

1 Department of Labor and Industry
2 Adopted Permanent Rules Relating to the Minnesota State Fire
3 Code

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ADMINISTRATIVE
HEARINGS

4 7510.5520 DEFINITIONS.

5 Subpart 1. **Scope.** The terms used in parts 7510.5500 to
6 7510.5570 have the meanings given them in this part.

7 Subp. 2. **Child day care center.** "Child day care center"
8 means a child day care facility required to be licensed by the
9 Department of Human Services under parts 9503.0005 to 9503.0175
10 and classified as a Group E~~7~~-~~Division-3~~7 Occupancy under section
11 202 of the Minnesota State Fire Code, as adopted in part
12 7511.0090.

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

14 Subp. 4. **Group I Occupancies.** "Group I Occupancies" means
15 Group I-3 Occupancies as set forth in section 202 of the
16 Minnesota State Fire Code, as adopted in part 7511.0090.

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

18 Subp. 9. **Public occupancies.** "Public occupancies" means:

- 19 A. Group I-3 Occupancies;
- 20 B. child day care centers;
- 21 C. public auditoriums and stadiums; and
- 22 D. public assembly areas of hotels containing more
23 than ten articles of seating furniture.

24 [For text of subps 10 to 14, see M.R.]

25 7511.0010 PURPOSE.

26 The purpose of this chapter is to adopt uniform fire safety

1 standards consistent with nationally recognized good practice
2 for the safeguarding to a reasonable degree of life and property
3 from the hazards of fire and explosion arising from the storage,
4 handling and use of hazardous substances, materials and devices,
5 and from conditions hazardous to life or property in the use or
6 occupancy of buildings or premises.

7 7511.0020 SCOPE.

8 The scope of this chapter is intended to be consistent with
9 Minnesota Statutes, section 299F.011.

10 7511.0090 RULES AND STANDARDS INCORPORATED BY REFERENCE.

11 For purposes of this chapter, "IFC" means the 2006 edition
12 of the International Fire Code as promulgated by the
13 International Code Council, Inc., Falls Church, Virginia. The
14 IFC is incorporated by reference and made a part of Minnesota
15 Rules pursuant to statutory authority, subject to the
16 alterations and amendments in this chapter. Portions of this
17 chapter reproduce text and tables from the IFC. The IFC is not
18 subject to frequent change and is available at the office of the
19 commissioner of the Department of Labor and Industry and at the
20 State Law Library, 25 Rev. Dr. Martin Luther King Jr. Blvd.,
21 Saint Paul, Minnesota 55155. The IFC is copyright 2006 by the
22 International Code Council, Inc. All rights reserved.

23 7511.0101 SECTION 101, GENERAL.

24 Subpart 1. IFC Section 101.1. IFC Section 101.1 is
25 amended to read:

26 101.1 Title. This code shall be known as the Minnesota State

1 Fire Code, may be cited as such, and will be referred to herein
2 as "Fire Code" or "this code."

3 Subp. 2. IFC Section 101. IFC Section 101 is amended by
4 adding sections to read:

5 101.6 Local government amendments to Chapter 1. Any
6 jurisdiction that adopts this code is authorized to make
7 amendments to Chapter 1 of this code to provide a system for
8 enforcement and administration within the jurisdiction. These
9 amendments shall be equal to, in addition to, or more stringent
10 than this code. None of the existing provisions of Chapter 1
11 shall be changed nor shall any amendment be made that interferes
12 with the intent of the existing provisions nor the state fire
13 marshal's duties and powers thereunder.

14 101.6.1 Local government rules. Any jurisdiction that
15 adopts this code is authorized to adopt rules for the prevention
16 and control of fires and fire hazards as may be necessary from
17 time to time, to carry out the intent of this code, and that may
18 be more restrictive than this code when the rules are necessary
19 to protect life or property in the community. The governing
20 body may adopt this code by ordinance. One certified copy of
21 the ordinance containing the rules shall be filed with the clerk
22 of the jurisdiction and shall be in effect immediately
23 thereafter, and additional copies shall be kept in the office of
24 the fire department for distribution to the public.

25 7511.0102 SECTION 102, APPLICABILITY.

26 Subpart 1. IFC Section 102.1. IFC Section 102.1 is
27 amended, and sections added, to read:

1 **102.1 Construction and design provisions.** The construction and
2 design provisions of this code shall apply to:

- 3 1. Structures, facilities and conditions arising
4 after the adoption of this code.
- 5 2. Existing structures, facilities and conditions
6 when identified in specific sections of this code.
- 7 3. Existing structures, facilities and conditions
8 that, in the opinion of the code official, constitute
9 a distinct hazard to life and property.

10 **102.1.1 Existing building features - application.** Existing
11 construction and design features that exceed the requirements
12 for existing structures or facilities but are less than the
13 requirements for new structures or facilities shall not be
14 further diminished. Existing construction and design features
15 that exceed the requirements for new structures or facilities
16 are allowed to be removed. (See section 901.6 concerning
17 maintenance of fire protection systems.)

18 Subp. 2. **IFC Section 102.2.** IFC Section 102.2 is amended
19 by adding a section to read:

20 **102.2.1 Operational provisions - defined.** The operational
21 provisions of this code are those operations defined in Sections
22 105.6.1 through 105.6.46.

23 Subp. 3. **IFC Section 102.6.** IFC Section 102.6 is amended
24 by adding a section to read:

25 **102.6.1 References to ICC codes.** The references to the
26 codes and standards promulgated by the International Code
27 Council (listed under ICC in Chapter 45) are modified as follows:

- 1 1. Wherever this code references the ICC Electrical
2 Code, it means the Electrical Code, Minnesota Rules,
3 chapter 1315.
- 4 2. Wherever this code references the International
5 Building Code, it means the Minnesota State Building
6 Code adopted pursuant to Minnesota Statutes, section
7 16B.61, subdivision 1.
- 8 3. Wherever this code references the International
9 Fuel Gas Code, it means the Minnesota State Mechanical
10 Code adopted pursuant to Minnesota Statutes, section
11 16B.61.
- 12 4. Wherever this code references the International
13 Mechanical Code, it means the Minnesota State
14 Mechanical Code adopted pursuant to Minnesota
15 Statutes, section 16B.61.
- 16 5. Wherever this code references the International
17 Plumbing Code, it means the Minnesota Plumbing Code,
18 Minnesota Rules, chapter 4715.
- 19 6. Wherever this code references the International
20 Property Maintenance Code, it means the housing
21 maintenance code or property maintenance code adopted
22 by the jurisdiction (see Appendix J).
- 23 7. Wherever this code references the International
24 Residential Code, it means the Minnesota State
25 Building Code adopted pursuant to Minnesota Statutes,
26 section 16B.61, subdivision 1.
- 27 8. Wherever this code references the International

1 Existing Building Code, it means the Minnesota
2 Building Conservation Code adopted pursuant to
3 Minnesota Statutes, section 16B.61, subdivision 1.

4 Subp. 4. IFC Section 102. IFC Section 102 is amended by
5 adding sections to read:

6 **102.10 Standards for existing Group I occupancies.** The
7 provisions of protection in existing Group I-2 occupancies, and
8 in existing Group I-3 occupancies used as detention and
9 correctional facilities, shall be in accordance with the
10 applicable provisions of the Life Safety Code, ANSI/NFPA 101,
11 referred to as Standard No. 101, issued by the National Fire
12 Protection Association (Quincy, Massachusetts, 2000). Standard
13 No. 101 is incorporated by reference, is not subject to frequent
14 change and is available at the State Law Library, 25 Rev. Dr.
15 Martin Luther King Jr. Blvd., Saint Paul, Minnesota 55155.

16 Construction provisions of Standard No. 101 that are more
17 restrictive than those found in the Building Code shall not be
18 applicable. For the purposes of Section 102.10, construction
19 provisions shall include those relating to type of construction,
20 automatic fire-extinguishing and standpipe systems, fire alarm
21 and detection systems, vertical opening protection, escape
22 windows, exits, smoke barriers, handicapped accessibility and
23 hazardous area separations.

24 **102.10.1 Standard 101 modified.** Sections 23.3.7 through
25 23.3.7.3 of Standard No. 101 are deleted.

26 **102.11 Mixed occupancies.** Where a building is occupied for two
27 or more uses not included in the same occupancy, the building or

1 portion thereof shall be classified as a mixed occupancy. The
2 mixed occupancy shall be further classified as either
3 nonseparated uses or separated uses according to the Building
4 Code. Areas of Group H shall only be as separated uses as
5 permitted by the Building Code.

6 **102.11.1 Separated uses.** Each portion of the building
7 shall be individually classified as to use. Each fire area
8 shall comply with the Fire Code based on the use of that space.
9 Provisions for egress between different occupancies shall be in
10 accordance with Chapter 10.

11 **102.11.2 Nonseparated uses.** Each portion of the building
12 shall be individually classified as to use. The most
13 restrictive provisions of the Fire Code shall apply to the
14 nonseparated uses. Provisions for egress between different
15 occupancies shall be in accordance with Chapter 10.

16 7511.0104 SECTION 104, GENERAL AUTHORITY AND RESPONSIBILITIES.

17 IFC Section 104.9 is amended by adding sections to read:

18 **104.9.1 Performance-based fire and life safety design.** The
19 code official is authorized to approve performance-based fire
20 and life safety designs where the code official finds that the
21 proposed design has been conducted by an approved method.

22 Approved performance-based designs shall be deemed as evidence
23 of compliance with the intent of this code. Approvals under the
24 authority herein contained shall be subject to the approval of
25 the building code official whenever the design involves matters
26 regulated by the Building Code.

27 Sections 104.9.1.1 through 104.9.1.4 shall apply to

1 performance-based designs.

2 **104.9.1.1 Goals, objectives and acceptance criteria.**

3 Design goals, objectives and performance criteria shall be
4 approved by the code official prior to the submission of a
5 performance-based design report, calculations or analysis
6 results. As a minimum, an approved performance-based design
7 shall address the following objectives: life safety of
8 occupants, firefighter safety, property protection, continuity
9 of operations and safeguarding of the environment.

10 **104.9.1.2 Peer review.** To determine the acceptability
11 of the performance-based design, the code official is authorized
12 to request technical assistance in accordance with Section
13 104.7.2.

14 **104.9.1.3 Engineer of record.** Performance-based
15 designs shall be prepared by, and bear the stamp of, a licensed
16 design professional competent in the area of work. The design
17 professional shall provide written confirmation to the code
18 official before a certificate of occupancy is issued that the
19 performance-based design has been properly implemented, that the
20 operation or use of the building is within the limitations of
21 the design and that adequate controls are in place to maintain
22 compliance with the conditions of the design throughout the life
23 of the building.

24 **104.9.1.4 Annual recertification of performance-based**
25 **design.** Where a performance-based design has been approved and
26 used, the property owner shall annually certify that the design
27 features and systems have been maintained in accordance with the

1 approved original performance-based design and assumptions and
2 any subsequent approved changes or modifications to the original
3 performance-based design.

4 7511.0106 SECTION 106, INSPECTIONS.

5 IFC Section 106 is amended by adding a section to read:

6 **106.4 Approvals.** Approval as the result of an inspection shall
7 not be construed to be an approval of a violation of the
8 provisions of this code or of other ordinances of the
9 jurisdiction. Inspections presuming to give authority to
10 violate or cancel provisions of this code or of other ordinances
11 of the jurisdiction shall not be valid.

12 7511.0108 SECTION 108, BOARD OF APPEALS.

13 Subpart 1. IFC Section 108.1. IFC Section 108.1 is
14 amended to read:

15 **SECTION 108**

16 **APPEALS**

17 **108.1 Appeals to state fire marshal.** As outlined in Minnesota
18 Statutes, section 299F.011, subdivisions 5 and 5b, any person
19 may appeal an order issued to them by the state fire marshal or
20 action taken by the local governing body on issues regulated by
21 this code. Appeals can be made to determine the suitability of
22 alternate materials and types of construction, to provide for
23 reasonable interpretations of the provisions of this code, and
24 to grant variances from orders issued by representatives of the
25 state fire marshal. Persons wishing to present matters for
26 appeal shall do so in writing and, in the case of persons who

1 have received written orders, applications for variances shall
2 be made prior to the expiration of the orders. Orders shall not
3 be considered to be expired until any time extensions granted by
4 the state fire marshal have elapsed. The state fire marshal
5 shall not accept applications for variances after criminal
6 action for noncompliance has been initiated pursuant to
7 Minnesota Statutes, section 299F.011, subdivision 6.

8 Subp. 2. IFC Sections 108.2 and 108.3. IFC Sections 108.2
9 and 108.3 are deleted.

10 7511.0109 SECTION 109, VIOLATIONS.

