows:~~

39.3 **907.2.2.1 Initiation.** Initiation of the fire alarm system shall be by automatic
39.4 means. Approved automatic fire detectors shall be provided in boiler and
39.5 furnace rooms, shops, kitchens, mechanical and electrical rooms, trash
39.6 collection rooms, storage rooms and similar areas. In ~~outpatient clinics~~
39.7 ambulatory care facilities, initiation of the fire alarm system shall also be by
39.8 manual means.

39.9 Subp. 8. **IBC [F] section ~~907.2.2~~ 907.2.2.2.** IBC [F] section 907.2.2 is amended by
39.10 adding a section to read as follows:

39.11 **907.2.2.2 Notification.** Activation of the fire alarm system shall initiate a
39.12 general evacuation signal.

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

39.15 Subp. 9. **IBC [F] section ~~907.2.2~~ 907.2.2.3.** IBC [F] section 907.2.2 is amended by
39.16 adding a section to read as follows:

39.17 **907.2.2.3 ~~Outpatient clinics~~ Ambulatory care facilities.** Corridors ~~in~~
39.18 ~~outpatient clinics and spaces open to the corridors~~ and rooms or spaces
39.19 open to corridors within an ambulatory care facility shall be protected by an
39.20 automatic smoke detection system.

39.21 Subp. 10. **IBC [F] section 907.2.3.** IBC [F] section 907.2.3 is amended to read
39.22 as follows:

39.23 **907.2.3 Group E, general.** A fire alarm system shall be installed in accordance
39.24 with sections 907.2.3 through 907.2.3.3 in Group E occupancies having an
39.25 occupant load of 50 or more.

40.1 Subp. 11. IBC [F] section 907.2.3 907.2.3.1. IBC [F] section 907.2.3 is amended by
40.2 adding a section to read as follows:

40.3 **907.2.3.1 Initiation.** Initiation of the fire alarm system shall be by manual
40.4 and automatic means. Approved automatic fire detectors shall be provided
40.5 in laundry rooms, boiler and furnace rooms, mechanical and electrical
40.6 rooms, shops, laboratories, kitchens, locker rooms, janitors' closets, trash
40.7 collection rooms, storage rooms, lounges, and similar areas.

40.8 **Exceptions:**

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

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

40.17 Subp. 12. IBC [F] section 907.2.3 907.2.3.2. IBC [F] section 907.2.3 is amended by
40.18 adding a ~~subsection~~ section to read as follows:

40.19 **907.2.3.2 Travel through adjoining rooms.** Where the only means of
40.20 egress travel from an interior room or rooms having an aggregate occupant
40.21 load of more than 10 occupants is through an adjoining or intervening
40.22 room, automatic smoke detectors shall be installed throughout the common
40.23 atmosphere through which the path of egress travel passes.

40.24 **Exception:** In buildings that are protected throughout by an approved automatic
40.25 sprinkler system installed in accordance with section 903.3.1.1, smoke detectors are
40.26 not required in intervening or adjoining rooms.

41.1 Subp. 13. **IBC [F] section ~~907.2.3~~ 907.2.3.3.** IBC [F] section 907.2.3 is amended by
41.2 adding a section to read as follows:

41.3 **907.2.3.3 Notification.** Activation of the fire alarm system or automatic
41.4 sprinkler system shall initiate a general evacuation signal.

41.5 Subp. 14. **IBC [F] section 907.2.4.** IBC [F] section 907.2.4 is amended to read
41.6 as follows:

41.7 **907.2.4 Group F, general.** A fire alarm system shall be installed in accordance
41.8 with sections 907.2.4 through 907.2.4.2 in Group F occupancies that are two or
41.9 more stories in height and have an occupant load of 500 or more above or below
41.10 the lowest level of exit discharge.

41.11 **Exception:** A fire alarm system is not required when an approved automatic
41.12 fire extinguishing system is installed throughout the building.

41.13 Subp. 15. **IBC [F] section ~~907.2.4~~ 907.2.4.1.** IBC [F] section 907.2.4 is amended by
41.14 adding a section to read as follows:

41.15 **907.2.4.1 Initiation.** Initiation of the fire alarm system shall be by manual
41.16 and automatic means. Approved automatic fire detectors shall be provided
41.17 in boiler and furnace rooms, trash collection rooms, kitchens, mechanical
41.18 and electrical rooms, and similar areas.

41.19 Subp. 16. **IBC [F] section ~~907.2.4~~ 907.2.4.2.** IBC [F] section 907.2.4 is amended by
41.20 adding a section to read as follows:

41.21 **907.2.4.2 Notification.** Activation of the fire alarm system shall initiate a
41.22 general evacuation signal.

41.23 Subp. 17. **IBC [F] section 907.2.5.** IBC [F] section 907.2.5 is amended to read
41.24 as follows:

41.25 **907.2.5 Group H, general.** A fire alarm system shall be installed in accordance
41.26 with sections 907.2.5 through 907.2.5.2 in Group H-5 occupancies, occupancies

42.1 used for the manufacture of organic coatings, and, when required by chapters ~~37,~~
42.2 ~~39 and 40~~ 60, 62, and 63 of the IFC at the following locations:

- 42.3 1. Rooms or areas where highly toxic compressed gases are stored or used;
- 42.4 2. Rooms or areas where Class I, II or III organic peroxides are stored; and
- 42.5 3. Liquid and solid oxidizer storage areas.

42.6 Subp. 18. IBC [F] section 907.2.5 907.2.5.1. IBC [F] section 907.2.5 is amended by
42.7 adding a section to read as follows:

42.8 **907.2.5.1 Initiation.** Initiation of the fire alarm system in Group H-5
42.9 Occupancies and in occupancies used for the manufacture of organic
42.10 coatings shall be by manual means. Initiation of fire alarm systems installed
42.11 for highly toxic gases, organic peroxides and oxidizers shall be by automatic
42.12 means, as specified in chapters ~~37, 39 and 40~~ 60, 62, and 63 of the 2012 IFC.

42.13 Subp. 19. IBC [F] section 907.2.5 907.2.5.2. IBC [F] section 907.2.5 is amended by
42.14 adding a section to read as follows:

42.15 **907.2.5.2 Notification.** Activation of the fire alarm system in Group H-5
42.16 Occupancies and in occupancies used for the manufacture of organic
42.17 coatings shall initiate a general evacuation signal. Activation of the
42.18 automatic detection systems installed for highly toxic gases, organic
42.19 peroxides, and oxidizers shall sound a local alarm.

42.20 Subp. 20. [Repealed, 32 SR 7]

42.21 Subp. 21. [Repealed, 32 SR 7]

42.22 Subp. 22. IBC [F] section 907.2.6. IBC [F] section 907.2.6 and all subsections are
42.23 deleted in their entirety and replaced with the following:

42.24 **907.2.6 Group I, general.** A fire alarm system shall be installed in accordance
42.25 with sections 907.2.6 through ~~907.2.6.4.3~~ 907.2.6.4.2 in Group I occupancies.

43.1 ~~**907.2.6.1 Initiation.** Initiation of the fire alarm system shall be by manual and automatic~~
43.2 ~~means. Approved automatic fire detectors shall be installed in laundry and soiled linen~~
43.3 ~~rooms, boiler and furnace rooms, mechanical and electrical rooms, shops, laboratories,~~
43.4 ~~kitchens, locker rooms, janitors' closets, trash-collection rooms, storage rooms, lounges,~~
43.5 ~~gift shops, and similar areas. Automatic smoke detectors shall be provided in waiting~~
43.6 ~~areas that are open to corridors.~~

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

43.12 ~~**907.2.6.2 Notification.** Activation of the fire alarm system or automatic sprinkler system~~
43.13 ~~shall initiate a general evacuation signal. In addition, activation of the fire alarm system~~
43.14 ~~shall immediately transmit an alarm to an approved central station or remote station service.~~

43.15 ~~**Exceptions:**~~

43.16 ~~1. In lieu of audible notification appliances, visible notification appliances shall be~~
43.17 ~~allowed to be used in critical care areas.~~

43.18 ~~2. Where occupants are incapable of evacuating themselves because of age,~~
43.19 ~~physical/mental disabilities, or physical restraint, only the attendants or other~~
43.20 ~~personnel required to evacuate occupants from a zone, area, floor or building shall~~
43.21 ~~be required to be notified. This notification shall include means to readily identify~~
43.22 ~~the zone, area, floor or building in need of evacuation.~~

43.23 ~~**907.2.6.3 Group I-2 Occupancies.** Corridors in hospitals, nursing homes (both~~
43.24 ~~intermediate care and skilled nursing facilities), board and care homes and detoxification~~
43.25 ~~facilities and spaces open to the corridors shall be protected by an automatic~~
43.26 ~~smoke-detection system.~~

44.1 ~~907.2.6.3.1 Patient room smoke detectors.~~ Smoke detectors that receive their primary
44.2 power from the building wiring shall be installed in patient sleeping rooms of hospitals
44.3 and nursing homes. Actuation of such detectors shall cause a visual display on the corridor
44.4 side of the room in which the detector is located and shall cause an audible and visual
44.5 alarm at the nurse's station attending the room.

44.6 ~~907.2.6.4 Group I-3 Occupancies.~~ Group I-3 occupancies shall be provided with a fire
44.7 alarm system installed for alerting staff.

44.8 ~~907.2.6.4.1 Initiation.~~ Initiation of the fire alarm system shall be by manual and automatic
44.9 means. Approved automatic fire detectors shall be installed in laundry and soiled linen
44.10 rooms, boiler and furnace rooms, mechanical and electrical rooms, shops, laboratories,
44.11 kitchens, locker rooms, janitors' closets, trash-collection rooms, storage rooms, lounges,
44.12 gift shops, commissaries and similar areas. Actuation of an automatic fire-extinguishing
44.13 system, a manual fire alarm box or a fire detector shall initiate an approved fire alarm
44.14 signal, which automatically notifies staff. Presignal systems shall not be used.

44.15 ~~907.2.6.4.2 Manual fire alarm boxes.~~ Manual fire alarm boxes are not required to be
44.16 located in accordance with Section 907.4 where the fire alarm boxes are provided at
44.17 staff-attended locations having direct supervision over areas where manual fire alarm
44.18 boxes have been omitted.

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

44.22 ~~907.2.6.4.3 Smoke detectors.~~ An approved automatic smoke-detection system shall be
44.23 installed throughout resident housing areas, including sleeping areas and contiguous day
44.24 rooms, group activity spaces and other common spaces normally accessible to residents.

44.25 **Exceptions:**

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

45.4 ~~2. Smoke detectors are not required in sleeping rooms with four or fewer occupants~~
45.5 ~~in smoke compartments that are equipped throughout with an approved automatic~~
45.6 ~~sprinkler system.~~

45.7 907.2.6.1 Group I-1 occupancies-general. A manual and automatic fire
45.8 alarm system shall be installed in Group I-1 occupancies in accordance with
45.9 sections 907.2.6.1 through 907.2.6.1.3.

45.10 907.2.6.1.1 Initiation. Initiation of the fire alarm system shall be by
45.11 manual and automatic means. Approved automatic fire detectors shall
45.12 be installed in laundry and soiled linen rooms, boiler and furnace
45.13 rooms, mechanical and electrical rooms, shops, laboratories, kitchens,
45.14 locker rooms, janitors' closets, trash-collection rooms, storage rooms,
45.15 lounges, gift shops, and similar areas. Automatic smoke detectors shall
45.16 be provided in corridors and areas that are open to corridors.

45.17 Exception: Manual fire alarm boxes in patient sleeping areas of
45.18 Group I-1 occupancies shall not be required at exits if located at
45.19 all nurses' stations or other constantly attended staff locations,
45.20 provided such fire alarm boxes are visible and continuously
45.21 accessible and provided that travel distances required by section
45.22 907.4.2 are not exceeded.

45.23 907.2.6.1.2 Notification. Activation of the fire alarm system or
45.24 automatic sprinkler system shall initiate a general evacuation signal. In
45.25 addition, activation of the fire alarm system shall immediately transmit
45.26 an alarm to an approved central station or remote station service.

45.27 Exceptions:

46.1 1. In lieu of audible notification appliances, visible notification
46.2 appliances shall be allowed to be used in critical care areas.
46.3 2. Where occupants are incapable of evacuating themselves
46.4 because of age, physical/mental disabilities, or physical restraint,
46.5 only the attendants or other personnel required to evacuate
46.6 occupants from a zone, area, floor, or building shall be required to
46.7 be notified. This notification shall include means to readily identify
46.8 the zone, area, floor, or building in need of evacuation.

46.9 **907.2.6.1.3 Sleeping room smoke alarms.** Smoke alarms shall be
46.10 installed in resident sleeping rooms in accordance with section
46.11 907.2.11.1.

46.12 **907.2.6.2 Group I-2 occupancies-general.** A manual and automatic fire
46.13 alarm system shall be installed in Group I-2 occupancies in accordance with
46.14 sections 907.2.6.2 through 907.2.6.2.4.