11 IFC Section 109.3 is amended to read:

12 109.3 Violation penalties. A person who violates a provision of
13 this code shall be guilty of a misdemeanor.

14 7511.0201 SECTION 201, GENERAL.

15 IFC Section 201.4 is amended to read:

16 201.4 Terms not defined. When terms are not defined, they shall
17 have their ordinary accepted meanings within the context with
18 which they are used. The Merriam-Webster Collegiate Dictionary,
19 available on the Internet at www.m-w.com, shall be considered as
20 providing ordinarily accepted meanings. The dictionary is
21 incorporated by reference, is subject to frequent change, and is
22 available through the Minitex interlibrary loan system.

23 7511.0202 SECTION 202, GENERAL DEFINITIONS.

24 IFC Section 202 is amended by adding or amending
25 definitions to read:

26 **ADULT DAY CARE CENTER.** A facility, licensed by the Department

1 of Human Services under Minnesota Rules, parts 9555.9600 to
2 9555.9730, that provides a program of adult day care services to
3 functionally impaired adults for periods of less than 24 hours
4 per day in a setting other than a participant's home or the
5 residence of the facility's operator.

6 **AISLE.** See Section 1002.1.

7 **AUTHORITY HAVING JURISDICTION.** Any municipal fire code official
8 serving a particular jurisdiction or the state fire marshal or
9 any of their authorized representatives.

10 **BUILDING CODE.** The Minnesota State Building Code adopted
11 pursuant to Minnesota Statutes, section 16B.61, subdivision 1.

12 **CHIEF.** See FIRE CHIEF.

13 **CORRIDOR.** See Section 1002.1.

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

26 **FAMILY ADULT DAY SERVICES.** A program providing services for up
27 to eight functionally impaired adults for less than 24 hours per

1 day in the license holder's primary residence in accordance with
2 Minnesota Statutes, section 245A.143. This includes programs
3 located in residences licensed by the Department of Human
4 Services for adult foster care, provided not more than eight
5 adults, excluding staff, are present in the residence at any
6 time.

7 **FAMILY DAY CARE HOME.** A residence, licensed by the Department
8 of Human Services under Minnesota Rules, parts 9502.0315 to
9 9502.0445, in which no more than ten children at any one time
10 receive care, maintenance and supervision by other than their
11 relatives or legal guardians for less than 24 hours per day.

12 **FIRE CHIEF.** The chief officer of the fire department serving
13 the jurisdiction or the chief's authorized representatives. For
14 purposes of enforcing this code, the term fire chief also
15 includes the state fire marshal and the state fire marshal's
16 representatives.

17 **GROUP DAY CARE HOME.** A residence, licensed by the Department of
18 Human Services under Minnesota Rules, parts 9502.0315 to
19 9502.0445, in which at least 11 but not more than 14 children
20 receive care, maintenance and supervision by other than their
21 relatives or legal guardians for less than 24 hours per day.

22 **GUEST ROOM.** A room or rooms used or intended to be used for
23 sleeping purposes. Every 100 square feet of superficial floor
24 area in a dormitory shall be considered to be a guest room.

25 **JURISDICTION.** Any municipality, district, or other political
26 subdivision adopting this code for use in its jurisdictional
27 area.

1 **JURISDICTIONAL AREA.** The territory of the municipality,
2 district, or other political subdivision adopting this code.

3 **MECHANICAL CODE.** The Minnesota State Mechanical Code as adopted
4 pursuant to Minnesota Statutes, section 16B.61.

5 **MUNICIPALITY.** Any statutory or home rule charter city, county
6 or town meeting the requirements of Minnesota Statutes, section
7 368.01, subdivision 1, the University of Minnesota, or the state
8 for public buildings.

9 **OCCUPANCY CLASSIFICATION.** This definition is amended by
10 modifying the definitions of Educational Group E; Institutional
11 Groups I-1 and I-2; Institutional Group I-4; and Residential
12 Groups R-1, R-3 and R-4, to read:

13 **Educational Group E.** Educational Group E occupancy
14 includes any building used for educational purposes
15 through the 12th grade by six or more persons for more
16 than 12 hours per week or four hours in any one day.

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

22 **Adult day care.** An adult day care center serving more
23 than five ambulatory and mobile persons who are
24 capable of taking appropriate action for
25 self-preservation under emergency conditions as
26 determined by program licensure provisions shall be
27 classified as an E occupancy. See part 7510.3675 for

1 the protection requirements for facilities serving
2 both participants who are capable and not capable of
3 taking appropriate action for self-preservation.

4 **Institutional Group I.**

5 **Group I-1.** This occupancy shall include buildings,
6 structures, or parts thereof housing more than 16
7 persons, on a 24-hour basis, who because of age,
8 mental disability or other reasons, live in a
9 supervised residential environment that provides
10 personal care services. The occupants are capable of
11 responding to an emergency situation without physical
12 assistance from staff. This group shall include, but
13 not be limited to, the following: residential board
14 and care facilities, assisted living facilities,
15 halfway houses, group homes, congregate care
16 facilities, social rehabilitation facilities, alcohol
17 and drug centers and convalescent facilities. A
18 facility such as the above with five or fewer persons
19 shall be classified as Group R-3. A facility such as
20 the above housing at least six and not more than 16
21 persons, shall be classified as Group R-4.

22 **Group I-2.** This occupancy shall include buildings and
23 structures used for medical, surgical, psychiatric,
24 nursing or custodial care on a 24-hour basis for more
25 than five persons who are not capable of
26 self-preservation. This group shall include, but not
27 be limited to, the following: hospitals, nursing

1 homes (both intermediate-care facilities and skilled
2 nursing facilities), mental hospitals and
3 detoxification facilities. A facility such as the
4 above with five or fewer persons shall be classified
5 as Group R-3.

6 **Child care facility.** A child care facility that
7 provides care on a 24-hour basis to more than five children
8 2-1/2 years of age or less shall be classified as Group I-2.

9 **Group I-4, Day care facilities.** This group shall
10 include buildings and structures occupied by persons
11 of any age who receive custodial care for less than 24
12 hours by individuals other than parents or guardians,
13 relatives by blood, marriage, or adoption, and in a
14 place other than the home of the person cared for. A
15 facility such as the above with five or fewer persons
16 shall be classified as Group R-3. Places of worship
17 during religious functions are not included.

18 **Adult care facility.** A facility that provides
19 accommodations for less than 24 hours for more than five
20 unrelated adults and provides supervision and personal care
21 services shall be classified as Group I-4.

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

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

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

7 **Residential Group R.**

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

13 R-1. Residential occupancies containing sleeping
14 units where the occupants are primarily transient in
15 nature, including:

16 Boarding houses (transient)

17 Hotels (transient)

18 Motels (transient)

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

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

25 Apartment houses

26 Boarding houses (not transient)

27 Convents

28 Dormitories

29 Fraternities and sororities

30 Hotels (not transient)

1 Monasteries

2 Motels (not transient)

3 Vacation time-share properties

4 Congregate living facilities with 16 or fewer

5 occupants are permitted to comply with construction

6 that complies with the requirements for Group R-3.

7 R-3. Residential occupancies where the occupants are

8 primarily permanent in nature and not classified as R-1,

9 R-2, R-4 or I, including:

10 Buildings that do not contain more than two dwelling

11 units

12 Adult facilities that provide accommodations for five

13 or fewer persons of any age for less than 24 hours

14 Child care facilities that provide accommodations for

15 five or fewer persons of any age for less than 24

16 hours

17 Congregate living facilities with 16 or fewer persons

18 Adult and child care facilities

19 R-4. Residential occupancies shall include buildings

20 arranged for occupancy as residential care/assisted living

21 facilities including more than five but not more than 16

22 occupants, excluding staff. Group R-4 occupancies shall

23 meet the requirements for construction as defined for Group

24 R-3 except as otherwise provided for in this code.

25 **OUTPATIENT CLINIC.** A building or part thereof used to provide,

26 on an outpatient basis, surgical treatment requiring general

27 anesthesia or other treatment of patients that would render them

1 incapable of unassisted self-preservation under emergency
2 conditions. This would include outpatient surgical centers and
3 kidney dialysis units, but does not include doctors' and
4 dentists' offices or clinics for the practice of medicine or the
5 delivery of primary care.

6 **PERFORMANCE-BASED DESIGN.** An engineering approach to design
7 elements of a building based on agreed-upon performance goals
8 and objectives, engineering analysis and quantitative assessment
9 of alternatives against the design goals and objectives using
10 accepted engineering tools, methodologies and performance
11 criteria.

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

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

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

25 **ROOM.** A space or area bounded by any obstructions over 6 feet
26 in height which at any time enclose more than 80 percent of the
27 perimeter of the area. In computing the unobstructed perimeter,

1 openings less than 3 feet in clear width and less than 6 feet 8
2 inches high shall not be considered. Aisles and corridors shall
3 not be construed to form rooms.

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

6 **SUPERVISED LIVING FACILITY.** A facility in which supervision,
7 lodging, meals, and, in accordance with the rules of the
8 Department of Human Services and the Department of Health,
9 counseling and developmental habilitative or rehabilitative
10 services are provided to persons who are mentally retarded,
11 chemically dependent, adult mentally ill, or physically
12 handicapped.

13 **Class A-1 supervised living facility.** A supervised
14 living facility for six or fewer ambulatory or mobile
15 disabled persons who are capable of taking appropriate
16 action for self-preservation under emergency
17 conditions as determined by program licensure
18 provisions.

19 **Class A-2 supervised living facility.** A supervised
20 living facility for more than six ambulatory or mobile
21 disabled persons who are capable of taking appropriate
22 action for self-preservation under emergency
23 conditions as determined by program licensure
24 provisions.

25 **Class B-1 supervised living facility.** A supervised
26 living facility for six or fewer ambulatory or
27 nonambulatory, mobile or nonmobile persons who are not

1 mentally or physically capable of taking appropriate
2 action for self-preservation under emergency
3 conditions as determined by program licensure
4 provisions.

5 **Class B-2 supervised living facility.** A supervised
6 living facility for seven to 16 ambulatory or
7 nonambulatory, mobile or nonmobile persons who are not
8 mentally or physically capable of taking appropriate
9 action for self-preservation under emergency
10 conditions as determined by program licensure
11 provisions.

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

19 7511.0304 SECTION 304, COMBUSTIBLE WASTE MATERIAL.

20 IFC Section 304.3.2 is deleted.

21 7511.0307 SECTION 307, OPEN BURNING AND RECREATIONAL FIRES.

22 IFC Sections 307.1 through 307.2.1 and IFC Sections 307.4
23 through 307.4.1 are deleted.

24 7511.0308 SECTION 308, OPEN FLAMES.

25 IFC Sections 308.3.1 through 308.3.1.1 are deleted.

1 7511.0315 SECTION 315, MISCELLANEOUS COMBUSTIBLE MATERIALS
2 STORAGE.

3 Subpart 1. IFC Section 315.2.1. IFC Section 315.2.1 is
4 amended by adding a paragraph to read:

5 Where more restrictive clearances between sprinkler head
6 deflectors and storage are required by the sprinkler listing or
7 NFPA 13, the more restrictive clearances shall apply.

8 Subp. 2. IFC Section 315.2.3. IFC Section 315.2.3 is
9 amended, and sections added, to read:

10 **315.2.3 Equipment rooms.** Combustible storage in boiler
11 rooms, mechanical rooms, electrical equipment rooms and elevator
12 equipment rooms shall be in accordance with sections 315.2.3.1
13 through 315.2.3.2. Storage not in conformance with these
14 sections shall be removed or the condition abated. For purposes
15 of sections 315.2.3 through 315.2.3.5, storage does not include
16 materials necessary for the construction, maintenance, or
17 operation of the equipment.

18 **315.2.3.1 Boiler rooms.** Storage in boiler and furnace
19 rooms shall be neat and orderly. Access to electrical panels
20 shall be maintained in accordance with Section 605.3. At least
21 36 inches (914 mm) shall be maintained for access to equipment.
22 Combustible storage in boiler and furnace rooms shall be in
23 accordance with Section 315.2.3.1.1 or 315.2.3.1.2.

24 **315.2.3.1.1 Boiler rooms with equipment at**
25 **400,000 BTU's per hour input or less.** Combustible storage is
26 allowed in boiler and furnace rooms equipped throughout with an
27 approved automatic fire-extinguishing system and where the

1 fuel-fired equipment is 400,000 BTU's per hour input or less.
2 No combustible storage shall be within 36 inches (914 mm) of
3 fuel-fired equipment.

4 **315.2.3.1.2 Boiler rooms with equipment over**
5 **400,000 BTU's per hour input.** Combustible storage is allowed in
6 boiler and furnace rooms equipped throughout with an approved
7 automatic fire-extinguishing system and where the fuel-fired
8 equipment exceeds 400,000 BTU's per hour input. No storage
9 shall be within 10 feet (3048 mm) of the boiler.