46.15 **907.2.6.2.1 Initiation.** Initiation of the fire alarm system shall be by
46.16 manual and automatic means. Approved automatic fire detectors shall
46.17 be installed in laundry and soiled linen rooms, boiler and furnace
46.18 rooms, mechanical and electrical rooms, shops, laboratories, kitchens,
46.19 locker rooms, janitors' closets, trash-collection rooms, storage rooms,
46.20 lounges, gift shops, and similar areas. Hospitals, nursing homes (both
46.21 intermediate care and skilled nursing facilities), board and care homes,
46.22 and detoxification facilities shall be provided with smoke detection
46.23 throughout the corridor and areas open to the corridors, other than
46.24 nurses' stations.

46.25 **Exceptions:**

46.26 1. Corridor smoke detection shall not be required where the
46.27 sleeping room smoke detectors required in section 907.2.6.3 are

47.1 connected to an approved fire alarm system and activate a general
47.2 evacuation signal.

47.3 2. Manual fire alarm boxes shall not be required at exits from
47.4 patient sleeping areas if located at all nurses' stations or other
47.5 constantly attended staff locations, provided such fire alarm boxes
47.6 are visible and continuously accessible and provided that travel
47.7 distances horizontally on the same floor shall not exceed 200 feet
47.8 to reach a manual fire alarm box.

47.9 **907.2.6.2.2 Notification.** Activation of the fire alarm system or
47.10 automatic sprinkler system shall initiate a signal that is distinctive from
47.11 audible signals used for other purposes in the same building. Such
47.12 signal is intended to notify staff and need not meet the minimum sound
47.13 pressure levels required for general evacuation fire alarm notification. In
47.14 addition, activation of the fire alarm system shall immediately transmit
47.15 an alarm to an approved central station or remote station service.

47.16 **Exceptions:**

- 47.17 1. In lieu of audible notification appliances, visible notification
47.18 appliances shall be allowed to be used in critical care areas.
- 47.19 2. Where occupants are incapable of evacuating themselves
47.20 because of age, physical/mental disabilities, or physical restraint,
47.21 only the attendants or other personnel required to evacuate
47.22 occupants from a zone, area, floor, or building shall be required to
47.23 be notified. This notification shall include means to readily identify
47.24 the zone, area, floor, or building in need of evacuation.
- 47.25 3. Where total evacuation of occupants is impractical due to
47.26 building configuration, only the occupants in the affected zones
47.27 shall be initially notified. Provisions shall be made to selectively

48.1 notify occupants in other zones to afford orderly evacuation of
48.2 the entire building.

48.3 **907.2.6.2.3 Patient room smoke detectors.** Smoke detectors shall be
48.4 installed in patient sleeping rooms of hospitals and nursing homes. Such
48.5 detectors' primary power shall be other than battery power. Actuation
48.6 of such detectors shall cause a visual display on the corridor side of the
48.7 room where the detector is located and shall cause a distinct audible and
48.8 visual alarm at the nurses' station attending the room. Such detectors
48.9 may be part of the facility, fire alarm system, nurses' call system, or a
48.10 standalone system. Integral smoke detectors for automatic door-closing
48.11 devices on sleeping room doors can meet this requirement if they also
48.12 cause all the items in section 907.2.6.3.1 to occur.

48.13 **907.2.6.2.4 Sleeping room smoke alarms.** For Group I-2 facilities
48.14 other than hospitals and nursing homes, single station smoke alarms
48.15 shall be installed in resident sleeping rooms.

48.16 **907.2.6.3 Group I-3 occupancies-general.** A manual and automatic fire
48.17 alarm system shall be installed in Group I-3 occupancies in accordance with
48.18 sections 907.2.6.3 through 907.2.6.3.4.

48.19 **907.2.6.3.1 Initiation.** Initiation of the fire alarm system shall be by
48.20 manual and automatic means. Approved automatic fire detectors shall
48.21 be installed in laundry and soiled linen rooms, boiler and furnace rooms,
48.22 mechanical and electrical rooms, shops, laboratories, kitchens, locker
48.23 rooms, janitors' closets, trash-collection rooms, storage rooms, lounges,
48.24 gift shops, commissaries, and similar areas. Actuation of an automatic
48.25 fire-extinguishing system, a manual fire alarm box, or a fire detector
48.26 shall initiate an approved fire alarm signal, which automatically notifies
48.27 staff. Presignal systems shall not be used.

49.1 **907.2.6.3.2 Manual fire alarm boxes.** Manual fire alarm boxes are
49.2 not required to be located in accordance with section 907.4 where the
49.3 fire alarm boxes are provided at staff-attended locations having direct
49.4 supervision over areas where manual fire alarm boxes have been omitted.
49.5 Manual fire alarm boxes are permitted to be locked in areas occupied by
49.6 detainees, provided that staff members are present within the subject area
49.7 and have keys readily available to operate the manual fire alarm boxes.

49.8 **907.2.6.3.3 Smoke detectors.** An approved automatic smoke-detection
49.9 system shall be installed throughout resident housing areas, including
49.10 sleeping areas and contiguous day rooms, group activity spaces, and
49.11 other common spaces normally accessible to residents.

49.12 **Exceptions:**

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

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

49.20 **907.2.6.3.4 Notification.** Activation of the fire alarm system or
49.21 automatic sprinkler system shall initiate a signal that is distinctive from
49.22 audible signals used for other purposes in the same building. Such
49.23 signal is intended to notify staff and need not meet the minimum sound
49.24 pressure levels required for general evacuation fire alarm notification. In
49.25 addition, activation of the fire alarm system shall immediately transmit
49.26 an alarm to an approved central station or remote station service.

50.1 **907.2.6.4 Group I-4 occupancies-general.** A manual and automatic fire
50.2 alarm system shall be installed in Group I-4 occupancies in accordance with
50.3 sections 907.2.6.4.1 through 907.2.6.4.2.

50.4 **907.2.6.4.1 Initiation.** Initiation of the fire alarm system shall be by
50.5 manual and automatic means. Approved automatic fire detectors shall
50.6 be installed in laundry and soiled linen rooms, boiler and furnace
50.7 rooms, mechanical and electrical rooms, shops, laboratories, kitchens,
50.8 locker rooms, janitors' closets, trash-collection rooms, storage rooms,
50.9 lounges, gift shops, and similar areas. Automatic smoke detectors shall
50.10 be provided in corridors and areas that are open to corridors.

50.11 **907.2.6.4.2 Notification.** Activation of the fire alarm system or
50.12 automatic sprinkler system shall initiate a general evacuation signal.

50.13 Subp. 23. **IBC [F] section 907.2.7.** IBC [F] section 907.2.7 is deleted in its entirety.

50.14 Subp. 24. **IBC [F] section 907.2.7.1.** IBC [F] section 907.2.7.1 is deleted in its
50.15 entirety.

50.16 Subp. 25. **IBC [F] section 907.2.8.** IBC [F] section 907.2.8 is amended to read
50.17 as follows:

50.18 **907.2.8 Group R-1, general.** A fire alarm system shall be installed in accordance
50.19 with sections 907.2.8 through 907.2.8.3 in Group R-1 occupancies.

50.20 **Exceptions:**

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

51.1 2. Buildings containing five or less ~~guest rooms~~ sleeping units shall be
 51.2 allowed to be equipped with approved multiple-station smoke detectors
 51.3 installed as required for Group R-3 Occupancies. Installation shall be in
 51.4 accordance with section ~~907.2.10~~ 907.2.11.

51.5 **907.2.8.1 Initiation.** Initiation of the fire alarm system shall be by automatic
 51.6 means. Approved automatic fire detectors shall be provided in boiler and
 51.7 furnace rooms, shops, laundry rooms, mechanical and electrical rooms,
 51.8 trash collection rooms, storage rooms, gift shops, locker rooms and similar
 51.9 areas. Automatic smoke detectors shall be provided in all common areas and
 51.10 interior corridors serving as required means of egress.

51.11 **Exception:** System fire and smoke detectors are not required when an
 51.12 approved automatic fire extinguishing system is installed ~~throughout~~
 51.13 ~~the building and manual activation~~ in accordance with section 903.3.1.1
 51.14 or 903.3.1.2 is provided at a constantly attended location. When a
 51.15 constantly attended location is not provided, the manual fire alarm box
 51.16 shall be provided at the main exit.

51.17 **907.2.8.2 Notification.** Activation of the fire alarm system or automatic
 51.18 sprinkler system shall initiate a general evacuation signal.

51.19 **907.2.8.3 ~~Guest room detectors~~ Sleeping unit smoke alarms.** ~~Guest room~~
 51.20 Sleeping unit smoke ~~detectors~~ alarms required by section ~~907.2.10~~ 907.2.11
 51.21 shall not be connected to a fire alarm system.

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

51.23 Subp. 26. **IBC [F] section 907.2.9.** IBC [F] section 907.2.9 is amended, and
 51.24 ~~subsections~~ sections added, to read as follows:

51.25 **907.2.9 Group R-2, general.** A fire alarm system shall be installed in accordance
 51.26 with sections 907.2.9 through 907.2.9.2 in Group R-2 occupancies where:

- 52.1 1. Any ~~guest room~~ sleeping unit or dwelling unit is located ~~two~~ three or more
52.2 stories above ~~the story containing the lowest level of exit discharge~~ the grade
52.3 plane;
- 52.4 2. Any ~~guest room~~ sleeping unit or dwelling unit is located more than one story
52.5 below ~~the highest level of exit discharge of exits serving the dwelling unit~~ the
52.6 grade plane;
- 52.7 3. The building contains more than 16 dwelling units or ~~guest rooms~~ sleeping
52.8 units; or
- 52.9 4. The building is used as a congregate living facility, dormitory, convent,
52.10 monastery, fraternity, ~~or~~ sorority, group home, or shelter and has an occupant
52.11 load of 20 or more.

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

52.17 **907.2.9.1 Initiation.** Initiation of the fire alarm system shall be by automatic
52.18 means. Automatic fire detectors shall be provided in boiler and furnace
52.19 rooms, trash-collection rooms, shops, laundry rooms, mechanical and
52.20 electrical rooms, storage rooms, and similar areas. Automatic smoke
52.21 detectors shall be provided in all common areas and interior corridors
52.22 serving as required means of egress.

52.23 **Exception:** System fire and smoke detectors are not required when an
52.24 approved automatic fire extinguishing system is installed throughout
52.25 the building.

52.26 **907.2.9.2 Notification.** Activation of the fire alarm system or automatic
52.27 sprinkler system shall initiate a general evacuation signal.

53.1 **907.2.9.3 Dwelling unit smoke detectors alarms.** Dwelling unit smoke
53.2 detectors alarms required by section ~~907.2.10~~ 907.2.11 shall not be
53.3 connected to the building fire alarm system.

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

53.5 Subp. 26a. [See repealer.]

53.6 Subp. 26b. **IBC [F] section 907.2.10.** IBC [F] section 907.2.10 is amended to read
53.7 as follows:

53.8 **907.2.10 Group R-4, general.** A fire alarm system shall be installed in
53.9 accordance with sections 907.2.10 through 907.2.10.3 in Group R-4 occupancies.

53.10 **Exceptions:**

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

53.16 2. Buildings containing five or fewer sleeping units shall be allowed to be
53.17 equipped with approved multiple-station smoke alarms installed as required
53.18 for Group R-3 occupancies. Installation shall be in accordance with section
53.19 907.2.11.

53.20 **907.2.10.1 Initiation.** Initiation of the fire alarm system shall be by
53.21 automatic means. Approved automatic fire detectors shall be provided in
53.22 boiler and furnace rooms, shops, laundry rooms, mechanical and electrical
53.23 rooms, trash collection rooms, storage rooms, gift shops, locker rooms, and
53.24 similar areas. Automatic smoke detectors shall be provided in all common
53.25 areas and interior corridors serving as required means of egress.

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

54.4 907.2.10.2 Notification. Activation of the fire alarm system or automatic
 54.5 sprinkler system shall initiate a general evacuation signal.

54.6 907.2.10.3 Smoke alarms. Single and multistation smoke alarms shall be
 54.7 installed in accordance with section 907.2.11.

54.8 Subp. 27. IBC [F] section ~~907.2.10.2~~ 907.2.11.4. IBC [F] section ~~907.2.10.2~~
 54.9 907.2.11.4 is amended to read as follows:

54.10 **907.2.10.2 Power source.** In new construction, required smoke alarms shall receive their
 54.11 primary power from the building wiring where such wiring is served from a commercial
 54.12 source and shall be equipped with a battery backup. Smoke alarms shall emit a signal
 54.13 when the batteries are low. Wiring shall be permanent and without a disconnecting switch
 54.14 other than as required for overcurrent protection.

54.15 **Exceptions:**

- 54.16 1. Smoke alarms are not required to be equipped with battery backup
 54.17 in Group R-1 occupancies where they are connected to an emergency
 54.18 electrical system.
- 54.19 2. Smoke alarms are not required to be equipped with battery backup in
 54.20 Group R-2 occupancies equipped throughout with an automatic sprinkler
 54.21 system installed in accordance with section 903.3.1.1 or 903.3.1.2.

54.22 Subp. 27a. [See repealer.]

54.23 Subp. 28. IBC [F] section ~~907.2~~ 907.2.24. IBC [F] section 907.2 is amended by
 54.24 adding sections to read as follows:

54.25 **907.2.24 Residential hospices.** A fire alarm system shall be installed in
 54.26 accordance with section 907.2.24 in residential hospices. When automatic

55.1 sprinkler systems or automatic fire detectors are installed, such systems or
55.2 detectors shall be connected to the building fire alarm system.

55.3 **907.2.24.1 Initiation.** Initiation of the fire alarm system shall be by manual
55.4 and automatic means. Approved automatic fire detectors shall be provided
55.5 in boiler and furnace rooms, kitchens, laboratories, shops, gift shops,
55.6 commissaries, laundry and soiled linen rooms, mechanical and electrical
55.7 rooms, locker rooms, storage rooms, janitors' closets, trash collection rooms,
55.8 lounges, and similar areas. Automatic smoke detectors shall be provided in
55.9 sleeping rooms, corridors, and spaces open to the corridors.

55.10 **Exception:** Manual fire alarm boxes are not required at exits if manual
55.11 fire alarm boxes are located at all nurses' stations or other continuously
55.12 attended staff locations, provided such fire alarm boxes are visible and
55.13 continuously accessible and that travel distances required by section
55.14 907.4.1 are not exceeded.

55.15 **907.2.24.2 Notification.** Activation of the fire alarm system or automatic
55.16 sprinkler system shall initiate a general evacuation signal. In addition, the
55.17 fire alarm system shall be monitored by an approved central station service
55.18 in accordance with section 903.4.1.

55.19 **Exception:** In lieu of audible notification appliances, visible notification
55.20 appliances shall be allowed to be used in sleeping areas.

55.21 Subp. 29. [Repealed, 32 SR 7]

55.22 Subp. 30. [See repealer.]

55.23 Subp. 31. **IBC [F] section ~~907.10~~ 907.3.** IBC [F] section ~~907.10~~ 907.3 is amended,
55.24 and subsections added, to read as follows:

55.25 **~~907.10~~ 907.3 Fire safety functions.** Automatic fire detectors required by section
55.26 907.2 and IFC chapter 11 are to activate notification appliances in accordance with

56.1 those sections. ~~Where~~ When automatic fire detectors are installed for other fire safety
56.2 functions, they shall perform the intended function upon activation. ~~Where~~ When
56.3 automatic detectors are installed for fire safety functions and the building has a fire
56.4 alarm system, ~~such~~ the detectors shall activate supervisory signals at the fire alarm
56.5 control panel or at a constantly attended location. ~~Where~~ When the building does
56.6 not have a fire alarm system, ~~such~~ the detectors shall activate a visual and audible
56.7 supervisory signal at an approved location, which shall indicate the source of the signal.

56.8 **907.10.1 907.3.1 Air distribution and air-handling systems.** Smoke detectors
56.9 installed to shut down the air distribution or air-handling system shall, upon
56.10 activation, perform the intended function. Air distribution or air-handling
56.11 equipment that is part of a smoke-control system shall switch to smoke-control
56.12 mode upon activation of a detector.

56.13 **907.10.1.1 907.3.1.1 Fire alarm system interface.** Smoke detectors that are
56.14 installed in air distribution or air-handling systems for shutdown purposes
56.15 and that are connected to a fire alarm system shall not sound a general
56.16 evacuation signal.

56.17 **907.10.2 907.3.2 Elevator control functions.** Smoke detectors that are installed
56.18 to control or recall elevators or to control doors for elevators, elevator lobbies, or
56.19 elevator shafts and that are connected to a fire alarm system shall not sound a
56.20 general evacuation signal. Elevator recall and firefighter's emergency operation
56.21 for elevators shall only be controlled by elevator smoke detectors and shall not
56.22 initiate upon other building fire detectors or evacuation signals.

56.23 **907.10.3 907.3.3 Door hold-open functions.** Smoke detectors that are installed
56.24 to hold open fire doors under nonemergency conditions and that are connected
56.25 to a fire alarm system shall sound a general evacuation signal when the doors
56.26 being held open are part of the means of egress corridor or stair system. Door
56.27 hold-open smoke detectors are not required to activate a visual or audible signal.

57.1 Subp. 31a. IBC [F] section 907.6.5. IBC [F] section 907.6.5 and its subsections are
57.2 deleted in their entirety.

57.3 Subp. 32. [See repealer.]

57.4 Subp. 33. [See repealer.]

57.5 **1305.0908 SECTION 908, EMERGENCY ALARM SYSTEMS.**

57.6 IBC [F] section 908.7 is amended to read as follows:

57.7 908.7 Carbon monoxide alarms. Group I or R occupancies located in a building
57.8 containing a fuel-burning appliance or in a building that has an attached garage shall
57.9 be equipped with single-station carbon monoxide alarms. The carbon monoxide
57.10 alarms shall be:

57.11 A. listed as complying with UL 2034;

57.12 B. installed and maintained in accordance with NFPA 720 and the manufacturer's
57.13 instructions; and

57.14 C. installed within 10 feet of each sleeping unit or sleeping room.

57.15 Exception: Individual sleeping units or dwelling units that do not contain
57.16 a fuel-burning appliance or have an attached garage, but are located in a
57.17 multiunit building with a fuel-burning appliance or attached garage, need
57.18 not be equipped with a single-station carbon monoxide alarm if:

57.19 (1) the sleeping unit or dwelling unit is not connected by duct work or
57.20 ventilation shafts to any room containing a fuel-burning appliance or to an
57.21 attached garage; and

57.22 (2) the building is equipped with a common area carbon monoxide alarm
57.23 system.

57.24 (Subsection 908.7.1 applies and remains unchanged.)

57.25 **1305.0909 SECTION 909, SMOKE CONTROL SYSTEMS.**

57.26 Subpart 1. [See repealer.]

58.1 Subp. 1a. IBC [F] section 909.1. IBC [F] section 909.1 is amended to read:
58.2 909.1 Scope and purpose. This section applies to mechanical or passive smoke
58.3 control systems for new buildings or portions of new buildings when they are required
58.4 by other provisions of this code. The purpose of this section is to establish minimum
58.5 requirements for the design, installation, and acceptance testing for smoke control
58.6 systems that are intended to provide a tenable environment for the evacuation or
58.7 relocation of occupants and for fire suppression and overhaul efforts. These provisions
58.8 are not intended for the preservation of contents or the timely restoration of operations.

58.9 Subp. 1b. IBC [F] section 909.4.6. IBC [F] section 909.4.6 is amended to read:
58.10 909.4.6 Duration of operation. All portions of the active or passive smoke
58.11 control system shall be capable of continued operation after detection of the
58.12 fire event for a period of not less than 20 minutes. System design shall be for
58.13 20 minutes; however, fans shall continue to operate after 20 minutes and shall
58.14 continue to operate automatically for smoke removal during fire suppression
58.15 and overhaul efforts for a minimum of 5 minutes for every 10 feet vertically of
58.16 protected space.

58.17 Subp. 1c. IBC [F] section 909.4.7. IBC [F] section 909.4 is amended by adding a
58.18 section to read:

58.19 909.4.7 Door opening force. With any of the design methods allowed by section
58.20 909, the door opening force, latch release, and set-in-motion force shall comply
58.21 with section 1008.1.3 requirements when the system is in smoke control mode.

58.22 Subp. 2. [See repealer.]

58.23 **1305.0910 ~~[F]~~ SECTION 910, SMOKE AND HEAT VENTS REMOVAL.**

58.24 **IBC [F] section 910 is amended to read as follows:**

58.25 **[F] SECTION 910**

58.26 **SMOKE AND HEAT VENTS REMOVAL**

59.1 Subpart 1. **IBC [F] section 910.1.** IBC [F] section 910.1 is amended by adding
59.2 sections to read as follows:

59.3 **910.1.1 Required venting method.** Required smoke and heat venting shall be
59.4 accomplished with mechanical smoke exhaust according to section 910.4.

59.5 **Exceptions:**

59.6 1. Calculated engineering design of mechanical smoke exhaust in accordance
59.7 with section 910.5 shall be permitted for buildings sprinklered throughout.

59.8 2. For nonsprinklered buildings, smoke and heat vents as specified in section
59.9 910.3 shall be permitted.

59.10 3. Where approved by the code building official, smoke and heat vents as
59.11 specified in section 910.3 shall be permitted in sprinklered buildings.

59.12 **910.1.2 Listing.** Smoke and heat vents and mechanical smoke exhaust fans
59.13 shall be listed for the intended purpose.

59.14 **910.1.3 Curtain boards.** When mechanical smoke exhaust is provided in
59.15 accordance with section 910.4 or 910.5, curtain boards are only required at the
59.16 separation between areas protected with early suppression fast response (ESFR)
59.17 sprinklers and conventional sprinkler systems.

59.18 Subp. 2. **IBC [F] section 910.4.** IBC [F] section 910.4 is amended to read as follows:

59.19 **910.4 Mechanical smoke exhaust.** Mechanical smoke exhaust shall be in accordance
59.20 with sections 910.4.1 through 910.4.6.

59.21 Subp. 3. **IBC [F] section 910.4.3.** IBC [F] section 910.4.3 is amended to read as
59.22 follows:

59.23 **910.4.3 Operation.** Mechanical smoke exhaust fans shall be ~~automatically~~
59.24 manually activated upon sprinkler system water flow. ~~A 5 to 10 minute delay~~
59.25 ~~shall be provided between the sprinkler water flow signal and activation of the~~
59.26 ~~exhaust fans.~~ In addition, individual manual controls of each fan unit shall also
59.27 be provided.

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

60.3 Subp. 4. **IBC [F] section 910.4.5.** IBC [F] section 910.4.5 is amended to read as
60.4 follows:

60.5 **910.4.5 Supply air.** Supply air for exhaust fans shall be sized to provide a
60.6 minimum of 50 percent of the required exhaust. Air velocity at each supply air
60.7 opening shall not exceed an average of 200 feet per minute when measured 4 feet
60.8 (1219 mm) in front of the opening. Openings for supply air shall be uniformly
60.9 distributed around the periphery of the area served and be located or ducted to a
60.10 position not more than one-half the storage height above the floor. Supply air
60.11 openings shall open automatically upon operation of the smoke exhaust system
60.12 and shall not require a manual action at each supply opening for operation.
60.13 Supply air openings shall be kept clear of storage or obstructions to airflow for at
60.14 least ~~four~~ 4 feet (1219 mm) in front of the opening. Supply air openings shall be
60.15 separated from exhaust fans and exterior combustibles to prevent introduction of
60.16 smoke into the building.

60.17 Subp. 5. **IBC [F] section ~~910~~ 910.5.** IBC [F] section 910 is amended by adding
60.18 sections to read as follows:

60.19 **910.5 Calculated engineering design of mechanical smoke exhaust.** Calculated
60.20 engineering design of mechanical smoke exhaust shall be in accordance with sections
60.21 910.5.1 through 910.5.5.

60.22 **910.5.1 Methodology.** Mechanical smoke exhaust systems shall be designed to
60.23 remove smoke after a fire is extinguished and to assist the fire department during
60.24 suppression operations or during marginal sprinkler control situations. They are
60.25 not considered life safety systems and are not designed for occupant safety.

60.26 **910.5.2 Calculation method.** Volumetric flow rate calculations shall
60.27 demonstrate that the system will provide at least three air changes per hour for

61.1 the space required to be provided with smoke exhaust. When only a portion of
61.2 a space is used for high-piled storage requiring smoke exhaust, the volume to
61.3 be extracted shall be based on the ceiling height multiplied by the actual gross
61.4 floor area for storage.

61.5 **910.5.3 Operation.** Mechanical smoke exhaust fans shall be ~~automatically~~
61.6 manually activated upon ~~sprinkler system water flow~~. A ~~5- to 10-minute~~ delay
61.7 shall be provided between the sprinkler water flow signal and activation of the
61.8 exhaust fans. In addition, individual manual controls of each fan unit shall also
61.9 be provided.

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

61.12 **910.5.4 Supply air.** Supply air for exhaust fans shall be sized to provide a
61.13 minimum of 50 percent of the required exhaust. Air velocity at each supply air
61.14 opening shall not exceed an average of 200 feet per minute when measured 4 feet
61.15 (1219 mm) in front of the opening. Openings for supply air shall be uniformly
61.16 distributed around the periphery of the area served and be located or ducted to a
61.17 position not more than one-half the storage height above the floor. Supply air
61.18 openings shall open automatically upon operation of the smoke exhaust system
61.19 and shall not require a manual action at each supply opening for operation.
61.20 Supply air openings shall be kept clear of storage or obstructions to airflow for
61.21 at least 4 feet (1219 mm) in front of the opening. Supply air openings shall be
61.22 separated from exhaust fans and exterior combustibles to prevent introduction of
61.23 smoke into the building.