10 **315.2.3.2 Mechanical rooms.** Combustible storage is
11 allowed in mechanical rooms with or without fuel-fired equipment
12 when equipped throughout with an approved automatic
13 fire-extinguishing system. Storage shall be neat and orderly.
14 A 3-foot aisle shall be maintained to all equipment. No storage
15 shall be allowed within 3 feet of fuel-fired equipment. Access
16 to electrical service panels shall be maintained per Section
17 605.3.

18 **315.2.3.3 Electrical equipment rooms.** No combustible
19 storage or any other type of storage shall be allowed in
20 electrical distribution equipment rooms.

21 **315.2.3.4 Elevator equipment rooms.** No combustible
22 storage or any other type of storage shall be allowed in
23 elevator equipment rooms or elevator machine rooms.

24 **315.2.3.5 Shafts.** No combustible storage shall be
25 allowed in mechanical rooms such as penthouses with shafts open
26 to multiple floors.

27 7511.0316 SECTION 316, CLEARANCE OF VEGETATION FROM STRUCTURES.

1 IFC Chapter 3 is amended by adding a section to read:

2 **SECTION 316**

3 **CLEARANCE OF VEGETATION FROM STRUCTURES**

4 **316.1 General.** Land that is covered with grass, grain brush, or
5 forest, whether privately or publicly owned, which is so
6 situated or is of such inaccessible location that a fire
7 originating upon the land would present an abnormally difficult
8 job of suppression or would result in great and unusual damage
9 through fire or resulting erosion shall comply with Section
10 316.2.

11 **316.2 Fire breaks.** Persons owning, leasing, controlling,
12 operating or maintaining buildings or structures in, upon or
13 adjoining land covered with grass, grain brush or forest, and
14 persons owning, leasing or controlling land adjacent to such
15 buildings or structures, shall comply at all times with all of
16 the following requirements:

17 1. Maintain an effective fire break by removing and
18 clearing away flammable vegetation and combustible
19 growth from areas within 30 feet (9144 mm) of such
20 buildings or structures.

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

25 2. Maintain additional fire protection or firebreak
26 by removing brush, flammable vegetation and
27 combustible growth located from 30 feet to 100 feet
28 (9144 mm to 30 480 mm) from such buildings or
29 structures, when required by the fire chief because of

1 extrahazardous conditions causing a firebreak of only
2 30 feet (9144 mm) to be insufficient to provide
3 reasonable fire safety.

4 **Exception:** Grass and other vegetation located more than 30
5 feet (9144 mm) from buildings or structures and less than
6 18 inches (457 mm) in height above the ground need not be
7 removed where necessary to stabilize the soil and prevent
8 erosion.

9 3. Remove portions of trees that extend within 10
10 feet (3048 mm) of the outlet of a chimney.

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

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

15 7511.0405 SECTION 405, EMERGENCY EVACUATION DRILLS.

16 IFC Section 405.7 is amended by adding an exception to read:

17 **Exception:** In Group A and R-1 occupancies where only
18 employees are required to participate in drills as
19 specified in Table 405.2.

20 7511.0408 SECTION 408, USE AND OCCUPANCY-RELATED REQUIREMENTS.

21 Subpart 1. IFC Section 408.6. IFC Section 408.6 is
22 amended by deleting the last sentence.

23 Subp. 2. IFC Section 408.10.4. IFC Section 408.10.4 is
24 amended by deleting the last sentence.

25 Subp. 3. IFC Section 408.11.3. IFC Section 408.11.3 is
26 amended by adding sections to read:

27 408.11.3.1 Minimum mall width. The minimum width of
28 the mall area in covered mall buildings shall be maintained in
29 conformance with the Building Code.

1 **408.11.3.2 Kiosks.** Kiosks and similar structures,
2 whether temporary or permanent, located in covered mall
3 buildings shall be constructed, protected and located in
4 conformance with the Building Code.

5 7511.0508 SECTION 508, FIRE PROTECTION WATER SUPPLIES.

6 IFC Section 508.5.1 is amended to read:

7 **508.5.1 Where required.** Where a portion of the facility or
8 building hereafter constructed or moved into or within the
9 jurisdiction is more than 300 feet (91.5 m) from a hydrant on a
10 fire apparatus access road, as measured by an approved route
11 around the exterior of the facility or building, on-site fire
12 hydrants and mains shall be provided where required by the fire
13 code official.

14 **Exceptions:**

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

17 2. For buildings equipped throughout with an approved
18 automatic sprinkler system installed in accordance with
19 Section 903.3.1.1 or 903.3.1.2, the distance requirement
20 shall be 400 feet (122 m).

21 7511.0603 SECTION 603, FUEL-FIRED APPLIANCES.

22 Subpart 1. IFC Section 603.5. IFC Section 603.5 is
23 amended, and sections added, to read:

24 **603.5 Heating appliances.** Heating appliances shall be listed
25 and shall comply with this section.

26 **Exception:** Unlisted appliances may be installed where
27 permitted by the code official, provided clearance from
28 combustibles is maintained in accordance with the
29 Mechanical Code.

30 **603.5.1 Guard against contact.** The heating element or

1 combustion chamber shall be permanently guarded so as to prevent
2 accidental contact by persons or material.

3 **603.5.2 Heating appliance installation and maintenance.**

4 Heating appliances shall be installed and maintained in
5 accordance with the manufacturer's instructions, the
6 International Building Code, the International Mechanical Code,
7 the International Fuel Gas Code and the ICC Electrical Code.

8 **603.5.3 Heating appliance clearance to combustible**

9 **materials.** Clearances between heat-producing appliances and
10 combustibles shall be in accordance with this section. Where
11 specific manufacturer's instructions or listings allow a
12 reduction from the distances specified in this section, those
13 distances are allowed. Clearance reductions permitted by the
14 Mechanical Code are allowed.

15 **603.5.3.1 Gas heaters.** A minimum of 18 inches (457
16 mm) shall be maintained between gas heat-producing appliances
17 and combustible materials.

18 **603.5.3.2 Solid fuel-burning heaters.** A minimum of 36
19 inches (914 mm) shall be maintained between solid fuel-burning
20 appliances and combustible materials.

21 Subp. 2. IFC Section 603.8. IFC Section 603.8 and all
22 subsections are deleted.

23 7511.0604 SECTION 604, EMERGENCY AND STANDBY POWER SYSTEMS.

24 IFC Section 604.2.1 is deleted.

25 7511.0605 SECTION 605, ELECTRICAL EQUIPMENT, WIRING AND HAZARDS.

26 IFC Section 605.10.4 is deleted.

1 7511.0607 SECTION 607, ELEVATOR RECALL AND MAINTENANCE.

2 IFC Section 607 is deleted.

3 7511.0610 SECTION 610, MEZZANINES.

4 IFC Chapter 6 is amended by adding a section 610 to read:

5 **SECTION 610**

6 **MEZZANINES**

7 **610.1 Conform to Building Code.** Mezzanines in buildings shall
8 conform to the requirements of the Building Code.

9 7511.0611 SECTION 611, PEDESTRIAN WALKWAYS AND PEDESTRIAN
10 TUNNELS.

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

12 **SECTION 611**

13 **PEDESTRIAN WALKWAYS AND PEDESTRIAN TUNNELS**

14 **611.1 Installation and maintenance.** New pedestrian walkways and
15 tunnels shall be constructed and maintained in conformance with
16 the Building Code. Existing pedestrian walkways and pedestrian
17 tunnels shall comply with the following:

18 1. Unless all buildings connected to them are
19 protected throughout by approved automatic
20 fire-extinguishing systems, pedestrian walkways and
21 pedestrian tunnels shall, at a minimum, be separated
22 from the interior of buildings by walls and
23 self-closing doors constructed to form a barrier to
24 limit the transfer of smoke.

25 2. The unobstructed width of pedestrian walkways and
26 pedestrian tunnels shall not be less than 44 inches

1 (1118 mm).

2 3. No combustible materials or decorations shall be
3 located in pedestrian walkways or pedestrian tunnels.
4 Interior wall, ceiling, and floor finishes shall
5 comply with Chapter 8.

6 4. Pedestrian walkways and pedestrian tunnels that
7 serve as required means of egress from attached
8 buildings shall comply with Sections 1026 and 1027.

9 5. Pedestrian walkways and pedestrian tunnels
10 exceeding 400 feet (122 m) in length shall be provided
11 with means of egress so arranged that the maximum
12 length of exit access travel to reach an exit does not
13 exceed 200 feet (60,960 mm).

14 6. Means of egress from pedestrian walkways and
15 pedestrian tunnels shall not be locked unless
16 provisions for emergency egress are provided.

17 7511.0704 SECTION 704, FLOOR OPENINGS AND SHAFTS.

18 IFC Section 704 is amended by adding a section to read:
19 **704.3 Compliance alternative.** Protection of vertical openings
20 that do not serve as part of the required means of egress
21 conforming to the requirements of NFPA 101 (Life Safety Code)
22 shall be deemed to be in compliance with this code.

23 7511.0705 SECTION 705, SEPARATION OF OCCUPANCIES AND HAZARDOUS
24 AREAS.

25 IFC Chapter 7 is amended by adding a section to read:

26 **SECTION 705**

1 **SEPARATION OF OCCUPANCIES AND HAZARDOUS AREAS**

2 **705.1 General.** Mixed occupancies within the same building and
3 hazardous areas shall be separated in accordance with Sections
4 705.2 through 705.3.

5 **705.2 Occupancy separations.** Occupancy separations shall be
6 provided in buildings containing Group I and Group R occupancies
7 as specified in Sections 705.2.1 through 705.2.3. These
8 separations shall be constructed and maintained in accordance
9 with the Building Code. Existing wood lath and plaster in good
10 condition or 1/2-inch (12.7 mm) gypsum wallboard ~~may-be~~ is
11 acceptable where one-hour occupancy separations are required.

12 **Exception:** Where one-hour fire-resistant construction is
13 required, openings shall be protected by listed fire doors,
14 insulated steel doors, 1-3/8-inch thick (35 mm) or
15 1-3/4-inch thick (45 mm) solid wood doors, or fixed wired
16 glass set in steel frames. Doors shall be self-closing or
17 automatic-closing by smoke detection.

18 **705.2.1 Group I-1 and Group I-2 occupancies.** Group I-1 and
19 Group I-2 occupancies shall be separated from other occupancies
20 as specified in the Building Code.

21 **705.2.2 Group I-3 occupancies.** Group I-3 occupancies shall
22 be separated from other occupancies as specified in the Building
23 Code.

24 **Exceptions:**

25 1. In buildings that are protected throughout by an
26 approved automatic sprinkler system, one-hour
27 fire-resistance-rated construction is permitted.

28 2. In buildings that are protected throughout by an
29 approved automatic sprinkler system, openings for the
30 passage of materials between the Group I-3 and adjacent
31 occupancies are not required to be fire-resistance rated
32 when such openings are not more than 4 feet (1219 mm) above
33 the floor and are provided with a metal cover or door.

1 **705.2.3 Group R occupancies.** Group R occupancies and the
2 exits therefrom shall be separated from Group A, B, M, S and U
3 occupancies by at least one-hour fire-resistance-rated
4 construction. Group R occupancies shall be separated from all
5 other occupancies as specified in the Building Code.

6 **Exceptions:**

- 7 1. In buildings that are protected throughout by an
8 approved automatic sprinkler system, one-hour occupancy
9 separations need not be provided.
- 10 2. An occupancy separation need not be provided between
11 Group A and Group R occupancies if the building is provided
12 with a fire alarm system having automatic smoke detection
13 throughout the Group A occupancy.
- 14 3. Fire-resistance-rated opening protection need not be
15 provided between Group A and Group R occupancies when such
16 openings are designed to resist the passage of smoke and
17 the openings are protected by an approved automatic
18 sprinkler system.
- 19 4. An occupancy separation need not be provided where two
20 or more occupancies occur in the same building or structure
21 and are so intermingled that separations are impracticable
22 provided that the exit provisions and protection
23 requirements for the more restrictive occupancy are
24 provided.
- 25 5. An occupancy separation need not be provided between a
26 Group R-3 occupancy with sleeping accommodations for ten or
27 fewer persons and Group B or Group M occupancies which are
28 accessory if interconnected smoke detectors are provided.
29 At least one smoke detector shall be located in the Group B
30 or Group M occupancy and additional detectors may be needed
31 in accordance with manufacturer's instructions. Smoke
32 detectors in the sleeping areas shall be located as
33 specified in Section 907.2.10 and shall be audible in all
34 sleeping areas.