61.24 **910.5.5 Equipment.** Wiring and controls shall be as required in section 910.4.4.
61.25 Interlocks shall be as required in section 910.4.6. Exhaust fans shall be uniformly
61.26 spaced and each fan shall have a maximum individual capacity of 30,000 cfm
61.27 (850 m³/min).

62.1 **910.6 Testing and maintenance.** Mechanical smoke exhaust systems shall be
 62.2 tested and maintained as required by sections 910.6.1 through 910.6.4.

62.3 **910.6.1 Acceptance testing.** Mechanical smoke exhaust systems shall be
 62.4 acceptance tested as required by sections ~~909.18.2 through 909.18.5~~ 909.18.1
 62.5 through 909.18.7 and 909.19.

62.6 **910.6.1.1 Controls.** For testing purposes, each smoke exhaust system equipped
 62.7 for automatic activation shall be put into operation by the actuation of the
 62.8 automatic initiating device. Control sequences shall be verified throughout the
 62.9 system, including verification of override from the firefighter's control panel
 62.10 when systems are equipped for automatic activation.

62.11 **910.6.2 Special inspections.** Special inspections for mechanical smoke exhaust
 62.12 shall be conducted according to section 909.18.8.

62.13 **910.6.3 Maintenance.** Mechanical smoke exhaust systems, including exhaust
 62.14 fans, supply air openings and controls, shall be maintained and unobstructed.

62.15 **910.6.4 Operational testing.** Operational testing of the smoke exhaust system
 62.16 shall include all equipment such as initiating devices, fans, dampers, controls,
 62.17 and supply air openings. Mechanical smoke exhaust systems shall be operated
 62.18 and tested under each control sequence at least annually.

62.19 **1305.0916 SECTION 916, POST-FIRE EXHAUST SYSTEM.**

62.20 **IBC chapter 9 is amended by adding a section to read as follows:**

62.21 **SECTION 916**

62.22 **POST-FIRE SMOKE EXHAUST SYSTEM**

62.23 **916.1 Scope and purpose.** This section applies to post-fire smoke exhaust systems
 62.24 when they are required by other provisions of this code. The purpose of this section is
 62.25 to establish minimum requirements for the design and installation of smoke exhaust
 62.26 systems that are intended for the timely restoration of operations and overhaul
 62.27 activities once a fire is extinguished.

63.1 **916.2 General design requirements.** Post-fire smoke exhaust systems are not
63.2 intended or designed as life safety systems and are not required to meet the provisions
63.3 of section 909. These systems are permitted to use dedicated equipment, the normal
63.4 building HVAC system or other openings and shall have the capability to exhaust
63.5 smoke from occupied spaces. Smoke removal may be by either mechanical or natural
63.6 ventilation, but shall be capable of removing cold smoke. Smoke exhaust shall be
63.7 permitted through elevator shafts. Smoke removed from a space shall be discharged
63.8 to a safe location outside the building and may not be recirculated into the building
63.9 in accordance with the Minnesota Mechanical Code.

63.10 **916.3 Exhaust capability.** The system shall have an air supply and smoke exhaust
63.11 capability that will provide a minimum of three air changes per hour or remove smoke
63.12 to less than a 5 percent concentration within one hour of operation. The system does
63.13 not need to exhaust from all areas at the same time, but is permitted to be zoned
63.14 based on the largest fire area served. For the purpose of calculating system size, the
63.15 height of a compartment shall be considered to run from slab to slab and include
63.16 the volume above suspended ceilings.

63.17 **916.4 Operation.** The smoke exhaust system shall be operated by manual controls
63.18 that are readily accessible to the fire department at an approved location and shall
63.19 incorporate an approved control diagram. When a system is zoned into areas of
63.20 operation less than the entire building, each zone shall have an individual control.
63.21 Fire department manual controls of post-fire smoke exhaust systems shall have the
63.22 highest priority of any control point within the building. Smoke exhaust shall not be
63.23 permitted through any exit enclosure as defined in section 1002.

63.24 **916.5 Inspection and testing.** Post-fire smoke exhaust systems shall be inspected
63.25 and tested annually.

63.26 **1305.1008 SECTION 1008, DOORS, GATES, AND TURNSTILES.**

63.27 Subpart 1. [Repealed, 32 SR 7]

64.1 Subp. 2. [Repealed, 32 SR 7]

64.2 Subp. 3. [Repealed, 32 SR 7]

64.3 Subp. 4. [See repealer.]

64.4 Subp. 5. **IBC section ~~1008.1.4~~ 1008.1.5**. IBC section ~~1008.1.4~~ 1008.1.5 is amended
64.5 by modifying exception 5 to read as follows:

64.6 **Exceptions:**

64.7 5. Exterior decks, patios, or balconies that are part of Type B dwelling units,
64.8 have impervious surfaces, and that are not more than ~~two~~ 2 inches (50 mm)
64.9 below the finished floor level of the adjacent interior space of the dwelling
64.10 unit.

64.11 Subp. 6. **IBC section ~~1008.1.8.3~~ 1008.1.9.3**. IBC section ~~1008.1.8.3~~ 1008.1.9.3
64.12 is amended to read as follows:

64.13 **~~1008.1.8.3~~ 1008.1.9.3 Locks and latches**. Locks and latches shall be
64.14 permitted to prevent operation of doors where any of the following exists:

64.15 1. Places of detention or restraint.

64.16 2. In buildings in occupancy Group A having an occupant load of
64.17 300 or less, in buildings in occupancy Groups B, F, M, and S, and in
64.18 ~~churches~~ places of religious worship, the main exterior door or doors
64.19 are permitted to be equipped with key-operated locking devices from
64.20 the egress side provided:

64.21 2.1. The locking device is readily distinguishable as locked.

64.22 2.2. A readily visible durable sign is posted on the egress side
64.23 on or adjacent to the door stating: **THIS DOOR TO REMAIN**
64.24 **UNLOCKED WHEN BUILDING IS OCCUPIED**. The sign shall
64.25 be in letters 1 inch (25 mm) high on a contrasting background.

65.1 2.3. The use of the key-operated locking device is revokable by the
65.2 building official for due cause.

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

65.6 4. Doors from individual dwelling or sleeping units of Group R
65.7 occupancies having an occupant load of 10 or less are permitted to be
65.8 equipped with a night latch, dead bolt, or security chain, provided such
65.9 devices are openable from the inside without the use of a key or tool.

65.10 5. Fire doors, after the minimum elevated temperatures have disabled
65.11 the unlatching mechanism, in accordance with listed fire door test
65.12 procedures.

65.13 ~~5~~ 6. Delayed egress locks, installed and maintained in conformance
65.14 with section ~~1008.1.8.6~~ 1008.1.9.7.

65.15 ~~6~~ 7. Special egress-control devices locking arrangements installed
65.16 and maintained in conformance accordance with section ~~1008.1.3.6~~
65.17 1008.1.9.6.

65.18 8. Electromagnetically locked egress doors, installed and maintained in
65.19 conformance with section 1008.1.9.9:

65.20 ~~7~~ 9. In rooms, other than cells, where occupants are being restrained
65.21 for safety or security reasons, special locking detention arrangements
65.22 which that comply with the requirements of section ~~1008.1.10~~ 1008.1.11
65.23 are permitted.

65.24 Subp. 6a. IBC section 1008.1.9.6. IBC section 1008.1.9.6 is amended to read as
65.25 follows:

65.26 1008.1.9.6 Special door locking arrangements in Group I-1, I-2, R-3,
65.27 or R-4 occupancies. Approved special door locking arrangements shall

66.1 be permitted in a Group I-1, I-2, R-3, or R-4 occupancy when a person's
66.2 clinical needs require such locking. Special locking devices shall be
66.3 permitted on doors in these occupancies when the building is equipped
66.4 throughout with an approved automatic sprinkler system in accordance with
66.5 IBC section 903.3.1.1 and an approved automatic smoke or heat detection
66.6 system is installed in accordance with section 907. The special locking
66.7 arrangements and devices are permitted if they are installed and comply with
66.8 the requirements in items 1 through 10 below. Items 1 through 4 shall not
66.9 apply to special locking arrangements in areas where persons who, because
66.10 of clinical needs, require restraint or containment as part of the function of a
66.11 psychiatric treatment area.

66.12 1. The special locking devices shall unlock upon actuation of either the
66.13 automatic sprinkler system or the automatic fire-detection system.

66.14 2. The special locking devices shall unlock upon loss of power
66.15 controlling the lock or lock mechanism.

66.16 3. The special locking devices shall have the capability of being
66.17 unlocked by a signal from the fire-command center, a nursing station, or
66.18 other approved location.

66.19 4. A building occupant shall not be required to pass through more than
66.20 one door equipped with a special egress lock before entering an exit.

66.21 5. The procedures for the operations of the unlocking system shall
66.22 be described and approved as part of the emergency planning and
66.23 preparedness required by IFC chapter 4.

66.24 6. All clinical staff shall have the keys, codes, or other means necessary
66.25 to operate the locking devices.

66.26 7. Emergency lighting shall be provided at a door containing a special
66.27 locking device.

- 67.1 8. 24-hour patient supervision is provided within the secured area.
- 67.2 9. The special locking devices are designed to fail in the open position.
- 67.3 10. Floor levels within the building or portion of the building with
- 67.4 special locking arrangements shall be divided into at least two
- 67.5 compartments by smoke barriers meeting the requirements of section
- 67.6 709.
- 67.7 **Exception to item #10:** In existing Group R-3 occupancies
- 67.8 where the construction of smoke barrier compartmentation is not
- 67.9 practical, an existing sleeping room provided with smoke-tight
- 67.10 construction and having an escape window complying with section
- 67.11 1029 is allowed.

67.12 Subp. 7. **IBC section ~~1008.1.8.6~~ 1008.1.9.7.** IBC section ~~1008.1.8.6~~ 1008.1.9.7

67.13 is amended to read as follows:

- 67.14 ~~1008.1.8.6~~ 1008.1.9.7 **Delayed egress door locks.** Approved, listed,
- 67.15 delayed egress locks shall be permitted to be installed on doors serving any
- 67.16 occupancy except Assembly Group A occupancies and High Hazard Group
- 67.17 H occupancies, and assembly uses within Educational Group E occupancies.
- 67.18 Delayed egress locks shall be installed only in buildings that are equipped
- 67.19 throughout with an automatic sprinkler system in accordance with section
- 67.20 903.3.1.1 or an approved automatic smoke detection system installed in
- 67.21 accordance with Section 907 and an approved smoke detection system
- 67.22 installed in a means of egress system serving the locked area, provided that
- 67.23 the doors unlock in accordance with Items 1 through 4 below. A building
- 67.24 occupant shall not be required to pass through more than one door equipped
- 67.25 with a delayed egress lock before entering an exit.
- 67.26 1. The doors unlock upon actuation of the automatic sprinkler system
- 67.27 or automatic fire detection system.

- 68.1 2. The doors unlock upon loss of power controlling the lock or lock
68.2 mechanism.
- 68.3 3. The door locks shall have the capability of being unlocked by a
68.4 signal from the fire command center.
- 68.5 4. The ~~initiation of~~ door locks shall include an irreversible process
68.6 ~~which that~~ will release the latch in not more than 15 seconds when a
68.7 force of not more than 15 pounds (67 N) is applied for one second to
68.8 the release device. Initiation of the irreversible process shall activate an
68.9 audible signal in the vicinity of the door. Once the door lock has been
68.10 released by the application of force to the releasing device, relocking
68.11 shall be by manual means only.

68.12 **Exception:** Where approved, a delay of not more than 30 seconds
68.13 is permitted.

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

68.16 ~~5-~~ 1. A sign shall be provided on the door located above and within 12
68.17 inches (305 mm) of the release device reading: PUSH UNTIL ALARM
68.18 SOUNDS. DOOR CAN BE OPENED IN 15 [30] SECONDS.

68.19 ~~6-~~ 2. Emergency lighting shall be provided at the door.

68.20 3. Delayed egress locks shall be maintained and tested in accordance
68.21 with the Minnesota State Fire Code.

68.22 Subp. 7a. IBC section 1008.1.9.11. IBC section 1008.1.9.11 is amended by revising
68.23 exception 3 to read as follows:

68.24 3. In stairways serving not more than four stories, doors are permitted
68.25 to be locked from the side opposite the egress side. The exit door is
68.26 permitted to be locked but shall be operable from the egress side.

69.1 Subp. 8. **IBC section 1008.1.** IBC section 1008.1 is amended by adding subsections
69.2 as follows:

69.3 ~~1008.1.10~~ **1008.1.11 Special locking detention arrangements.** Special locking
69.4 detention arrangements meeting the requirements of sections ~~1008.1.10 through~~
69.5 ~~1008.1.10.5~~ 1008.1.11 through 1008.1.11.4 are permitted for rooms, other than
69.6 cells, where the occupants are being restrained for safety or security reasons. The
69.7 use of sections ~~1008.1.10 through 1008.1.10.5~~ 1008.1.11 through 1008.1.11.5
69.8 may be revoked by the fire code official or building official for due cause.

69.9 ~~1008.1.10.1~~ **1008.1.11.1 Locking hardware.** Locking devices shall release
69.10 upon any of the following conditions:

- 69.11 1. Activation of the automatic sprinkler system.
- 69.12 2. Activation of any automatic fire detection device.
- 69.13 3. Activation of any automatic fire alarm system.
- 69.14 4. Loss of electrical power to the locking device or the fire alarm system.
- 69.15 5. Activation of the fire alarm trouble signal.
- 69.16 6. Operation of a manual switch located in an approved location.

69.17 All locking devices shall be designed to fail in the open position following
69.18 the release of the locking devices for any of the conditions specified above.
69.19 Relocking of the devices shall be by manual means only at the door.

69.20 ~~1008.1.10.2~~ **1008.1.11.2 Fire-extinguishing system.** When special locking
69.21 detention arrangements are used, the room or area being secured shall be
69.22 protected with quick-response sprinklers.

69.23 ~~1008.1.10.3~~ **1008.1.11.3 Fire alarm and detection.** When special locking
69.24 detention arrangements are used, the room or area and spaces between the
69.25 room or area and an exterior exit door shall be protected with automatic
69.26 smoke detection connected to the building's fire alarm system. If the walls
69.27 of the room or area do not extend to the ceiling, automatic smoke detection

70.1 can be provided in the adjacent room or area, provided that there are no
70.2 substantial obstructions to delay activation of the smoke detection.

70.3 ~~**1008.1.10.4 Construction.** Rooms or areas containing these special locking arrangements
70.4 shall be constructed of noncombustible materials having a minimum one-hour fire-resistive
70.5 construction. Doors separating the rooms from other spaces shall swing in the direction of
70.6 egress travel from the room and have a fire-protection rating of not less than 20 minutes.
70.7 Doors need not be self-closing. The interior finish of the wall and ceiling surfaces must
70.8 not exceed a Class C.~~

70.9 ~~**1008.1.10.5 Location.** The room or rooms shall be located on a floor that provides direct
70.10 grade-level access when located in buildings or portions thereof consisting of nonrated
70.11 construction.~~

70.12 **1008.1.11.4 Door swing.** Doors separating detention rooms from other spaces
70.13 must swing in the direction of egress travel from the detention room.

70.14 **1305.1009 SECTION 1009, STAIRWAYS AND HANDRAILS.**

70.15 Subpart 1. **1009.9 IBC section 1009.13.** IBC section ~~1009.9~~ 1009.13 is amended
70.16 to read as follows:

70.17 **1009.9 1009.13 Alternating tread devices.** Alternating tread devices are limited to
70.18 an element of a means of egress in buildings of Groups F, H, and S from a mezzanine
70.19 not more than 250 square feet (23 m²) in area and which serves not more than
70.20 five occupants; in buildings of Group I-3 from a guard tower, observation station,
70.21 or control room not more than 250 square feet (23 m²) in area and for access to
70.22 unoccupied roofs. Access to mechanical equipment or appliances on a roof shall be in
70.23 accordance with section 1209.3.1 and the Minnesota Mechanical Code.

70.24 (IBC sections 1009.13.1, 1009.13.2, and the exception still apply.)

70.25 Subp. 2. **IBC section 1009.14.** IBC section 1009.14 is amended to read as follows:

71.1 **1009.14 Ships ladders.** Ships ladders constructed as required for permanent stairs in
71.2 accordance with Minnesota Rules, part 1305.1209, shall be permitted to be used as a
71.3 means of egress component at the following locations:

71.4 1. Ships ladders are permitted to be used in Group I-3 occupancies for means of
71.5 egress at control rooms or elevated facility observation stations not more than
71.6 250 square feet (23 m²) in floor area.

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

71.10 (a) access to the area served is limited to building facilities staff, maintenance
71.11 staff, employees, or other authorized personnel;

71.12 (b) required access to the area served is limited and periodic;

71.13 (c) the area served is used for building maintenance service functions, or
71.14 for equipment access or monitoring;

71.15 (d) the area served is not required to have a second means of egress by other
71.16 provisions of this code; and

71.17 (e) the area served is not classified as a Group H occupancy.

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

71.20 **1305.1013 SECTION 1013, GUARDS.**

71.21 Subpart 1. ~~IBC section 1013.1~~ 1013.2. IBC section ~~1013.1~~ 1013.2 is amended by
71.22 adding an exception as follows:

71.23 **Exception:**

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

72.1 Subp. 2. **IBC section ~~1013.2~~ 1013.3.** IBC section ~~1013.2~~ 1013.3 is amended by
72.2 modifying exception ~~2~~ 4 to read as follows:

72.3 2 4. The guard height in assembly seating areas shall be in accordance with
72.4 section ~~1025.14~~ 1028.14 and the Minnesota Bleacher Safety Act, Minnesota
72.5 Statutes, section 326B.112.

72.6 Subp. 3. **IBC section 1013.8.** IBC section 1013.8 is amended to read as follows:

72.7 **1013.8 Window sills.** In occupancy groups R-1, R-2, and R-3 where the lowest
72.8 part of the opening of an operable window is located more than 72 inches (1829
72.9 mm) above the finished grade or other surface below, the lowest part of the window
72.10 opening shall be at a height not less than 36 inches (914 mm) above the finished floor
72.11 surface of the room in which the window is located. Operable sections of windows
72.12 shall not permit openings that allow passage of a 4-inch-diameter (102 mm) sphere
72.13 where such openings are located within 36 inches (914 mm) of the finished floor.

72.14 **Exceptions:**

72.15 1. Operable windows where the lowest part of the opening is located more than
72.16 75 feet (22860 mm) above the finished grade or other surface below and that are
72.17 provided with window fall-prevention devices that comply with ASTM F 2006.

72.18 2. Windows whose openings will not allow a 4-inch-diameter (102 mm) sphere
72.19 to pass through the opening when the window is in its largest opened position.

72.20 3. Openings that are provided with window fall-prevention devices that comply
72.21 with ASTM F 2090.

72.22 4. Windows that are provided with window opening control devices that comply
72.23 with section 1013.8.1.

72.24 5. Replacement windows for occupancy groups R-1, R-2, and R-3 located on or
72.25 below the third story above grade plane.

72.26 **1013.8.1 Window opening control devices.** Window opening control devices
72.27 shall comply with ASTM F 2090. The window opening control device, after

73.1 operation to release the control device allowing the window to fully open, shall
 73.2 not reduce the minimum net clear opening area of the window unit to less than
 73.3 the area required by section 1029.2.

73.4 **1305.1014 [Renumbered 1305.1017]**

73.5 **1305.1015 SECTION 1015, EXIT AND EXIT ACCESS DOORWAYS.**

73.6 **IBC section 1015.1** is amended to read as follows:

73.7 **1015.1 Exit or exit access doorways required from spaces.** Two exits or exit access
 73.8 doorways from any space shall be provided where one of the following conditions
 73.9 exists:

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

73.11 **Exception Exceptions:**

73.12 (a) In Groups R-2 and R-3 occupancies, one means of egress is permitted
 73.13 within and from individual dwelling units with a maximum occupant load
 73.14 of ~~16~~ 20 where the dwelling unit is equipped throughout with an automatic
 73.15 sprinkler system in accordance with section 903.3.1.1 or 903.3.1.2.

73.16 (b) Care suites in Group I-2 occupancies complying with section 407.4.3.

73.17 2. The common path of egress travel exceeds the limitations of section 1014.3.

73.18 3. Where required by sections 1015.3, 1015.4, ~~and~~ 1015.5, and 1015.6.

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

73.21 ~~**Exception:** Group I-2 occupancies shall comply with Section 1014.2.2. Where~~
 73.22 a building contains mixed occupancies, each individual occupancy shall comply
 73.23 with the applicable requirements for that occupancy. Where applicable, cumulative
 73.24 occupant loads from adjacent occupancies shall be considered in accordance with the
 73.25 provisions of section 1004.1.

73.26 [Table 1015.1 is unchanged.]

74.1 ~~1305.1014~~ 1305.1017 SECTION ~~1014~~ 1017, ~~EXIT ACCESS AISLES~~.

74.2 IBC section ~~1014.4~~ 1017 and all subsections are deleted in their entirety and replaced
74.3 with the following:

74.4 ~~1014.4~~ 1017.1 **Aisles and aisle accessways.** Aisles and aisle accessways serving as
74.5 a portion of the exit access in the means of egress system shall comply with the
74.6 requirements of this section. Aisles and aisle accessways shall be provided from all
74.7 occupied portions of the exit access. Aisles and aisle accessways serving assembly
74.8 areas, other than seating at tables, shall comply with section ~~1025~~ 1028. Aisles and
74.9 aisle accessways serving reviewing stands, grandstands, and bleachers shall comply
74.10 with section ~~1024~~ 1028.

74.11 ~~1014.4.1~~ 1017.2 **Width determination.** Where tables or counters are served by fixed
74.12 seats, the width of the aisle or aisle accessway shall be measured from the back of the
74.13 seat. Where seating is located at a table or counter and is adjacent to an aisle or aisle
74.14 accessway, the measurement of required clear width of the aisle or aisle accessway
74.15 shall be made to a line 19 inches (483 mm) measured perpendicular to and away
74.16 from and running parallel to the edge of the table or counter. In the case of other
74.17 side boundaries for aisle or aisle accessways, the clear width shall be measured to
74.18 walls, tread edges, or other obstructions.

74.19 The required width of the aisles and aisle accessways shall be unobstructed.

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

74.25 ~~1014.4.1.1~~ 1017.2.1 **Minimum aisle accessway width.** Aisle accessways not
74.26 required to be accessible by IBC chapter 11 shall provide a minimum of 12
74.27 inches (305 mm) of width, plus 0.5 inches (12.7 mm) of width for each additional

75.1 one foot (305 mm), or fraction thereof, beyond 12 feet (3658 mm) of aisle
75.2 accessway length.

75.3 **Exception:** Portions of an aisle accessway having a length not exceeding
75.4 six feet and used by a total of not more than four persons.

75.5 ~~1014.4.1.2~~ **1017.2.2 Minimum aisle width.** The minimum clear width shall be
75.6 determined by section 1005.1 for the occupant load served, but shall not be
75.7 less than 36 inches (914 mm).

75.8 **Exception:** Nonpublic aisles serving ~~less~~ fewer than 50 people, and are not
75.9 required to be accessible by IBC chapter 11, need not exceed 28 inches
75.10 (711 mm) in width.

75.11 ~~1014.4.2~~ **1017.3 Length.**

75.12 ~~1014.4.2.1~~ **1017.3.1 Aisle accessway.** The length of travel along the aisle
75.13 accessway shall not exceed 30 feet (9144 mm) to an aisle or exit access doorway.

75.14 ~~1014.4.2.2~~ **1017.3.2 Aisle.** The length of travel along an aisle or combination
75.15 aisle accessway and aisle to a point where a person has a choice of two or more
75.16 paths of egress travel to separate exits or exit access doorways shall not exceed
75.17 that permitted by section 1014.3 for common path of egress travel.

75.18 **1305.1018 SECTION 1018, CORRIDORS.**

75.19 Subpart 1. IBC Table 1018.1. IBC Table 1018.1 is amended as follows:

	<u>OCCUPANT</u>	<u>REQUIRED FIRE-RESISTANCE RATING</u>	
		<u>(hours)</u>	
<u>OCCUPANCY</u>	<u>LOAD SERVED</u>	<u>Without sprinkler system</u>	<u>With sprinkler system^e</u>
75.20 <u>H-1, H-2, H-3</u>	<u>All</u>	<u>Not permitted</u>	<u>1</u>
75.21 <u>H-4, H-5</u>	<u>Greater than 30</u>	<u>Not permitted</u>	<u>1</u>
75.22 <u>A, B, E, F, M, S,</u>			
75.23 <u>U</u>	<u>Greater than 30</u>	<u>1</u>	<u>0</u>
75.24 <u>R</u>	<u>Greater than 10</u>	<u>1</u>	<u>0.5</u>

76.1	<u>I-2^a, I-4</u>	<u>All</u>	<u>Not permitted</u>	<u>0</u>
76.2	<u>I-1, I-3</u>	<u>All</u>	<u>Not permitted</u>	<u>1^b</u>

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

76.4 b. For a reduction in the fire-resistance rating for occupancies in Group I-3, see section
76.5 408.8.

76.6 c. Buildings equipped throughout with an automatic sprinkler system in accordance with
76.7 section 903.3.1.1 or 903.3.1.2, where allowed.