35 **705.3 Incidental use areas.** Incidental use areas shall be
36 separated from the rest of the building in accordance with this
37 section. Incidental use areas are defined as shops,
38 laboratories containing hazardous materials, storage rooms
39 exceeding 100 square feet in size, laundry rooms exceeding 100

1 square feet in size and rooms containing boilers or central
2 heating plants where the largest piece of fuel equipment exceeds
3 400,000 BTU per hour input.

4 **705.3.1 Separation required.** Incidental use areas in
5 Groups A, B, E, F, H, I, M, R-1, R-2 and S occupancies shall be
6 separated from the rest of the building by not less than a
7 one-hour fire barrier. Existing wood lath and plaster in good
8 condition or 1/2-inch (12.7 mm) gypsum wallboard is acceptable
9 where one-hour fire barriers are required. Storage rooms need
10 not be separated in Groups F, M or S occupancies.

11 **705.3.2 Sprinkler protection in lieu of separation.**
12 Incidental use areas in Groups A, B, E, F, H, M and S
13 occupancies need not be separated when the incidental use area
14 is protected with automatic sprinklers.

15 **705.3.2.1 Groups I and R occupancies.** Incidental use
16 areas in Groups I and R occupancies need not be separated when
17 the incidental use area is protected with automatic sprinklers
18 and the construction of such areas is capable of resisting the
19 passage of smoke. Doors to such areas shall be a minimum of
20 one-hour fire-rated, solid-core wood doors or insulated steel
21 doors. Doors shall be self-closing or automatic-closing by
22 smoke detection.

23 7511.0801 SECTION 801, GENERAL.

24 IFC Section 801.1 is amended by adding a section to read:

25 **801.1.1 Newly installed interior finish.** Newly installed
26 interior floor, wall and ceiling finishes shall be in accordance
27 with the Building Code.

1 7511.0807 SECTION 807, DECORATIVE MATERIALS OTHER THAN
2 DECORATIVE VEGETATION IN NEW AND EXISTING BUILDINGS.

3 Subpart 1. IFC Section 807.1. IFC Section 807.1 is
4 amended to read:

5 **807.1 General.** In Group A occupancies, curtains, drapes,
6 hangings and other decorative materials suspended from any wall
7 or ceiling, where the suspended materials exceed 20 percent of
8 the wall or ceiling surface, shall meet the flame propagation
9 performance criteria of NFPA 701 in accordance with Section
10 807.2 or shall be noncombustible.

11 In Group I-2 and I-3 occupancies, curtains, drapes, hangings,
12 and other decorative materials suspended from any wall or
13 ceiling, where the suspended materials exceed 10 square feet
14 (0.9 m²) for every 50 lineal feet (4.6 m²) of the wall or
15 ceiling surface, shall be flame resistant in accordance with
16 Section 807.2 or shall be noncombustible.

17 Fixed or movable walls and partitions, paneling, wall pads and
18 crash pads, applied structurally or for decoration, acoustical
19 correction, surface insulation or other purposes, shall be
20 considered interior finish if they cover 10 percent or more of
21 the wall or of the ceiling area, and shall not be considered
22 decorative materials or furnishings.

23 In Group B and M occupancies, fabric partitions suspended from
24 the ceiling and not supported by the floor shall meet the flame
25 propagation performance criteria in accordance with Section
26 807.2 and NFPA 701 or shall be noncombustible.

27 Subp. 2. IFC Sections 807.1.1, 807.1.2. IFC Sections

1 807.1.1 and 807.1.2 are deleted.

2 Subp. 3. IFC Section 807.4.3.1. IFC Section 807.4.3.1 is
3 amended by deleting Exception 2.

4 Subp. 4. IFC Section 807.4.4.1. IFC Section 807.4.4.1 is
5 amended by deleting Exception 2.

6 7511.0901 SECTION 901, GENERAL.

7 Subpart 1. IFC Section 901.6.1. IFC Section 901.6.1 is
8 amended by adding an exception to read:

9 **Exception:** Fire alarm and automatic fire-extinguishing
10 systems shall be inspected and tested at least annually.
11 Inspections and testing shall be conducted in accordance
12 with the procedures specified in the referenced standards
13 listed in Table 901.6.1.

14 Subp. 2. IFC Section 901.10. IFC Section 901 is amended
15 by adding sections to read:

16 **901.10 Fire sprinklers and fire detectors - ceilings.** In
17 buildings protected by automatic sprinklers or automatic fire
18 detectors, suspended or removable ceiling tiles shall be
19 maintained in place to prevent the delay in sprinkler or
20 detector activation.

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

23 **901.10.1 Open-grid ceilings.** Open-grid ceilings shall not
24 be installed beneath sprinklers.

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

27 **901.10.2 Drop-out ceilings.** Drop-out ceilings shall be
28 permitted to be installed beneath sprinklers when all
29 requirements of NFPA 13 for drop-out ceilings have been met.

1 7511.0903 SECTION 903, AUTOMATIC SPRINKLER SYSTEMS.

2 Subpart 1. IFC Section 903.2.7. IFC Section 903.2.7 is
3 amended, and a section added, to read:

4 **903.2.7 Group R.** An automatic sprinkler system installed
5 in accordance with Section 903.3.1.1, 903.3.1.2, or 903.3.1.3
6 shall be provided throughout all buildings containing a Group R
7 occupancy where one of the following conditions exists:

- 8 1. The combined area on all floors, including
9 mezzanines, exceeds 9,250 square feet (859.3 m²); or
- 10 2. The Group R fire area is located more than three
11 stories above grade plane.

12 **Exceptions:**

- 13 1. Group R-3 single dwelling unit buildings.
- 14 2. Group R-3 or R-4 occupancies containing a facility
15 licensed by the state of Minnesota shall be provided with a
16 fire suppression system as required by the applicable
17 licensing provision or this section, whichever is more
18 restrictive.
- 19 3. Group R-3 attached garages need not be sprinklered
20 throughout if a dry sprinkler is installed within 5 feet
21 (1524 mm) of the door opening between the garage and
22 attached residence.

23 For the purposes of this section, fire walls, party walls,
24 or attached multiple fire-resistive exterior walls shall not
25 constitute separate buildings.

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

29 **903.2.7.1 Residential hospice facilities.** An
30 automatic sprinkler system installed in accordance with NFPA 13
31 shall be provided throughout all buildings with a Group R-3 or
32 Group R-4 fire area containing a residential hospice facility.

1 **Exception:** An automatic sprinkler system installed in
2 accordance with Section 903.3.1.2 or 903.3.1.3 shall be
3 allowed, provided that all habitable spaces and closets are
4 sprinklered.

5 Subp. 2. IFC Section 903.2.12.1. IFC Section 903.2.12.1
6 is amended to read:

7 **903.2.12.1 Fire protection for exhaust systems.** Any
8 portion of an exhaust system utilizing combustible components or
9 having the potential for combustible residue build-up on the
10 inside or where required by other sections of this code, where
11 the duct cross-sectional area is greater than or equal to 75
12 square inches (480 cm²), shall be provided with an automatic
13 extinguishing system within the duct and at the duct intake,
14 hood, enclosure or canopy, or shall be constructed of material
15 listed for use without sprinkler protection. When sprinkler
16 protection is installed, means shall be provided to prevent
17 water accumulation in the duct or the flow of water back to a
18 process ~~subject-that-could-be-damaged-by-water~~ where the
19 application of water constitutes a serious life or fire hazard.

20 Subp. 3. IFC Section 903.3.1.2.1. IFC Section 903.3.1.2.1
21 is amended to read:

22 **903.3.1.2.1 Protection of decks and balconies.**
23 Decks and balconies greater than 6 feet (1.8 m) above grade,
24 greater than 4 feet (1.2 m) deep, with an area greater than 40
25 square feet (3.72 m²), and attached to new Group R-1 and R-2
26 occupancy buildings protected in accordance with Section
27 903.3.1.2 that are three or more stories in height and with 30
28 or more units, shall be protected with sprinklers under the
29 balcony or deck framing and under attic eaves when both of the

1 following two conditions exist:

2 1. The building has an unsprinklered attic; and

3 2. The building has combustible siding.

4 Subp. 4. IFC Section 903.3.1. IFC Section 903.3.1 is
5 amended by adding sections to read:

6 **903.3.1.4 Buildings of undetermined use.** When fire
7 sprinkler systems are required in buildings of undetermined use,
8 they shall be designed and installed to have a sprinkler density
9 of not less than that required for an Ordinary Hazard Group 2
10 use with a minimum design area of 3,000 square feet (279 m²).

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

13 Where a subsequent occupancy requires a system with greater
14 capability, it shall be the responsibility of the owner to
15 upgrade the system to the required density for the new hazard,
16 use or occupancy.

17 **903.3.1.5 Special sprinkler design criteria.** When
18 fire sprinkler systems are required in areas containing the
19 following uses, they shall be designed and installed to have a
20 sprinkler density of not less than that required for an Ordinary
21 Hazard Group 2 use:

22 1. Chemistry labs; or

23 2. Wrestling or gymnastic rooms.

24 **903.3.1.6 Modifications to sprinkler standards.** The
25 sprinkler installation standards as referenced in Sections
26 903.3.1.1, 903.3.1.2, and 903.3.1.3 are modified as follows:

27 **903.3.1.6.1 Hose stream requirements.** When, in

1 the opinion of the fire chief, an adequate alternate water
2 supply for hose stream requirements is provided or available,
3 the water supply requirements for the sprinkler system hose
4 stream demands may be modified.

5 **903.3.1.6.2 Elevator shafts and equipment.**

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

8 **903.3.1.6.3 Swimming pools.** Sprinkler protection

9 need not be provided on the ceiling of rooms containing swimming
10 pools when the pool area is used exclusively for swimming
11 purposes and when sprinklers are provided around the perimeter
12 of the pool area.

13 **903.3.1.6.4 NFPA 13 modifications.** Sections

14 8.6.4.1.4.2, 8.6.4.1.4.3, 8.14.8.2, and 8.16.2.5 of NFPA 13 are
15 amended to read:

16 **8.6.4.1.4.2 Combustible spaces;**

17 **installation near peak.** Sprinklers under a roof or ceiling in
18 combustible concealed spaces of wood joist or wood truss
19 construction with members 3 feet (0.9 m) or less on center and a
20 slope having a pitch of four in 12 or greater shall be installed
21 so that a row of sprinklers is installed within 12 inches (305
22 mm) horizontally of the peak and 1-12 inches (25.4-305 mm) down
23 from the bottom of the top chord member.

24 **8.6.4.1.4.3 Combustible spaces;**

25 **installation along eave.** Sprinklers under a roof or ceiling in
26 combustible concealed spaces of wood joist or wood truss
27 construction with members 3 feet (0.9 m) or less on center and a

1 slope having a pitch of four in 12 or greater shall be installed
2 so that the sprinklers installed along the eave are located not
3 less than 5 feet (1.5 m) from the intersection of the truss
4 cords.

5 **8.14.8.2 Linen closets and pantries.** Sprinklers
6 are not required in linen closets and pantries within dwelling
7 units that meet the following conditions:

- 8 1. The area of the space does not exceed 12 square
9 feet (1.1 m²).
- 10 2. The least dimension does not exceed 3 feet (0.9 m).
- 11 3. The walls and materials are surfaced with
12 noncombustible or limited combustible materials.
- 13 4. The closet or pantry contains no mechanical
14 equipment, electrical equipment or electrical
15 appliances.

16 **8.16.2.5 Valves.**

17 **8.16.2.5.1 Fire department connection.** A
18 listed check valve shall be installed in each fire department
19 connection.

20 **8.16.2.5.1.1 Maximum pipe length.**

21 There shall be a maximum of 25 feet (7.6 m) of pipe between the
22 check valve and the fire department connection inlet.

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

25 **8.16.2.5.1.2 Check valve location.** The
26 check valve shall be located to minimize freezing potential.

27 **Subp. 5. IFC Section 903.3.8.** IFC Section 903.3 is
28 amended by adding a section to read:

1 **903.3.8 Sprinkler system design pressure safety margin.**
2 For new sprinkler systems or additions to existing sprinkler
3 systems, the available water supply shall exceed the sprinkler
4 system demand, including hose stream requirements, by 5 psi
5 (0.34 bars) or more.

6 Subp. 6. IFC Section 903.4. IFC Section 903.4 is amended
7 by adding an exception to read:

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

10 Subp. 7. IFC Section 903.4.4. IFC Section 903.4 is
11 amended by adding a section to read:

12 **903.4.4 Valve security.** All valves controlling water
13 supplies for automatic sprinklers shall be locked or secured in
14 the open position.

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

17 Subp. 8. IFC Section 903.6. IFC Section 903.6 is amended
18 by adding sections to read:

19 **903.6.2 Basement access or sprinkler protection.** An
20 approved automatic sprinkler system shall be provided in the
21 following basements when such areas exceed 2,500 square feet
22 (232.3 m²) in size and do not have 20 square feet (1.86 m²) of
23 opening entirely above the adjoining ground level in each 50
24 lineal feet (15 240 mm) or fraction thereof of exterior wall on
25 at least one side of the building:

- 26 1. Group A occupancies used as commercial drinking
27 and dining establishments.
28 2. Group A occupancies used as bowling alleys.

1 3. Group E occupancies used for student occupancy.

2 4. Group I occupancies.

3 5. Group R-1 and R-2 occupancies having dwelling
4 units or guest rooms.

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

7 If any portion of the basement is located more than 75 feet
8 (22.86 m) from required openings, the basement shall be provided
9 with an approved automatic sprinkler system throughout.

10 **903.6.3 Existing rubbish and linen chutes.** Existing
11 rubbish and linen chutes shall be protected with automatic
12 sprinklers installed and maintained in conformance with Section
13 903.2.12.2.

14 7511.0904 SECTION 904, ALTERNATIVE AUTOMATIC FIRE-EXTINGUISHING
15 SYSTEMS.

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

17 **904.2.1.1 Protection of existing cooking equipment.**

18 Approved automatic fire-extinguishing systems shall be provided
19 for the protection of existing commercial-type cooking equipment
20 that produces grease-laden vapors.

21 7511.0905 SECTION 905, STANDPIPE SYSTEMS.

22 Subpart 1. IFC Section 905.2. IFC Section 905.2 is
23 amended by adding sections to read:

24 **905.2.1 Modification to standards.** In buildings other than
25 high rise that are protected throughout by an automatic
26 sprinkler system installed in accordance with Sections 903.3.1.1

1 and 903.3.1.2, a Class I or III standpipe system need only meet
2 the pressure requirements for the sprinkler system when such
3 systems comply with Sections 905.2.1.1 through 905.2.1.5.

4 **905.2.1.1 Municipal water supply.** A municipal water
5 supply capable of supplying the required standpipe flow rate
6 with a residual pressure not less than 20 psi (1.4 bars) through
7 a fire hydrant shall be provided. A fire hydrant shall be
8 located within 300 feet (91 m) of the building's fire department
9 connection.

10 **905.2.1.2 System testing and pipe size.** The standpipe
11 system shall be able to provide the pressure and flow rate
12 required by NFPA 14 when the standpipe system is supported by
13 local fire department apparatus through the fire department
14 connection as verified with hydraulic calculations. The
15 hydraulic calculations are to be performed between the
16 hydraulically most demanding standpipe hose connection and the
17 fire department connection. Pipe sizes shall not be less than
18 the minimum requirements in NFPA 14.

19 **905.2.1.3 Design pressure.** A maximum design pressure
20 of 150 psi (10.3 bars) is permitted at the fire department
21 connection when the standpipe is supported by local fire
22 department apparatus.

23 **905.2.1.4 Hose connection.** At least one 2-1/2 inch
24 (64 mm) hose connection shall be provided on the exterior of the
25 building at the fire department connection for each 250 gpm (980
26 L/min) of required standpipe flow.

27 **905.2.1.5 Automatic sprinkler system demand.** The

1 automatic sprinkler system demand, including the inside hose
2 stream demand from NFPA 13, is to be provided by the municipal
3 water supply system without requiring fire department pumping
4 into the system.

5 Subp. 2. IFC Section 905.3.2.1. IFC Section 905.3.2 is
6 amended by adding a section to read:

7 **905.3.2.1 Group A exhibition. Class III**
8 automatic standpipes shall be provided in Group A-3 occupancies
9 where the floor area used for exhibition exceeds 12,000 square
10 feet (1,115 m²).

11 Subp. 3. IFC Sections 905.3.4, 905.3.4.1. IFC Sections
12 905.3.4 and 905.3.4.1 are amended by deleting the sections in
13 their entirety.

14 Subp. 4. IFC Section 905.3. IFC Section 905.3 is amended
15 by adding sections to read:

16 **905.3.8 Detention and correctional facilities.** Regardless
17 of the height of the building or number of stories, every
18 building in a Group I-3 detention and correctional facility,
19 where 50 or more persons are under restraint or security under
20 Occupancy Condition 3, 4 or 5, shall be provided with a Class
21 III automatic wet or semiautomatic dry standpipe system.

22 **Exception:** Combined systems meeting the provisions of
23 Section 905.2 may be used.

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

27 Standpipes shall be located in accordance with Section 905. In
28 addition, standpipes shall be located so that it will not be

1 necessary to extend hose lines through smoke barriers. When
2 located in cell complexes, standpipes may be located in secured
3 pipe chases.

4 **905.3.9 Group R-2 occupancies.** Class III wet standpipes
5 shall be installed in Group R-2 occupancies three or more
6 stories in height where any portion of the building's interior
7 area is more than 200 feet (60,960 mm) of travel, vertically or
8 horizontally, from the nearest point of fire department vehicle
9 access. Standpipes required by this section shall be installed
10 in enclosed stairways.

11 Subp. 5. IFC Section 905.5.1. IFC Section 905.5.1 is
12 deleted.

13 7511.0906 SECTION 906, PORTABLE FIRE EXTINGUISHERS.

14 IFC Section 906.1 is amended to read:

15 **906.1 Where required.** Portable fire extinguishers shall be
16 installed in the following locations:

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

19 **Exception:** In all Group A, B and E occupancies equipped
20 throughout with an approved automatic sprinkler system
21 installed in accordance with Sections 903.3.1.1 and
22 903.3.1.2, fire extinguishers shall be required only in
23 laundry rooms, boiler and furnace rooms, mechanical and
24 electrical rooms, garages, stages, projection booths,
25 shops, laboratories, kitchens, locker rooms, janitors'
26 closets, trash-collection rooms, storage rooms and similar
27 areas.

28 2. Within 30 feet (9144 mm) of commercial cooking
29 equipment.

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

1 4. On each floor of structures under construction,
2 except Group R-3 occupancies, in accordance with
3 Section 1415.1.

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

6 6. Special-hazard areas, including but not limited to
7 laboratories, computer rooms and generator rooms,
8 where required by the fire code official.

9 7. R-3 occupancies used as family day care, group
10 family day care, foster care, adult family day
11 services and residential hospices.

12 7511.0907 SECTION 907, FIRE ALARM AND DETECTION SYSTEMS.

13 Subpart 1. IFC Section 907.1.3. IFC Section 907.1 is
14 amended by adding a section to read:

15 **907.1.3 Protection of control units.** In areas that
16 are not continuously occupied, automatic fire detection shall be
17 provided at the location of each new fire alarm control unit,
18 fire alarm notification circuit power extender and supervising
19 station transmitting equipment to provide notification of fire
20 at that location.

21 **Exception:** Additional detection is not required in
22 buildings sprinklered in accordance with Section 903.3.1.1
23 or 903.3.1.2.

24 Subp. 2. IFC Section 907.2. IFC Section 907.2 is amended
25 to read:

26 **907.2 Where required in new buildings and occupancies.** An
27 approved manual, automatic, or manual and automatic fire alarm
28 system shall be provided in new buildings and occupancies in

1 accordance with Sections 907.2.1 through 907.2.24 and NFPA 72.
2 For the purposes of Sections 907.2.1 through 907.2.24, fire
3 barrier walls or fire walls shall not define separate
4 buildings. In buildings containing mixed occupancies that are
5 designed as separated uses (see Section 102.11), fire alarm and
6 detection systems need only be installed in those occupancies
7 where required by this section.

8 **Exception:** In areas protected by an approved, supervised
9 automatic sprinkler system installed in accordance with
10 Section 903.3.1.1 or 903.3.1.2, automatic fire detectors
11 required by Section 907.2 need not be provided. Where
12 Section 907.2 requires smoke detectors, such protection
13 shall be installed.

14 Subp. 3. IFC Section 907.2.1. IFC Section 907.2.1 is
15 amended, and sections added, to read:

16 **907.2.1 Group A, general.** A fire alarm system shall be
17 installed in accordance with Sections 907.2.1 through 907.2.1.3
18 in Group A occupancies having an occupant load of 300 or more.

19 **Exceptions:**

- 20 1. Assembly areas used solely for worship purposes.
- 21 2. A fire alarm system is not required when an approved
22 automatic fire-extinguishing system is installed throughout
23 the building.
- 24 3. Group A occupancy portions of Group E occupancies are
25 allowed to have alarms as required for the Group E
26 occupancy.
- 27 4. Group A-5 occupancies.

28 See also Section 907.2.11.

29 **907.2.1.1 Initiation.** Initiation of the fire alarm
30 system shall be by automatic means. Approved automatic fire
31 detectors shall be installed in laundry rooms, boiler and
32 furnace rooms, mechanical and electrical rooms, shops, kitchens,

1 trash-collection rooms, storage rooms and similar areas.

2 **907.2.1.2 Notification.** The required fire alarm
3 system shall activate an audible and visible notification
4 appliance at a constantly attended location within the building
5 for the purposes of initiating emergency action. A presignal
6 feature and positive alarm sequencing in accordance with NFPA 72
7 are permitted.

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

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

15 **907.2.1.3 System initiation in Group A occupancies**
16 with occupant load of 1,000 or more. Activation of the fire
17 alarm system in Group A occupancies with an occupant load of
18 1,000 or more shall immediately initiate an approved prerecorded
19 message announcement using an approved emergency voice/alarm
20 communications system in accordance with NFPA 72.

21 **Exception:** Where approved, the prerecorded announcement is
22 allowed to be manually deactivated for a period of time,
23 not to exceed three minutes, for the sole purpose of
24 allowing a live voice announcement from an approved,
25 constantly attended location.

26 Subp. 4. IFC Section 907.2.2. IFC Section 907.2.2 is
27 amended, and sections added, to read:

28 **907.2.2 Group B, general.** A fire alarm system shall be
29 installed in accordance with Sections 907.2.2 through 907.2.2.3
30 in Group B occupancies if:

31 1. The building has an occupant load of 500 or more

1 persons; or

2 2. The building has an occupant load of more than 100
3 persons above or below the lowest level of exit
4 discharge; or

5 3. The building contains an outpatient clinic.

6 When automatic sprinkler systems or automatic fire
7 detectors are installed in outpatient clinics, such systems or
8 detectors shall be connected to the building fire alarm system.

9 **Exception:** In other than outpatient clinics, a fire alarm
10 system is not required when an approved automatic
11 fire-extinguishing system is installed throughout the
12 building.

13 **907.2.2.1 Initiation.** Initiation of the fire alarm
14 system shall be by automatic means. Approved automatic fire
15 detectors shall be provided in boiler and furnace rooms, shops,
16 kitchens, mechanical and electrical rooms, trash-collection
17 rooms, storage rooms and similar areas. In outpatient clinics,
18 initiation of the fire alarm system shall also be by manual
19 means.

20 **907.2.2.2 Notification.** Activation of the fire alarm
21 system shall initiate a general evacuation signal.

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

25 **907.2.2.3 Outpatient clinics.** Corridors in outpatient
26 clinics and spaces open to the corridors shall be protected by
27 an automatic smoke-detection system.

28 Subp. 5. IFC Section 907.2.3. IFC Section 907.2.3 is
29 amended, and sections added, to read:

30 **907.2.3 Group E, general.** A fire alarm system shall be

1 installed in accordance with Sections 907.2.3 through 907.2.3.3
2 in Group E occupancies having an occupant load of 50 or more.

3 **907.2.3.1 Initiation.** Initiation of the fire alarm
4 system shall be by manual and automatic means. Approved
5 automatic fire detectors shall be provided in laundry rooms,
6 boiler and furnace rooms, mechanical and electrical rooms,
7 shops, laboratories, kitchens, locker rooms, janitors' closets,
8 trash-collection rooms, storage rooms, lounges and similar areas.

9 **Exceptions:**

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

14 2. Where all corridors are protected by an approved
15 automatic fire alarm system having smoke detection with
16 alarm verification, manual fire alarm boxes are only
17 required near exits serving shops, chemistry and physics
18 laboratories, boiler rooms, industrial technology and
19 industrial arts rooms, kitchens, custodian's offices and
20 main offices.

21 **907.2.3.2 Travel through adjoining rooms.** Where the
22 only means of egress travel from an interior room or rooms
23 having an aggregate occupant load of more than ten occupants is
24 through an adjoining or intervening room, automatic smoke
25 detectors shall be installed throughout the common atmosphere
26 through which the path of egress travel passes.

27 **Exception:** In buildings that are protected throughout by
28 an approved automatic sprinkler system installed in
29 accordance with Section 903.3.1.1, smoke detectors are not
30 required in intervening or adjoining rooms.