76.8 Subp. 2. **IBC section 1018.6.** IBC section 1018.6 is amended by modifying the
76.9 exceptions to read as follows:

76.10 **Exceptions:**

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

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

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

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

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

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

77.1 **1305.1022 SECTION 1022, INTERIOR EXIT STAIRWAYS AND RAMPS.**

77.2 **IBC section 1022.5** is amended to read as follows:

77.3 **1022.5 Penetrations.** Penetrations into and openings through interior exit stairways
77.4 and ramps are prohibited except for required exit doors, equipment, and ductwork
77.5 necessary for independent ventilation or pressurization, sprinkler piping, standpipes,
77.6 electrical raceway for fire department communications systems and electrical raceway
77.7 serving the interior exit stairway or ramp and terminating at a steel box not exceeding
77.8 16 square inches (0.010 m²). Such penetrations shall be protected in accordance with
77.9 section 714. There shall be no penetrations or communicating openings, whether
77.10 protected or not, between any other interior exit stairways and ramps.

77.11 **1305.1023 SECTION 1023, EXIT PASSAGEWAYS.**

77.12 **IBC section 1023.6** is amended to read as follows:

77.13 **1023.6 Penetrations.** Penetrations into and openings through an exit passageway
77.14 are prohibited except for required exit doors, equipment, and ductwork necessary
77.15 for independent pressurization, sprinkler piping, standpipes, electrical raceway for
77.16 fire department communication, and electrical raceway serving the exit passageway
77.17 and terminating at a steel box not exceeding 16 square inches (0.010 m²). Such
77.18 penetrations shall be protected in accordance with section 714. There shall be no
77.19 penetrations or communicating openings, whether protected or not, between any
77.20 other exit passageway.

77.21 **1305.1026 [Renumbered 1305.1029]**

77.22 **1305.1028 SECTION 1028, ASSEMBLY.**

77.23 **IBC section 1028.1.1** is amended to read as follows:

77.24 **1028.1.1 Bleachers.** Bleachers, grandstands, and folding and telescopic seating,
77.25 that are not building elements, shall comply with International Code Council
77.26 (ICC) 300, with the following amendments to ICC 300:

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

78.2 **Exception:** Aisles shall not be required to be more than 66 inches
78.3 (1.676 mm) in width when the following are satisfied:

- 78.4 1. the seating area served by such aisles is composed entirely of
78.5 bleachers;
78.6 2. the row-to-row dimension is 28 inches (71 cm) or less; and
78.7 3. front egress is not limited.

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

78.9 **405.1 Aisles.** The minimum width of aisles shall be in accordance with section 404.5,
78.10 but not less than that required by this section. An aisle is not required in seating
78.11 facilities where all of the following conditions exist:

- 78.12 1. Seats are without backrest.
78.13 2. The rise from row to row does not exceed 6 inches (152 mm) per row.

78.14 **Exception:** Bleachers 55 inches or less in height.

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

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

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

78.20 **Exception:** Bleachers 55 inches or less in height.

78.21 6. Seat boards have a continuous flat surface.

78.22 7. Seat boards provide a walking surface with a minimum width of 11 inches
78.23 (279 mm).

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

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

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

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

79.3 **Exceptions:**

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

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

79.9 (a) bleachers must have vertical perimeter guards or other approved
79.10 guards that address climbability and are designed to prevent
79.11 accidents; and

79.12 (b) guards are not required on bleachers 55 inches (1397 mm) and
79.13 less in height.

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

79.15 **408.3 Guard design.** Guards and their attachment shall be designed to resist the
79.16 loads indicated in section 303. Bleachers must have vertical perimeter guards or other
79.17 approved guards that address climbability and are designed to prevent accidents, in
79.18 accordance with the Minnesota Bleacher Safety Act, Minnesota Statutes, section
79.19 326B.112.

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

79.21 All bleachers or bleacher open spaces over 55 inches (1397 mm) above grade or the
79.22 floor below, and all bleacher guardrails, if any part of the guardrail is over 30 inches
79.23 (762 mm) above grade or the floor below, must be certified to conform with the safety
79.24 requirements contained in Minnesota Statutes, section 326B.112.

79.25 (IBC Section 1028.1.1.1 still applies.)

80.1 ~~1305.1026~~ 1305.1029 SECTION ~~1026~~ 1029, EMERGENCY ESCAPE AND RESCUE.

80.2 Subpart 1. IBC section 1029.1. IBC section ~~1026.1~~ 1029.1 is amended to read
80.3 as follows:

80.4 ~~1026.1~~ 1029.1 **General.** In addition to the means of egress required by this chapter,
80.5 provisions shall be made for emergency escape and rescue in Group R as applicable
80.6 in Section 101.2 and Group I-1 openings in Group R-2 occupancies in accordance
80.7 with Tables 1021.2(1) and 1021.2(2) and Group R-3 occupancies. Basements and
80.8 sleeping rooms below the fourth story above grade plane shall have at least one
80.9 exterior emergency escape and rescue opening in accordance with this section.

80.10 Where basements contain one or more sleeping rooms, emergency egress and rescue
80.11 openings shall be required in each sleeping room, but shall not be required in
80.12 adjoining areas of the basement. Such ~~opening~~ openings shall open directly into a
80.13 public way, public alley, or to a yard or court that opens to a public way.

80.14 **Exceptions:**

- 80.15 1. In other than Group R-3 occupancies ~~as applicable in Section 101.2~~, buildings
80.16 equipped throughout with an approved automatic sprinkler system in accordance
80.17 with Section 903.3.1.1 or 903.3.1.2.
- 80.18 2. In other than Group R-3 occupancies ~~as applicable in Section 101.2~~, sleeping
80.19 rooms provided with a door to a fire-resistance-rated corridor having access to
80.20 two remote exits in opposite directions.
- 80.21 3. The emergency escape and rescue opening is permitted to open onto a balcony
80.22 within an atrium in accordance with the requirements of Section 404, provided
80.23 the balcony provides access to an exit and the dwelling unit or sleeping unit has a
80.24 means of egress that is not open to the atrium.
- 80.25 4. High-rise buildings in accordance with Section 403.

81.1 5. Emergency escape and rescue openings are not required from basements or
81.2 sleeping rooms which have an exit door or exit access door that opens directly into
81.3 a public way, or to a yard, court, or exterior exit balcony that opens to a public way.

81.4 6. Basements without habitable spaces and having no more than 200 square feet
81.5 (18.6 m²) in floor area shall not be required to have emergency escape windows.

81.6 7. Basements or basement bedrooms in Group R-3 occupancies, when the
81.7 building is protected by an automatic sprinkler system installed in accordance
81.8 with section 903.3.

81.9 8. Basements in Group R-3 occupancies used only to house mechanical
81.10 equipment that do not exceed a total floor area of 200 square feet (18.58 m²).

81.11 9. Basements or basement bedrooms in Group R-3 occupancies that comply
81.12 with all of the following conditions:

81.13 A. constructed prior to August 1, 2008;

81.14 B. undergoing an alteration or repair; and

81.15 C. the entire basement area is protected with an automatic sprinkler system
81.16 in accordance with section 903.3 and all portions of the means of egress to
81.17 the level of exit discharge, and all areas on the level of exit discharge that
81.18 are open to the means of egress, are protected with an automatic sprinkler
81.19 system in accordance with section 903.3.

81.20 Subp. 2. IBC section 1029.4. IBC section 1029.4 is amended by adding an exception
81.21 to read as follows:

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

81.25 Subp. 3. IBC section 1029.6. IBC section 1029 is amended to read as follows:

81.26 1029.6 Replacement windows. Replacement windows installed in buildings
81.27 regulated by the International Building Code shall be exempt from the minimum size

82.1 and maximum sill height requirements of sections 1029.2, 1029.2.1, and 1029.3, if
 82.2 the replacement window is the manufacturer's largest standard size window that will
 82.3 fit within the existing frame or existing rough opening. The replacement window
 82.4 shall be the same operating style as the existing window or a style that provides for an
 82.5 equal or greater window opening area than the existing window.

82.6 **1029.6.1 Licensed facilities.** Windows in rooms used for foster care or day care
 82.7 licensed or registered by the state of Minnesota shall comply with the provisions
 82.8 of section 1029.6 or all of the following conditions, whichever is more restrictive:

- 82.9 (a) Minimum of 20 inches in clear opening width;
 82.10 (b) Minimum of 20 inches in clear opening height;
 82.11 (c) Minimum of 648 square inches (4.5 square feet) clear opening; and
 82.12 (d) Maximum of 48 inches from the floor to the sill height.

82.13 **1305.1203 SECTION 1203, VENTILATION.**

82.14 **IBC section 1203.1** is amended to read as follows:

82.15 **1203.1 General.** Buildings shall be provided with natural ventilation in accordance
 82.16 with section 1203.4 or mechanical ventilation in accordance with Minnesota Rules,
 82.17 chapter 1346. For additional ventilation requirements, see Minnesota Rules, chapters
 82.18 1322 and 1323, as applicable.

82.19 **Exceptions:**

- 82.20 1. Buildings or portions thereof that are not intended for normal human
 82.21 occupancy, or where the primary purpose is not associated with human comfort.
 82.22 2. Group U occupancies.

82.23 **1305.1209 SECTION 1209, ACCESS TO UNOCCUPIED SPACES.**

82.24 **IBC section 1209.3** is amended, and subsections added, to read as follows:

82.25 **1209.3 Mechanical equipment and appliance access.** Access to mechanical
 82.26 equipment and appliances installed in underfloor areas, in attic spaces, and on roofs

83.1 or elevated structures shall be in accordance with this section and the Minnesota
83.2 Mechanical Code.

83.3 **1209.3.1 Mechanical equipment and appliances on roofs or elevated**
83.4 **structures.** Where mechanical equipment or appliances requiring periodic
83.5 inspection, service, or maintenance are installed on roofs or elevated structures, a
83.6 permanent stair shall be provided for access.

83.7 **Exception:** A portable ladder may be used for dwellings, replacement
83.8 equipment and appliances on existing buildings, and exterior roof access
83.9 points not exceeding 16 feet (4.9 m) above grade, unless the building official
83.10 determines that the unique shape of the roof does not allow safe access
83.11 with a portable ladder.

83.12 The permanent stair shall be as required by relevant safety regulations, but shall
83.13 not be less than, at a minimum, meet the following:

- 83.14 1. The stair shall be installed at an angle of not more than 60 degrees
83.15 measured from the horizontal plane;
- 83.16 2. The stair shall have flat treads at least six inches (152 mm) deep and a
83.17 clear width of at least 18 inches (457 mm) with equally spaced risers at least
83.18 10.5 inches (267 mm) high and not exceeding 14 inches (356 mm);
- 83.19 3. The stair shall have intermediate landings not exceeding 18 feet (5.5
83.20 m) vertically;
- 83.21 4. The stair shall be installed with continuous handrails ~~shall be installed~~
83.22 on both sides of the stair;
- 83.23 5. interior stairs shall terminate at the ~~under side~~ underside of the roof at
83.24 a hatch or scuttle of at least ~~eight~~ 8 square feet (0.74m^2) with a minimum
83.25 dimension of 20 inches (508 mm);

- 84.1 6. ~~when~~ a roof access hatch or scuttle ~~is~~ shall be located within ~~ten~~ 10
 84.2 feet (3.0 m) of a roof edge, and a guard shall be installed in accordance
 84.3 with this code; and
 84.4 7. exterior stairs shall terminate at the roof access point or at a level landing
 84.5 of at least ~~eight~~ 8 square feet (0.74m²) with a minimum dimension of 20
 84.6 inches (508 mm). The landing shall have a guard installed in accordance
 84.7 with IMC section 304.9.

84.8 **1209.3.1.1 Permanent ladders.** Where a change in roof elevation greater
 84.9 than 30 inches (762 mm) but not exceeding 16 feet (4.9 m) exists, a
 84.10 permanent ladder shall be provided. The ladder may be vertical ~~and shall~~
 84.11 ~~be as required by relevant safety regulations, but shall not be less than.~~ The
 84.12 ladder shall, at a minimum, meet the following:

- 84.13 1. Width shall be at least 16 inches (406 mm).
- 84.14 2. Rung spacing shall be a maximum of 14 inches (356 mm).
- 84.15 3. Toe space shall be at least ~~six~~ 6 inches (152 mm).
- 84.16 4. Side railings shall extend at least 30 inches (762 mm) above the
 84.17 roof or parapet wall.

84.18 **1305.1210 SECTION 1210, SURROUNDING MATERIALS.**

84.19 **IBC section ~~1210.1~~ 1210.2.1** is amended to read as follows:

84.20 **~~1210.1~~ 1210.2.1 Floors and wall bases.** In other than dwelling units, toilet,
 84.21 bathing and shower, and bathing room floors floor finish material shall have a
 84.22 smooth, hard, nonabsorbent surface, such as portland cement, concrete, ceramic
 84.23 tile, sheet vinyl, or other approved floor covering material. The intersections of
 84.24 such floors with walls shall have a smooth, hard, nonabsorbent vertical base that
 84.25 extends upward onto the walls at least ~~5~~ 4 inches (~~127~~ 101 mm).

84.26 **1305.1403 PERFORMANCE REQUIREMENTS.**

84.27 **IBC section 1403.5** is deleted in its entirety.