31 **907.2.3.3 Notification.** Activation of the fire alarm
32 system or automatic sprinkler system shall initiate a general
33 evacuation signal.

1 Subp. 6. IFC Section 907.2.4. IFC Section 907.2.4 is
2 amended, and sections added, to read:

3 **907.2.4 Group F, general.** A fire alarm system shall be
4 installed in accordance with Sections 907.2.4 through 907.2.4.2
5 in Group F occupancies that are two or more stories in height
6 and have an occupant load of 500 or more above or below the
7 lowest level of exit discharge.

8 **Exception:** A fire alarm system is not required when an
9 approved automatic fire-extinguishing system is installed
10 throughout the building.

11 **907.2.4.1 Initiation.** Initiation of the fire alarm
12 system shall be by manual and automatic means. Approved
13 automatic fire detectors shall be provided in boiler and furnace
14 rooms, trash-collection rooms, kitchens, mechanical and
15 electrical rooms, and similar areas.

16 **907.2.4.2 Notification.** Activation of the fire alarm
17 system shall initiate a general evacuation signal.

18 Subp. 7. IFC Section 907.2.5. IFC Section 907.2.5 is
19 amended, and sections added, to read:

20 **907.2.5 Group H, general.** A fire alarm system shall be
21 installed in accordance with Sections 907.2.5 through 907.2.5.2
22 in Group H-5 occupancies, occupancies used for the manufacture
23 of organic coatings and, when required by Chapters 37, 39 and
24 40, the following locations:

- 25 1. Rooms or areas where highly toxic compressed gases
26 are stored or used;
- 27 2. Rooms or areas where Class I, II or III organic
28 peroxides are stored; and

1 3. Liquid and solid oxidizer storage areas.

2 **907.2.5.1 Initiation.** Initiation of the fire alarm
3 system in Group H-5 occupancies and in occupancies used for the
4 manufacture of organic coatings shall be by manual means.

5 Initiation of fire alarm systems installed for highly toxic
6 gases, organic peroxides and oxidizers shall be by automatic
7 means, as specified in Chapters 37, 39 and 40.

8 **907.2.5.2 Notification.** Activation of the fire alarm
9 system in Group H-5 occupancies and in occupancies used for the
10 manufacture of organic coatings shall initiate a general
11 evacuation signal. Activation of the automatic detection
12 systems installed for highly toxic gases, organic peroxides and
13 oxidizers shall sound a local alarm.

14 Subp. 8. IFC Section 907.2.6. IFC Section 907.2.6 and all
15 subsections are deleted in their entirety and replaced with the
16 following:

17 **907.2.6 Group I, general.** A fire alarm system shall be
18 installed in accordance with Sections 907.2.6 through
19 907.2.6.4.3 in Group I occupancies.

20 **907.2.6.1 Initiation.** Initiation of the fire alarm
21 system shall be by manual and automatic means. Approved
22 automatic fire detectors shall be installed in laundry and
23 soiled linen rooms, boiler and furnace rooms, mechanical and
24 electrical rooms, shops, laboratories, kitchens, locker rooms,
25 janitors' closets, trash-collection rooms, storage rooms,
26 lounges, gift shops and similar areas. Automatic smoke
27 detectors shall be provided in waiting areas that are open to

1 corridors.

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

9 **907.2.6.2 Notification.** Activation of the fire alarm
10 system or automatic sprinkler system shall initiate a general
11 evacuation signal. In addition, activation of the fire alarm
12 system shall immediately transmit an alarm to an approved
13 central station or remote station service.

14 **Exceptions:**

15 1. In lieu of audible notification appliances, visible
16 notification appliances shall be allowed to be used in
17 critical care areas.

18 2. Where occupants are incapable of evacuating themselves
19 because of age, physical/mental disabilities or physical
20 restraint, only the attendants or other personnel required
21 to evacuate occupants from a zone, area, floor or building
22 shall be required to be notified. This notification shall
23 include means to readily identify the zone, area, floor or
24 building in need of evacuation.

25 **907.2.6.3 Group I-2 occupancies.** Corridors in
26 hospitals, nursing homes (both intermediate care and skilled
27 nursing facilities), board and care homes and detoxification
28 facilities and spaces open to the corridors shall be protected
29 by an automatic smoke-detection system.

30 **907.2.6.3.1 Patient room smoke detectors.** Smoke
31 detectors that receive their primary power from the building
32 wiring shall be installed in patient sleeping rooms of hospitals
33 and nursing homes. Actuation of such detectors shall cause a
34 visual display on the corridor side of the room where the

1 detector is located and shall cause an audible and visual alarm
2 at the nurse's station attending the room.

3 **907.2.6.4 Group I-3 occupancies.** Group I-3
4 occupancies shall be provided with a fire alarm system installed
5 for alerting staff.

6 **907.2.6.4.1 Initiation.** Initiation of the fire
7 alarm system shall be by manual and automatic means. Approved
8 automatic fire detectors shall be installed in laundry and
9 soiled linen rooms, boiler and furnace rooms, mechanical and
10 electrical rooms, shops, laboratories, kitchens, locker rooms,
11 janitors' closets, trash-collection rooms, storage rooms,
12 lounges, gift shops, commissaries and similar areas. Actuation
13 of an automatic fire-extinguishing system, a manual fire alarm
14 box or a fire detector shall initiate an approved fire alarm
15 signal, which automatically notifies staff. Presignal systems
16 shall not be used.

17 **907.2.6.4.2 Manual fire alarm boxes.** Manual fire
18 alarm boxes are not required to be located in accordance with
19 Section 907.4 where the fire alarm boxes are provided at
20 staff-attended locations having direct supervision over areas
21 where manual fire alarm boxes have been omitted.

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

26 **907.2.6.4.3. Smoke detectors.** An approved
27 automatic smoke-detection system shall be installed throughout

1 resident housing areas, including sleeping areas and contiguous
2 day rooms, group activity spaces and other common spaces
3 normally accessible to residents.

4 **Exceptions:**

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

9 2. Smoke detectors are not required in sleeping rooms with
10 four or fewer occupants in smoke compartments that are
11 equipped throughout with an approved automatic sprinkler
12 system.

13 Subp. 9. IFC Section 907.2.7. IFC Section 907.2.7 and all
14 subsections are deleted in their entirety.

15 Subp. 10. IFC Section 907.2.8. IFC Section 907.2.8 and
16 all subsections are deleted in their entirety and replaced with
17 the following:

18 **907.2.8 Group R-1, general.** A fire alarm system shall be
19 installed in accordance with Sections 907.2.8 through 907.2.8.3
20 in Group R-1 occupancies.

21 **Exceptions:**

22 1. A fire alarm system is not required in buildings not
23 over two stories in height where all individual guest rooms
24 and contiguous attic and crawl spaces are separated from
25 each other and public or common areas by at least one-hour
26 fire partitions and each guest room has an exit directly to
27 a public way, exit court or yard.

28 2. Buildings containing five or less guest rooms shall be
29 allowed to be equipped with approved multiple-station smoke
30 detectors installed as required for Group R-3 occupancies.
31 Installation shall be in accordance with Section 907.2.10.

32 **907.2.8.1 Initiation.** Initiation of the fire alarm
33 system shall be by automatic means. Approved automatic fire
34 detectors shall be provided in boiler and furnace rooms, shops,

1 laundry rooms, mechanical and electrical rooms, trash-collection
2 rooms, storage rooms, gift shops, locker rooms and similar
3 areas. Automatic smoke detectors shall be provided in all
4 common areas and interior corridors serving as required means of
5 egress.

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

10 **907.2.8.2 Notification.** Activation of the fire alarm
11 system or automatic sprinkler system shall initiate a general
12 evacuation signal.

13 **907.2.8.3 Guest room smoke detectors.** Guest room
14 smoke detectors required by Section 907.2.10 shall not be
15 connected to a fire alarm system.

16 **Exception:** Connection of such detectors for annunciation
17 only.

18 **Subp. 11. IFC Section 907.2.9.** IFC Section 907.2.9 is
19 amended, and sections added, to read:

20 **907.2.9 Group R-2, general.** A fire alarm system shall be
21 installed in accordance with Sections 907.2.9 through 907.2.9.2
22 in Group R-2 occupancies where:

- 23 1. Any guest room or dwelling unit is located two or
24 more stories above the story containing the lowest
25 level of exit discharge;
- 26 2. Any guest room or dwelling unit is located more
27 than one story below the highest level of exit
28 discharge of exits serving the dwelling unit;
- 29 3. The building contains more than 16 dwelling units

1 or guest rooms; or
2 4. The building is used as a dormitory, convent,
3 monastery, fraternity or sorority and has an occupant
4 load of 20 or more.

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

11 **907.2.9.1 Initiation.** Initiation of the fire alarm
12 system shall be by automatic means. Automatic fire detectors
13 shall be provided in boiler and furnace rooms, trash-collection
14 rooms, shops, laundry rooms, mechanical and electrical rooms,
15 storage rooms and similar areas. Automatic smoke detectors
16 shall be provided in all common areas and interior corridors
17 serving as a required means of egress.

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

21 **907.2.9.2 Notification.** Activation of the fire alarm
22 system or automatic sprinkler system shall initiate a general
23 evacuation signal.

24 **907.2.9.3 Dwelling unit smoke detectors.** Dwelling
25 unit smoke detectors required by Section 907.2.10 shall not be
26 connected to the building fire alarm system.

27 **Exception:** Connection of such detectors for annunciation
28 only.

29 Subp. 12. IFC Section 907.2.10.1.4. IFC Section
30 907.2.10.1 is amended by adding a section to read:

31 **907.2.10.1.4 Fire station and emergency medical**

1 quarters. Areas used for sleeping in fire stations and
2 emergency medical and ambulance crew quarters shall be provided
3 with single station smoke detectors in accordance with Section
4 907.2.10.

5 Subp. 13. IFC Section 907.2.10.2. IFC Section 907.2.10.2
6 is amended by numbering the existing exception and adding a new
7 exception, so that the exceptions read as follows:

8 **Exceptions:**

9 1. Smoke alarms are not required to be equipped with
10 battery backup in Group R-1 where they are connected to an
11 emergency electrical system.

12 2. Smoke alarms are not required to be equipped with
13 battery backup in Group R-2 occupancies equipped throughout
14 with an automatic sprinkler system installed in accordance
15 with Section 903.3.1.1 or 903.3.1.2.

16 Subp. 14. IFC Section 907.2.10.5. IFC Section 907.2.10 is
17 amended by adding a section to read:

18 **907.2.10.5 Smoke alarms in arc-fault protected**
19 **circuits.** Smoke alarms receiving their primary power supply
20 from electrical circuits that are protected with arc-fault
21 circuit interruption must have a backup power supply.

22 Subp. 15. IFC Section 907.2. IFC Section 907.2 is amended
23 by adding sections to read:

24 **907.2.24 Residential hospices.** A fire alarm system shall
25 be installed in accordance with Section 907.2.24 in residential
26 hospices. When automatic sprinkler systems or automatic fire
27 detectors are installed, such systems or detectors shall be
28 connected to the building fire alarm system.

29 **907.2.24.1 Initiation.** Initiation of the fire alarm
30 system shall be by manual and automatic means. Approved

1 automatic fire detectors shall be provided in boiler and furnace
2 rooms, kitchens, laboratories, shops, gift shops, commissaries,
3 laundry and soiled linen rooms, mechanical and electrical rooms,
4 locker rooms, storage rooms, janitors' closets, trash-collection
5 rooms, lounges and similar areas. Automatic smoke detectors
6 shall be provided in sleeping rooms, corridors and spaces open
7 to the corridors.

8 **Exception:** Manual fire alarm boxes are not required at
9 exits if manual fire alarm boxes are located at all nurses'
10 stations or other constantly attended staff locations,
11 provided such fire alarm boxes are visible and continuously
12 accessible and that travel distances required by Section
13 907.4.1 are not exceeded.

14 **907.2.24.2 Notification.** Activation of the fire alarm
15 system or automatic sprinkler system shall initiate a general
16 evacuation signal. In addition, the fire alarm system shall be
17 monitored by an approved central station service in accordance
18 with Section 903.4.1.

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

22 Subp. 16. IFC Sections 907.3 through 907.3.1.2. IFC

23 Sections 907.3 through 907.3.1.2 are amended to read:

24 **907.3 Where required in existing buildings and structures.** An

25 approved manual, automatic, or manual and automatic fire alarm

26 system shall be provided in existing buildings and structures in

27 accordance with Sections 907.3.1 through 907.3.6 and NFPA 72.

28 For the purposes of this section, fire barrier walls or fire

29 walls shall not define separate buildings. In buildings

30 containing mixed occupancies that are designed as separated uses

31 (see Section 102.11), fire alarm and detection systems need only

1 be installed in those occupancies where required by this section.