85.1 **1305.1405 SECTION 1405, INSTALLATION OF WALL COVERINGS.**

85.2 Subpart 1. ~~IBC section 1405.3.2~~ 1405.4.2. IBC section ~~1405.3.2~~ 1405.4.2 is
85.3 amended to read as follows:

85.4 ~~1405.3.2~~ 1405.4.2 **Masonry**. Flashing and weepholes in anchored veneer shall
85.5 be located above finished ground level above the foundation wall or slab, and
85.6 other points of support, including structural floors, shelf angles and lintels where
85.7 anchored veneers are designed in accordance with section ~~1405.5~~ 1405.4.6.

85.8 Subp. 2. [Repealed, 32 SR 7]

85.9 Subp. 3. [See repealer.]

85.10 **1305.1509 SECTION 1509, ROOFTOP STRUCTURES.**

85.11 **IBC section 1509.2.3** is amended to read as follows:

85.12 ~~1509.2 Penthouses~~ 1509.2.3 Use limitations. ~~A penthouse or other projection~~
85.13 ~~above the roof in structures of other than Type I construction shall not exceed~~
85.14 ~~28 feet (8534 mm) above the roof where used as an enclosure for tanks or for~~
85.15 ~~elevators that run to the roof and in all other cases shall not extend more than~~
85.16 ~~18 feet (5486 mm) above the roof. The aggregate area of penthouses and other~~
85.17 ~~rooftop structures shall not exceed one-third the area of the supporting roof. A~~
85.18 ~~penthouse, bulkhead, or any other similar projection above the roof~~ Penthouses
85.19 ~~shall not be used for purposes other than shelter of mechanical or electrical~~
85.20 ~~equipment, tanks, or shelter of vertical shaft openings in the roof assembly.~~

85.21 **Exception:** Accessory uses necessary for the maintenance of building
85.22 systems shall be permitted when the penthouse is sprinkled in accordance
85.23 with section 903.1.1.

85.24 ~~Provisions such as louvers, louver blades, or flashing shall be made to protect~~
85.25 ~~the mechanical equipment and the building interior from the elements. Penthouses or~~
85.26 ~~bulkheads used for purposes other than permitted by this section shall conform to the~~

86.1 requirements of this code for an additional story. The restrictions of this section shall not
86.2 prohibit the placing of wood flagpoles or similar structures on the roof of any building.

86.3 **1305.1511 SECTION 1511, SOLAR PHOTOVOLTAIC PANELS/MODULES.**

86.4 **IBC section 1511.1.** IBC section 1511.1 is amended to read as follows:

86.5 **1511.1 Solar photovoltaic panels/modules.** Solar photovoltaic panels/modules
86.6 installed upon a roof or as an integral part of a roof assembly shall comply with
86.7 the requirements of this code.

86.8 (Section 1511.1.1 still applies.)

86.9 **1305.1607 SECTION 1607, LIVE LOADS.**

86.10 Subpart 1. [Repealed, 32 SR 7]

86.11 Subp. 2. **IBC section 1607.12.2 1607.13.2.** IBC section ~~1607.12.2~~ 1607.13.2 is
86.12 amended to read as follows:

86.13 **1607.12.2 1607.13.2 Vertical impact force.** The maximum wheel loads of
86.14 the crane shall be increased by the percentages shown below to determine the
86.15 induced vertical impact or vibration force. Impact load shall be applied to one
86.16 hoist system at a time for multiple hoist or bridge systems.

86.17 **A. Monorails, underhung bridge cranes and pendant operated top running**
86.18 **bridge cranes:**

86.19 15 percent minimum for hoist lift speeds of less than 30 feet per minute.
86.20 Percentage equivalent to 0.5 times the hoist lift speed, for lift speeds of 30 to 100
86.21 feet per minute.

86.22 50 percent maximum for hoist lift speeds greater than 100 feet per minute.

86.23 50 percent for magnetic pickup or vacuum lift type systems.

86.24 No impact load is required for hand chain (non-powered) hoists.

86.25 **B. Cab operated or remotely operated top running bridge cranes:**

86.26 25 percent minimum.

87.1 Subp. 3. IBC section ~~1607.12.3~~ 1607.13.3. IBC section ~~1607.12.3~~ 1607.13.3 is
87.2 amended to read as follows:

87.3 ~~1607.12.3~~ 1607.13.3 Lateral force. Top running powered bridge cranes:

87.4 A. The lateral force on top running crane runway beams with powered
87.5 trolleys shall be calculated as 20 percent of the sum of the rated capacity
87.6 of the crane and the weight of the hoist and trolley. The lateral force shall
87.7 be assumed to act horizontally at the traction surface of a runway beam, in
87.8 either direction perpendicular to the beam, and shall be distributed according
87.9 to the lateral stiffness of the runway beam and supporting structure. The
87.10 runway beams shall be designed for the lateral and torsional loads, as well as
87.11 for the maximum lateral deflection limit of Span/800.

87.12 B. Monorails and underhung bridge cranes: The bridge girder, underhung
87.13 bridge crane runway beam and monorails shall be designed with sufficient
87.14 strength and rigidity to prevent detrimental lateral deflection. The lateral
87.15 deflection should not exceed span/800 based on 5 percent of maximum
87.16 wheel load(s) without vertical impact factor.

87.17 **1305.1705 SECTION 1705, REQUIRED VERIFICATION AND INSPECTION.**

87.18 Subpart 1. IBC Table 1705.3. IBC Table 1705.3 is amended as follows:

87.19 A. Add "X⁶" to the "Periodic" column, row "7. Inspection of concrete and
87.20 shotcrete placement for proper application techniques."

87.21 B. Add footnote "c." to read as follows:

87.22 c. Exception: Periodic verification and inspection is permitted, upon approval of the
87.23 structural engineer of record and the building official.

87.24 Subp. 2. IBC section 1705.4. IBC section 1705.4 is amended by adding the following
87.25 sentence to the end of the section: "Periodic verification and inspection of grout placement
87.26 is permitted, upon approval of the structural engineer of record and the building official."

88.1 **1305.1805 SECTION 1805, FOOTINGS AND FOUNDATIONS DAMPROOFING**
88.2 **AND WATERPROOFING.**

88.3 Subpart 1. [Repealed, 32 SR 7]

88.4 Subp. 2. [Repealed, 32 SR 7]

88.5 Subp. 3. [Repealed, 32 SR 7]

88.6 Subp. 4. [See repealer.]

88.7 Subp. 5. [See repealer.]

88.8 Subp. 6. **IBC section 1805.4.3.** IBC section 1805.4.3 is amended to read as follows:

88.9 **1805.4.3 Drain discharge.** The floor base and foundation perimeter drain shall
88.10 discharge by gravity or mechanical means into a trapped area drain, sump, dry
88.11 well, or other approved location above the ground.

88.12 **1305.1809 SECTION 1809, SHALLOW FOUNDATIONS.**

88.13 **IBC section 1809.5** is amended to read as follows:

88.14 **1809.5 Frost protection.** Except where otherwise protected from frost, foundations
88.15 and other permanent supports of buildings and structures shall be protected from frost
88.16 by one or more of the following methods:

- 88.17 1. extending below the frost line specified in Minnesota Rules, part 1303.1600;
88.18 2. constructing in accordance with ASCE 32; or
88.19 3. erecting on solid rock.

88.20 **Exception:** Freestanding buildings constructed in accordance with
88.21 Minnesota Rules, chapter 1303, shall not be required to be protected.

88.22 Shallow foundations shall not bear on frozen soil.

88.23 **1305.2510 SECTION 2510, LATHING AND FURRING FOR CEMENT PLASTER**
88.24 **(STUCCO).**

88.25 **IBC section 2510.6** is amended to read as follows:

89.1 **2510.6 Water-resistive barriers.** Water-resistive barriers shall be installed as
89.2 required in section 1404.2 and, where applied over wood-based sheathing, shall
89.3 include a water-resistive, vapor-permeable barrier with a performance at least
89.4 equivalent to two layers of Grade D paper.

89.5 **Exception:** Where the water-resistive barrier that is applied over wood-based
89.6 sheathing has a water resistance equal or greater than that of 60-minute Grade
89.7 D paper and is separated from the stucco by an intervening, substantially
89.8 non-water-absorbing layer or drainage space.

89.9 **1305.2603 SECTION 2603 FOAM PLASTIC INSULATION.**

89.10 IBC Section 2603.4.1.13 is amended to read as follows:

89.11 ~~**2603.4.1.13 Type V construction.** Foam plastic spray applied to a sill plate and header~~
89.12 ~~of Type V construction is subject to all of the following:~~

- 89.13 1. The maximum thickness of the foam plastic shall be 5-1/2 inches (82.6 mm).
89.14 2. The foam plastic shall have a flame spread index of 25 or less and an accompanying
89.15 smoke-developed index of 450 or less when tested in accordance with ASTM E84.

89.16 IBC section 2603.5.5 is amended by adding exception number 2 and renumbering
89.17 the exceptions as follows:

89.18 **2603.5.5 Vertical and lateral fire propagation.** The exterior wall assembly shall
89.19 be tested in accordance with and comply with the acceptance criteria of NFPA 285.

89.20 **Exceptions:**

- 89.21 1. one-story buildings complying with section 2603.4.1.4.
89.22 2. In other than high-rise buildings equipped throughout with an automatic
89.23 sprinkler system installed in accordance with section 903.3.1.1, foam plastic
89.24 insulation may be installed in compliance with the following conditions:
89.25 (a) The foam plastic insulation shall be applied between a continuous
89.26 masonry or noncombustible exterior wall sheathing on the building

90.1 side and a continuous noncombustible substrate or fire resistant treated
90.2 plywood barrier on the exterior side of the foam plastic insulation.

90.3 (b) Foam insulation shall be limited to a maximum of 3 inches thickness.

90.4 (c) Wall claddings permitted by this code may be applied to the outside
90.5 of the exterior substrate barrier.

90.6 (d) Continuous fire blocking shall be provided around all opening
90.7 head, jamb, and sill conditions between continuous masonry or
90.8 noncombustible exterior wall sheathing on the building side and a
90.9 continuous substrate barrier on the exterior side of the foam plastic
90.10 insulation.

90.11 (e) Continuous horizontal metal furring, minimum 16 gauge without
90.12 perforations, shall be provided at each floor, in line with the slab edge
90.13 containment fire stopping creating a fire break spanning between the
90.14 masonry or noncombustible wall sheathing on the building side and a
90.15 noncombustible substrate barrier on the exterior side of the foam plastic
90.16 insulation.

90.17 **1305.2902 SECTION 2902, MINIMUM PLUMBING FACILITIES.**

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

90.19 Subp. 1a. IBC section 2902.1.1 2902.1.2. IBC section ~~2902.1.1~~ 2902.1.2 is amended
90.20 to read as follows:

90.21 **2902.1.1 Unisex 2902.1.2 Family or assisted-use toilet and bath fixtures.**
90.22 Fixtures located within unisex family or assisted-use toilet and bathing rooms
90.23 complying with Minnesota Rules, chapter 1341, are permitted to be included
90.24 in determining the minimum required number of fixtures for either the male
90.25 or female occupants.

90.26 Subp. 2. IBC Table 2902.1, Minimum number of required plumbing fixtures.

91.1 A. The body of IBC Table 2902.1 is amended as follows:

91.2 1. Add footnote "e h" to the A-5 Use Group "Stadiums, amusement parks, bleachers,
91.3 and grandstands for outdoor sporting events and activities" description of the table.

91.4 2. Add footnotes "f," "g i," and "h j" to the "Drinking Fountains" heading in the table.

91.5 3. Add footnote "i k" to the "Water Closets" heading in the table.

91.6 B. The footnotes to IBC Table 2902.1 are amended, ~~and footnotes added,~~ to
91.7 read as follows:

91.8 a. The fixtures shown are based on one fixture being the minimum required for the
91.9 number of persons indicated or any fraction of the number of persons indicated. The
91.10 number of occupants shall be determined by this code.

91.11 b. Toilet facilities for employees shall be separate from facilities for inmates or
91.12 patients care recipients.

91.13 c. A single-occupant toilet room with one water closet and one lavatory serving not
91.14 more than two adjacent patient rooms shall be permitted where ~~such~~ the room is provided
91.15 with direct access from each patient room and with provisions for privacy.

91.16 d. The occupant load for seasonal outdoor seating and entertainment areas shall be
91.17 included when determining the minimum number of facilities required.

91.18 e. ~~Permanent facilities located either on site or available in an adjacent building or~~
91.19 ~~portable temporary facilities available on site during times when the stadium or grandstand~~
91.20 ~~is in use may be used.~~ The minimum number of required drinking fountains shall comply
91.21 with Table 2902.1 and IBC chapter 11.

91.22 f. A drinking fountain shall not be required in buildings or tenant spaces having an
91.23 occupant load less than 50.

91.24 g. For business and mercantile occupancies with an occupant load of 15 or fewer,
91.25 service sinks shall not be required.

92.1 h. Permanent facilities located either on site or available in an adjacent building or
 92.2 portable temporary facilities available on site during times when the stadium or grandstand
 92.3 is in use may be used.