2 **Exception:** In areas protected by an approved, supervised
3 automatic sprinkler system installed in accordance with
4 Section 903.3.1.1 or 903.3.1.2, automatic fire detectors
5 required by Section 907.3 need not be provided. Where
6 Section 907.3 required smoke detectors, such protection
7 shall be installed.

8 **907.3.1 Group A, general.** A fire alarm system shall be
9 installed in accordance with Sections 907.3.1 through 907.3.1.2
10 in existing Group A occupancies having an occupant load of 300
11 or more.

12 **Exceptions:**

- 13 1. Assembly areas used solely for worship purposes.
- 14 2. A fire alarm system is not required when an approved
15 automatic fire-extinguishing system is installed throughout
16 the building.
- 17 3. Group A occupancy portions of Group E occupancies are
18 allowed to have alarms as required for the Group E
19 occupancy.
- 20 4. A-5 occupancies.

21 **907.3.1.1 Initiation.** Initiation of the fire alarm
22 system shall be by automatic means. Approved automatic fire
23 detectors shall be installed in laundry rooms, boiler and
24 furnace rooms, mechanical and electrical rooms, shops, kitchens,
25 trash-collection rooms, storage rooms and similar areas.

26 **907.3.1.2 Notification.** The required fire alarm
27 system shall activate an audible and visible notification
28 appliance at a constantly attended location within the building
29 for the purposes of initiating emergency action. A presignal
30 feature and positive alarm sequencing in accordance with NFPA 72
31 are permitted.

32 Occupant notification shall be by means of voice

1 announcements, either live or prerecorded, initiated by the
2 person in the constantly attended location.

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

7 Subp. 17. IFC Sections 907.3.1.3 through 907.3.1.8. IFC
8 Sections 907.3.1.3 through 907.3.1.8 are deleted.

9 Subp. 18. IFC Sections 907.3.2 through 907.3.2.3. IFC
10 Sections 907.3.2 through 907.3.2.3 are amended to read:

11 **907.3.2 Group E, general.** A fire alarm system shall be
12 installed in accordance with Sections 907.3.2 through 907.3.2.3
13 in existing Group E occupancies having an occupant load of 50 or
14 more.

15 **Exception:** A building with a maximum area of 1,000 square
16 feet (93 m²) that contains a single classroom and is
17 located no closer than 20 feet (15 240 mm) from another
18 building.

19 **907.3.2.1 Initiation.** Initiation of the fire alarm
20 system shall be by manual and automatic means. Approved
21 automatic fire detectors shall be provided in laundry rooms,
22 boiler and furnace rooms, mechanical and electrical rooms,
23 shops, laboratories, kitchens, locker rooms, janitors' closets,
24 trash-collection rooms, storage rooms, lounges and similar areas.

25 **Exceptions:**

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

30 2. Where all corridors are protected by an approved
31 automatic fire alarm system having smoke detection with
32 alarm verification, manual fire alarm boxes are only
33 required near exits serving shops, chemistry and physics
34 laboratories, boiler rooms, industrial technology and

1 industrial arts rooms, kitchens, custodian's offices and
2 main offices.

3 **907.3.2.2 Travel through adjoining rooms.** Where the
4 only means of egress travel from an interior room or rooms
5 having an aggregate occupant load of more than ten occupants is
6 through an adjoining or intervening room, automatic smoke
7 detectors shall be installed throughout the common atmosphere
8 through which the path of egress travel passes.

9 **Exception:** In buildings that are protected throughout by
10 an approved automatic sprinkler system installed in
11 accordance with Section 903.3.1.1, smoke detectors are not
12 required in intervening or adjoining rooms.

13 **907.3.2.3 Notification.** Activation of the fire alarm
14 system or automatic sprinkler system shall initiate a general
15 evacuation signal.

16 Subp. 19. IFC Sections 907.3.3 through 907.3.3.3. IFC
17 Section 907.3 is amended by adding sections to read:

18 **907.3.3 Group I, general.** A fire alarm system shall be
19 installed in accordance with Sections 907.3.3 through
20 907.3.3.3.3 in existing Group I occupancies.

21 **907.3.3.1 Initiation.** Initiation of the fire alarm
22 system shall be by manual and automatic means. Approved
23 automatic fire detectors shall be provided in laundry and soiled
24 linen rooms, boiler and furnace rooms, mechanical and electrical
25 rooms, shops, laboratories, kitchens, locker rooms, janitors'
26 closets, trash-collection rooms, storage rooms, lounges, gift
27 shops and similar areas. Automatic smoke detectors shall be
28 provided in waiting areas that are open to corridors.

29 **Exception:** Manual fire alarm boxes in patient sleeping
30 areas of Group I-1 and I-2 occupancies are not required at

1 exits if manual fire alarm boxes are located at all nurses'
2 stations or other constantly attended staff locations,
3 provided such fire alarm boxes are visible and continuously
4 accessible and that travel distances required by Section
5 907.4.1 are not exceeded.

6 907.3.3.2 Notification. Activation of the fire alarm
7 system or automatic sprinkler system shall initiate a general
8 evacuation signal. In addition, activation of the fire alarm
9 system shall immediately transmit an alarm to an approved
10 central station or remote station service.

11 **Exceptions:**

12 1. In lieu of audible notification appliances, visible
13 notification appliances shall be allowed to be used in
14 critical care areas.

15 2. Where occupants are incapable of evacuating themselves
16 because of age, physical/mental disabilities, or physical
17 restraint, only the attendants or other personnel required
18 to evacuate occupants from a zone, area, floor or building
19 shall be required to be notified. This notification shall
20 include means to readily identify the zone, area, floor or
21 building in need of evacuation.

22 907.3.3.3 Group I-3 occupancies, general. Existing
23 Group I-3 occupancies shall be provided with a fire alarm system
24 installed for alerting staff.

25 907.3.3.3.1 Initiation. Initiation of the fire
26 alarm system shall be by manual and automatic means. Approved
27 automatic fire detectors shall be provided in laundry and soiled
28 linen rooms, boiler and furnace rooms, mechanical and electrical
29 rooms, shops, laboratories, kitchens, locker rooms, janitors'
30 closets, trash-collection rooms, storage rooms, lounges, gift
31 shops, commissaries and similar areas. Actuation of an
32 automatic fire-extinguishing system, a manual fire alarm box or
33 a fire detector shall initiate an approved fire alarm signal,

1 which automatically notifies staff. Presignal systems shall not
2 be used.

3 **907.3.3.3.2 Manual fire alarm boxes.** Manual fire
4 alarm boxes are not required to be located in accordance with
5 Section 907.4 where the fire alarm boxes are provided at
6 staff-attended locations having direct supervision over areas
7 where manual fire alarm boxes have been omitted.

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

12 **907.3.3.3.3 Smoke detectors.** An approved
13 automatic smoke-detection system shall be installed throughout
14 resident housing areas, including sleeping areas and contiguous
15 day rooms, group activity spaces and other common spaces
16 normally accessible to residents.

17 **Exceptions:**

18 1. Other approved smoke-detection arrangements providing
19 equivalent protection, such as placing alarms in exhaust
20 ducts from cells or behind protective guards, listed for
21 the purpose, are allowed when necessary to prevent damage
22 or tampering.

23 2. Smoke detectors are not required in sleeping rooms with
24 four or fewer occupants in smoke compartments that are
25 equipped throughout with an approved automatic sprinkler
26 system.

27 Subp. 20. IFC Sections 907.3.4 through 907.3.6.1. IFC
28 Section 907.3 is amended by adding sections to read:

29 **907.3.4 Group R-1, general.** A fire alarm system shall be
30 installed in accordance with Sections 907.3.4 through 907.3.4.3
31 in existing Group R-1 occupancies three or more stories in

1 height or with 20 or more guest rooms.

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

7 **907.3.4.1 Initiation.** Initiation of the fire alarm
8 system shall be by automatic means. Approved automatic fire
9 detectors shall be provided in boiler and furnace rooms, shops,
10 laundry rooms, mechanical and electrical rooms, trash-collection
11 rooms, storage rooms, gift shops, locker rooms and similar
12 areas. Automatic smoke detectors shall be provided in all
13 common areas and interior corridors serving as required means of
14 egress.

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

19 **907.3.4.2 Notification.** Activation of the fire alarm
20 system or automatic sprinkler system shall initiate a general
21 evacuation signal.

22 **907.3.4.3 Guest room detectors.** Guest room smoke
23 detectors required by Section 907.2.10 shall not be connected to
24 a fire alarm system.

25 **Exception:** Connection of such detectors for annunciation
26 only.

27 **907.3.5 Group R-2, general.** A fire alarm system shall be
28 installed in accordance with Sections 907.3.5 through 907.3.5.2
29 in existing Group R-2 occupancies where:

30 1. Any guest room or dwelling unit is located two or
31 more stories above the story containing the lowest

1 level of exit discharge;

2 2. Any guest room or dwelling unit is located more
3 than one story below the highest level of exit
4 discharge of exits serving the dwelling unit;

5 3. The building contains more than 16 dwelling units
6 or guest rooms; or

7 4. The building is used as a dormitory, convent,
8 monastery, fraternity or sorority and has an occupant
9 load of 20 or more.

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

15 **907.3.5.1 Initiation.** Initiation of the fire alarm
16 system shall be by automatic means. Approved automatic fire
17 detectors shall be provided in boiler and furnace rooms, shops,
18 laundry rooms, mechanical and electrical rooms, trash-collection
19 rooms, storage rooms and similar areas. Automatic smoke
20 detectors shall be provided in all common areas and interior
21 corridors serving as required means of egress.

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

25 **907.3.5.2 Notification.** Activation of the fire alarm
26 system or automatic sprinkler system shall initiate a general
27 evacuation signal.

28 **907.3.5.3 Dwelling unit smoke detectors.** Dwelling
29 unit smoke detectors required by Section 907.3.6 shall not be
30 connected to the building fire alarm system.

1 **Exception:** Connection of such detectors for annunciation
2 only.

3 **907.3.6 Single- or multiple-station smoke alarms.** Existing
4 Group R occupancies not already provided with single- or
5 multiple-station smoke alarms shall be provided with approved
6 single- or multiple-station smoke alarms installed and
7 maintained in accordance with Section 907.2.10.

8 **Exception:** For buildings constructed prior to August 1,
9 1989, detectors can receive their power from a battery
10 supply. For buildings constructed on or after August 1,
11 1989, detectors shall be connected to a centralized power
12 source.

13 **907.3.6.1 Fire station and emergency medical**
14 **quarters.** Areas used for sleeping in fire stations and
15 emergency medical and ambulance crew quarters shall be provided
16 with single station smoke detectors in accordance with Section
17 907.3.6.

18 Subp. 21. IFC Section 907.10.2. IFC Section 907.10.2 is
19 amended to read:

20 **907.10.2 Audible alarms.** Audible alarm notification
21 appliances shall be provided and sound a distinctive sound that
22 is not to be used for any purpose other than that of a fire
23 alarm. The audible alarm notification appliances shall provide
24 a sound pressure level of 15 decibels (dBA) above the average
25 ambient sound level or 5 dBA above the maximum sound level
26 having a duration of at least 60 seconds, whichever is greater,
27 in every occupied space within the building. The minimum sound
28 pressure levels shall be: 75 dBA in Groups R and I-1
29 occupancies; 90 dBA in mechanical equipment rooms; and 60 dBA in
30 other occupancies. The maximum sound pressure level for audible

1 alarm notification appliances shall be 110 dBA at the minimum
2 hearing distance from the audible appliance. Where the average
3 ambient noise is greater than 105 dBA, visible alarm
4 notification appliances shall be provided in accordance with
5 NFPA 72 and audible alarm notification appliances shall not be
6 required.

7 **Exception:** Visible alarm notification appliances shall be
8 allowed in lieu of audible alarm notification appliances in
9 critical care areas of Group I-2 occupancies.

10 Subp. 22. IFC Section 907.11. IFC Section 907.11 is
11 amended, and sections added, to read:
12 **907.11 Fire safety functions.** Automatic fire detectors required
13 by Sections 907.2 and 907.3 are to activate notification
14 appliances in accordance with those sections. Where automatic
15 fire detectors are installed for other fire safety functions,
16 they shall perform the intended function upon activation. Where
17 automatic detectors are installed for fire safety functions and
18 the building has a fire alarm system, such detectors shall
19 activate supervisory signals at the fire alarm control panel or
20 at a constantly attended location. Where the building does not
21 have a fire alarm system, such detectors shall activate a visual
22 and audible supervisory signal at an approved location, which
23 shall indicate the source of the signal.