92.4 ~~g. i.~~ Where water is served in restaurants, drinking fountains shall not be required.

92.5 ~~h. j.~~ Water or other beverages available through free or fee-based serving or dispensers
 92.6 may be substituted for up to 50 percent of the required number of drinking fountains.

92.7 ~~i. k.~~ In each bathroom or toilet room, urinals shall not be substituted for more than
 92.8 67 percent of the required water closets.

92.9 Subp. 3. **IBC section 2902.2.** IBC section 2902.2 is amended to read as follows:

92.10 **2902.2 Separate facilities.** Where plumbing fixtures are required, separate facilities
 92.11 shall be provided for each sex.

92.12 **Exceptions:**

92.13 1. Separate facilities shall not be required for dwelling units and sleeping units.

92.14 2. Separate facilities shall not be required in structures or tenant spaces with a
 92.15 total occupant load, including both employees and customers, of ~~15~~ 20 or less.

92.16 3. Separate facilities shall not be required in mercantile occupancies in which the
 92.17 maximum occupant load is ~~50~~ 100 or less.

92.18 ~~4. Separate facilities shall not be required in Group B occupancies not exceeding~~
 92.19 ~~2,000 gross square feet (185.8 m²) of floor area. When using this exception, the~~
 92.20 ~~individual unisex restroom shall have not less than one watercloset, one urinal,~~
 92.21 ~~and one lavatory.~~

92.22 Subp. 4. **IBC section 2902.6.** IBC section 2902 is amended by adding a subsection
 92.23 to read as follows:

92.24 **2902.6 Controlled access to required facilities.** Sanitation facilities required by this
 92.25 chapter may have controlled access, but in all cases shall be maintained available for
 92.26 utilization by those employees, customers, or patrons used to calculate the minimum
 92.27 required facilities.

93.1 **1305.3109 SECTION 3109, SWIMMING POOL ENCLOSURES AND SAFETY**
93.2 **DEVICES.**

93.3 **IBC section 3109, Swimming Pool Enclosures and Safety Devices, is deleted in its**
93.4 **entirety.**

93.5 **1305.3111 SECTION 3111, SOLAR PHOTOVOLTAIC PANELS/MODULES.**

93.6 **IBC section 3111.1.** IBC section 3111.1 is amended to read as follows:

93.7 **3111.1 General.** Solar photovoltaic panels/modules shall comply with the
93.8 **requirements of this code.**

93.9 **1305.3112 SECTION 3112, WINDOW CLEANING ANCHORS.**

93.10 **IBC chapter 31** is amended by adding a new section to the chapter:

93.11 **3112. Window cleaning anchors.** Building anchors for window cleaning safety shall
93.12 **be provided for buildings four or more stories above grade plane. Building anchors for**
93.13 **window cleaning safety shall be designed, installed, and located in accordance with the**
93.14 **design criteria of ANSI/IWCA I-14.1-2001.**

93.15 **Exceptions:**

93.16 **1. Buildings without windows.**

93.17 **2. Existing buildings undergoing reconstruction, alteration, or repair that does not**
93.18 **include the exposure of primary structural roof components.**

93.19 **3. In accordance with Minnesota Statutes, section 326B.106, subdivision 4, paragraph**
93.20 **(n), the commissioner of the Minnesota Department of Labor and Industry may waive**
93.21 **all or a portion of the requirements for existing buildings if the installation of the**
93.22 **dedicated anchorages would not result in significant safety improvements due to**
93.23 **limits on the size of the project, or other factors as determined by the commissioner.**

93.24 **1305.3113 SECTION 3113, SOLAR PHOTOVOLTAIC POWER SYSTEMS.**

93.25 **IBC section 3113.** IBC chapter 31 is amended to add a section to read as follows:

93.26 **3113. Solar photovoltaic power systems; general.** Solar photovoltaic power systems
93.27 **shall be installed in accordance with this part and Minnesota Rules, chapter 1315.**

94.1 **Exception:** Detached, nonhabitable Group U structures including parking shade
94.2 structures, carports, solar trellises, and similar structures shall not be subject to the
94.3 requirements of this part. Minnesota Rules, chapter 1315, applies.

94.4 **3113.1 Access and pathways.** Roof access, pathways, and spacing requirements shall
94.5 be provided in accordance with sections 3113.1 through 3113.3.

94.6 **Exceptions:**

94.7 1. Residential structures shall be designed so that each photovoltaic array is no
94.8 greater than 150 feet (45,720 mm) by 150 feet (45,720 mm) in either axis.

94.9 2. Panels/modules shall be permitted to be located up to the roof ridge where an
94.10 alternative ventilation method approved by the fire department has been provided
94.11 or where the fire department has determined vertical ventilation techniques will
94.12 not be employed.

94.13 **3113.1.1 Roof access points.** Roof access points shall be located in areas that
94.14 do not require the placement of fire department ground ladders over openings
94.15 such as windows or doors, and located at strong points of building construction
94.16 in locations where the access point does not conflict with overhead obstructions
94.17 such as tree limbs, wires, or signs.

94.18 **3113.1.2 Residential systems for dwelling units.** Access to residential systems
94.19 for dwelling units shall be provided in accordance with sections 3113.1.2.1
94.20 through 3113.1.2.4.

94.21 **3113.1.2.1 Residential buildings with hip roof layouts.** Panels or modules
94.22 installed on residential buildings with hip roof layouts shall be located in a
94.23 manner that provides a 3-foot-wide (914 mm) clear access pathway from
94.24 the eave to the ridge on each roof slope where panels/modules are located.
94.25 The access pathway shall be located at a location on the building capable of
94.26 supporting the live load of firefighters accessing the roof.

95.1 **Exception:** These requirements shall not apply to roofs with slopes of
95.2 two units vertical in 12 units horizontal (2:12) or less.

95.3 **3113.1.2.2 Residential buildings with a single ridge.** Panels or modules
95.4 installed on residential buildings with a single ridge shall be located in a
95.5 manner that provides two 3-foot-wide (914 mm) clear access pathways from
95.6 the eave to the ridge on each roof slope where panels/modules are located.

95.7 **Exception:** This requirement shall not apply to roofs with slopes of two
95.8 units vertical in 12 units horizontal (2:12) or less.

95.9 **3113.1.2.3 Residential buildings with roof hips and valleys.** Panels or
95.10 modules installed on residential buildings with roof hips and valleys shall
95.11 be located no closer than 18 inches (457 mm) to a hip or valley where
95.12 panels/modules are to be placed on both sides of a hip or valley. Where panels
95.13 are to be located on only one side of a hip or valley that is of equal length, the
95.14 panels shall be permitted to be placed directly adjacent to the hip or valley.

95.15 **Exception:** These requirements shall not apply to roofs with slopes of
95.16 two units vertical in 12 units horizontal (2:12) or less.

95.17 **3113.1.2.4 Residential building smoke ventilation.** Panels or modules
95.18 installed on residential buildings shall be located no higher than 3 feet (914
95.19 mm) below the ridge in order to allow for fire department smoke ventilation
95.20 operations.

95.21 **3113.2 Other than residential buildings.** Access to systems for occupancies other
95.22 than dwelling units shall be provided in accordance with sections 3113.2.1 through
95.23 3113.2.1.2.

95.24 **Exception:** Where it is determined by the fire department that the roof
95.25 configuration is similar to that of dwelling units, the residential access and
95.26 ventilation requirements in sections 3113.1.2 through 3113.1.2.4 shall be
95.27 permitted.

96.1 **3113.2.1 Access.** There shall be a minimum 6-foot-wide (1829 mm) clear
96.2 perimeter around the edges of the roof.

96.3 **Exception:** Where either access of the building is 250 feet (76,200 mm)
96.4 or less, there shall be a minimum 4-foot-wide (1290 mm) clear perimeter
96.5 around the edges of the roof.

96.6 **3113.2.1.2 Pathways.** The solar installation shall be designed to provide
96.7 designated pathways. The pathways shall meet the following requirements:

96.8 1. The pathway shall be over areas capable of supporting the live load
96.9 of firefighters accessing the roof.

96.10 2. The centerline access pathways shall be provided in both axes of the
96.11 roof. Centerline access pathways shall run where the roof structure is
96.12 capable of supporting the live load of firefighters accessing the roof.

96.13 3. The pathway shall be a straight line not less than 4 feet (1290 mm)
96.14 clear to skylights or ventilation hatches.

96.15 4. The pathway shall be a straight line not less than 4 feet (1290 mm)
96.16 clear to roof standpipes.

96.17 5. The pathway shall provide not less than 4 feet (1290 mm) clear
96.18 around roof access hatch with at least one not less than 4 feet (1290
96.19 mm) clear pathway to parapet or roof edge.

96.20 **3113.3 Smoke ventilation.** The solar installation shall be designed to meet the
96.21 following requirements:

96.22 1. Arrays shall be no greater than 150 feet (45,720 mm) by 150 feet (45,720 mm)
96.23 in distance in either axis in order to create opportunities for fire department
96.24 smoke ventilation operations.

96.25 2. Smoke ventilation options between array sections shall be one of the following:

96.26 2.1 A pathway 8 feet (2438 mm) or greater in width.

97.1 2.2 A 4-foot (1290 mm) or greater in width pathway and bordering roof
97.2 skylights or smoke and heat vents.

97.3 2.3 A 4-foot (1290 mm) or greater in width pathway and bordering 4-foot by
97.4 8-foot (1290 mm by 2438 mm) "venting cutouts" every 20 feet (6096 mm)
97.5 on alternating sides of the pathway.

97.6 **3113.4 Ground-mounted photovoltaic arrays.** Ground-mounted photovoltaic
97.7 arrays shall comply with this part and Minnesota Rules, chapter 1315. Setback
97.8 requirements shall not apply to ground-mounted, free-standing photovoltaic arrays.
97.9 A clear, brush-free area of 10 feet (3048 mm) shall be required for ground-mounted
97.10 photovoltaic arrays.

97.11 **1305.3302 SECTION 3302, CONSTRUCTION SAFEGUARDS.**

97.12 **IBC section 3302** is amended by adding a subsection to read as follows:

97.13 **3302.3 3302.4 Construction barriers.** Where construction, remodeling, or
97.14 demolition is taking place involving the use of cutting and welding, temporary
97.15 heating with open flames, or flammable liquid fueled equipment, such areas shall be
97.16 separated from occupied areas of a building by materials that will resist the spread of
97.17 fire and smoke as specified for draftstopping materials in IBC section 717.3.1 718.3.1.

97.18 **1305.3500 CHAPTER 35, REFERENCED STANDARDS.**

97.19 Subpart 1. [See repealer.]

97.20 Subp. 2. **Supplemental standards.** The standards listed in this subpart shall
97.21 supplement the list of referenced documents in chapter 35 of the IBC. The standards
97.22 referenced in this subpart shall be considered part of the requirements of this rule part to
97.23 the extent prescribed in each rule part or reference.

97.24 NFPA 45 - ~~2004~~ 2011 Standard on Fire Protection for Laboratories Using Chemicals
97.25 ANSI/TWCA I-14.1-2001 - Standard for Window Cleaning

98.1 **REPEALER.** Minnesota Rules, parts 1305.0040; 1305.0308, subpart 3; 1305.0403,
98.2 subpart 2; 1305.0404; 1305.0408, subpart 1; 1305.0421; 1305.0716; 1305.0903, subpart 1;
98.3 1305.0907, subparts 1, 26a, 27a, 30, 32, and 33; 1305.0909, subparts 1 and 2; 1305.0913;
98.4 1305.1002; 1305.1008, subpart 4; 1305.1019; 1305.1025; 1305.1405, subpart 3;
98.5 1305.1502; 1305.1702; 1305.1704; 1305.1805, subparts 4 and 5; 1305.1807; 1305.1907;
98.6 1305.2109; and 1305.3500, subpart 1, are repealed.

98.7 **EFFECTIVE DATE.** Minnesota Rules, parts 1305.0011 to 1305.3500, are effective
98.8 January 24, 2015, or five working days after publication of the amendments' notice of
98.9 adoption in the State Register, whichever is later.

Office of the Revisor of Statutes

Administrative Rules



TITLE: Proposed Permanent Rules Adopting the 2012 International Building Code

AGENCY: Department of Labor and Industry

MINNESOTA RULES: Chapter 1305

INCORPORATIONS BY REFERENCE:

Part 1305.0011: IBC 2012 edition of the International Building Code as promulgated by the International Code Council, Inc. (ICC), Washington, D.C., is incorporated by reference and made part of the Minnesota State Building Code except as qualified by the applicable provisions in Minnesota Rules, chapter 1300, and as amended in this chapter. Portions of this chapter reproduce excerpts from the 2012 IBC, International Code Council, Inc., Washington, D.C., copyright 2012, reproduced with permission, all rights reserved. The IBC is not subject to frequent change and a copy of the IBC, with amendments for use in Minnesota, is available in the office of the commissioner of labor and industry.

The attached rules are approved for
publication in the State Register

Handwritten signature of Sheree Speer in cursive script.

Sheree Speer
Senior Assistant Revisor