24 **907.11.1 Air distribution and air-handling systems.** Smoke
25 detectors installed to shut down the air distribution or
26 air-handling system shall, upon activation, perform the intended
27 function. Air distribution or air-handling equipment that is
28 part of a smoke-control system shall switch to smoke-control

1 mode upon activation of a detector.

2 **907.11.1.1 Fire alarm system interface.** Smoke
3 detectors that are installed in air distribution or air-handling
4 systems for shutdown purposes and that are connected to a fire
5 alarm system shall not sound a general evacuation signal.

6 **907.11.2 Elevator control functions.** Smoke detectors that
7 are installed to control or recall elevators or to control doors
8 for elevators, elevator lobbies or elevator shafts and that are
9 connected to a fire alarm system shall not sound a general
10 evacuation signal. Elevator recall and firefighter's emergency
11 operation for elevators shall only be controlled by elevator
12 smoke detectors and shall not initiate upon other building fire
13 detectors or evacuation signals.

14 **907.11.3 Door hold-open functions.** Smoke detectors that
15 are installed to hold open fire doors under nonemergency
16 conditions and that are connected to a fire alarm system shall
17 sound a general evacuation signal when the doors being held open
18 are part of the means of egress corridor or stair system. Door
19 hold-open smoke detectors are not required to activate a visual
20 or audible signal.

21 Subp. 23. IFC Section 907.12. IFC Section 907.12 is
22 deleted.

23 Subp. 24. IFC Section 907.15. IFC Section 907.15 is
24 deleted.

25 Subp. 25. IFC Section 907.20.2. IFC Section 907.20.2 is
26 amended to read:

27 **907.20.2 Testing.** Fire alarm systems shall be inspected

1 and tested at least annually in accordance with NFPA 72 or more
2 frequently where required by the code official.

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

7 7511.0909 SECTION 909, SMOKE CONTROL SYSTEMS.

8 Subpart 1. IFC Section 909.4.7. IFC Section 909.4 is
9 amended by adding a section to read:

10 **909.4.7 Door opening force.** With any of the design methods
11 allowed by Section 909, the door opening force, latch release,
12 and set-in-motion force shall comply with Section 1008.1.2
13 requirements when the system is in smoke control mode.

14 Subp. 2. IFC Section 909.22. IFC Section 909 is amended
15 by adding a section to read:

16 **909.22 High-rise and covered mall smoke-exhaust systems.**
17 High-rise buildings and covered mall buildings exceeding 50,000
18 square feet (4645 m²) in floor area, excluding anchor stores,
19 shall be equipped with a post-fire smoke exhaust system
20 installed and maintained in accordance with the Building Code.

21 7511.0910 SECTION 910, SMOKE AND HEAT VENTS.

22 Subpart 1. IFC Section 910.1. IFC Section 910.1 is
23 amended by adding sections to read:

24 **910.1.1 Required venting method.** Required smoke and heat
25 venting shall be accomplished with mechanical smoke exhaust
26 according to Section 910.4.

27 **Exceptions:**

28 1. Calculated engineering design of mechanical smoke

1 exhaust in accordance with Section 910.5 shall be permitted
2 for buildings sprinklered throughout.

3 2. For nonsprinklered buildings, smoke and heat vents as
4 specified in Section 910.3 shall be permitted.

5 3. Where approved by the code official, smoke and heat
6 vents as specified in Section 910.3 shall be permitted in
7 sprinklered buildings.

8 **910.1.2 Listing.** Smoke and heat vents and mechanical smoke
9 exhaust fans shall be listed for the intended purpose.

10 **910.1.3 Curtain boards.** When mechanical smoke exhaust is
11 provided in accordance with Section 910.4 or 910.5, curtain
12 boards are only required at the separation between areas
13 protected with early suppression fast response (ESFR) sprinklers
14 and conventional sprinkler systems.

15 Subp. 2. IFC Section 910.4. IFC Section 910.4 is amended
16 to read:

17 **910.4 Mechanical smoke exhaust.** Mechanical smoke exhaust shall
18 be in accordance with Sections 910.4.1 through 910.4.6.

19 Subp. 3. IFC Section 910.4.3. IFC Section 910.4.3 is
20 amended to read:

21 **910.4.3 Operation.** Mechanical smoke exhaust fans shall be
22 automatically activated upon sprinkler system water flow. A 5-
23 to 10-minute delay shall be provided between the sprinkler water
24 flow signal and activation of the exhaust fans. In addition,
25 individual manual controls of each fan unit shall also be
26 provided.

27 **Exception:** When required by the code official, initiation
28 of mechanical smoke exhaust fans shall be only through
29 manual activation.

30 Subp. 4. IFC Section 910.4.5. IFC Section 910.4.5 is

1 amended to read:

2 **910.4.5 Supply air.** Supply air for exhaust fans shall be
3 sized to provide a minimum of 50 percent of the required
4 exhaust. Air velocity at each supply air opening shall not
5 exceed an average of 200 feet per minute when measured 4 feet
6 (1219 mm) in front of the opening. Openings for supply air
7 shall be uniformly distributed around the periphery of the area
8 served and be located or ducted to a position not more than
9 one-half the storage height above the floor. Supply air
10 openings shall open automatically upon operation of the smoke
11 exhaust system and shall not require a manual action at each
12 supply opening for operation. Supply air openings shall be kept
13 clear of storage or obstructions to airflow for at least 4 feet
14 (1219 mm) in front of the opening. Supply air openings shall be
15 separated from exhaust fans and exterior combustibles to prevent
16 introduction of smoke into the building.

17 **Subp. 5. IFC Section 910.** IFC Section 910 is amended by
18 adding sections to read:

19 **910.5 Calculated engineering design of mechanical smoke**
20 **exhaust.** Calculated engineering design of mechanical smoke
21 exhaust shall be in accordance with Sections 910.5.1 through
22 910.5.5.

23 **910.5.1 Methodology.** Mechanical smoke exhaust systems
24 shall be designed to remove smoke after a fire is extinguished
25 and to assist the fire department during suppression operations
26 or during marginal sprinkler control situations. They are not
27 considered life safety systems and are not designed for occupant

1 safety.

2 **910.5.2 Calculation method.** Volumetric flow rate
3 calculations shall demonstrate that the system will provide at
4 least three air changes per hour for the space required to be
5 provided with smoke exhaust. When only a portion of a space is
6 used for high-piled storage requiring smoke exhaust, the volume
7 to be extracted shall be based on the ceiling height multiplied
8 by the actual gross floor area for storage.

9 **910.5.3 Operation.** Mechanical smoke exhaust fans shall be
10 automatically activated upon sprinkler system water flow. A 5-
11 to 10-minute delay shall be provided between the sprinkler water
12 flow signal and activation of the exhaust fans. In addition,
13 individual manual controls of each fan unit shall also be
14 provided.

15 **Exception:** When required by the code official, initiation
16 of mechanical smoke exhaust fans shall be only through
17 manual activation.

18 **910.5.4 Supply air.** Supply air for exhaust fans shall be
19 sized to provide a minimum of 50 percent of the required
20 exhaust. Air velocity at each supply air opening shall not
21 exceed an average of 200 feet per minute when measured 4 feet
22 (1219 mm) in front of the opening. Openings for supply air
23 shall be uniformly distributed around the periphery of the area
24 served and be located or ducted to a position not more than
25 one-half the storage height above the floor. Supply air
26 openings shall open automatically upon operation of the smoke
27 exhaust system and shall not require a manual action at each
28 supply opening for operation. Supply air openings shall be kept

1 clear of storage or obstructions to airflow for at least 4 feet
2 (1219 mm) in front of the opening. Supply air openings shall be
3 separated from exhaust fans and exterior combustibles to prevent
4 introduction of smoke into the building.

5 **910.5.5 Equipment.** Wiring and controls shall be as
6 required in Section 910.4.4. Interlocks shall be as required in
7 Section 910.4.6. Exhaust fans shall be uniformly spaced and
8 each fan shall have a maximum individual capacity of 30,000 cfm
9 ($850 \text{ m}^3/\text{min}$).

10 **910.6 Testing and maintenance.** Mechanical smoke exhaust systems
11 shall be tested and maintained as required in Sections 910.6.1
12 through 910.6.4.

13 **910.6.1 Acceptance testing.** Mechanical smoke exhaust
14 systems shall be acceptance tested as required by Sections
15 909.18.2 through 909.18.5 and 909.19.

16 **910.6.1.1 Controls.** For testing purposes, each smoke
17 exhaust system equipped for automatic activation shall be put
18 into operation by the actuation of the automatic initiating
19 device. Control sequences shall be verified throughout the
20 system, including verification of override from the
21 firefighter's control panel when systems are equipped for
22 automatic activation.

23 **910.6.2 Special inspections.** Special inspections for
24 mechanical smoke exhaust shall be conducted according to Section
25 909.18.8.

26 **910.6.3 Maintenance.** Mechanical smoke exhaust systems,
27 including exhaust fans, supply air openings and controls, shall

1 be maintained and unobstructed.

2 **910.6.4 Operational testing.** Operational testing of the
3 smoke exhaust system shall include all equipment such as
4 initiating devices, fans, dampers, controls and supply air
5 openings. Mechanical smoke exhaust systems shall be operated
6 and tested under each control sequence at least annually.

7 7511.0912 SECTION 912, FIRE DEPARTMENT CONNECTIONS.

8 IFC Section 912.2 is amended by adding a section to read:

9 **912.2.3 Connection height.** Newly installed fire department
10 connections shall be located not less than 18 inches (457 mm)
11 and not more than 4 feet (1.2 m) above the level of the adjacent
12 grade or access level.

13 7511.1001 SECTION 1001, ADMINISTRATION.

14 Subpart 1. IFC Section 1001.1. IFC Section 1001.1 is
15 amended to read:

16 **1001.1 General.** Buildings or portions thereof shall be provided
17 with a means of egress system as required by this chapter. The
18 provisions of this chapter shall control the design,
19 construction, and arrangement of means of egress components
20 required to provide an approved means of egress from structures
21 and portions thereof. Sections 1001 through 1025 and Section
22 1028 shall apply to new construction. Sections 1001, 1002,
23 1026, 1027, and 1028 shall apply to existing buildings.

24 Subp. 2. IFC Section 1001.3. IFC Section 1001 is amended
25 by adding a section to read:

26 **1001.3 Special exiting provisions for younger students.** Rooms

1 in Group E occupancies used by preschool, kindergarten, first-
2 or second-grade pupils shall be located as required by the
3 Building Code.

4 7511.1002 SECTION 1002, DEFINITIONS.

5 The definitions of "aisle" and "corridor" in IFC Section
6 1002 are amended to read:

7 **AISLE.** That portion of an exit access that connects an aisle
8 access way to an exit access doorway, corridor or exit.

9 **CORRIDOR.** An interior passageway having a length at least three
10 times its width, having walls, partitions or other obstructions
11 to exit travel over 6 feet (1829 mm) in height on two opposing
12 sides and having openings from rooms or similar spaces.

13 7511.1007 SECTION 1007, ACCESSIBLE MEANS OF EGRESS.

14 IFC Section 1007 is deleted.

15 7511.1008 SECTION 1008, DOORS, GATES AND TURNSTILES.

16 Subpart 1. IFC Sections 1008.1.8.1, 1008.1.8.2,
17 1008.1.8.3. IFC Sections 1008.1.8.1, 1008.1.8.2, and 1008.1.8.3
18 are amended to read:

19 **1008.1.8.1 Hardware.** Except as permitted by Section
20 1008.1.8.3, door handles, pulls, latches, locks and other
21 operating devices on doors shall only require a single operation
22 to release the door from the egress side.

23 **1008.1.8.2 Hardware height.** Door handles, pulls,
24 latches, locks, and other operating devices shall be installed
25 34 inches (864 mm) minimum and 48 inches (1219 mm) maximum above
26 the finished floor.

1 **1008.1.8.3 Locks and latches.** Locks and latches shall
2 be permitted to prevent operation of doors where any of the
3 following exists:

4 1. Places of detention or restraint.

5 2. In buildings in occupancy Group A having an
6 occupant load of 300 or less, Groups B, F, M, and S
7 and in churches, the main exterior door or doors are
8 permitted to be equipped with key-operated locking
9 devices from the egress side, provided:

10 2.1 The locking device is readily distinguishable as
11 locked.

12 2.2 A readily visible durable sign is posted on the
13 egress side on or adjacent to the door stating: THIS
14 DOOR TO REMAIN UNLOCKED WHEN BUILDING IS OCCUPIED.
15 The sign shall be in letters 1 inch (25 mm) high on a
16 contrasting background.

17 2.3 The use of the key-operated locking device is
18 revocable by the fire code official for due cause.

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

23 4. Doors from individual dwelling or sleeping units
24 of Group R occupancies having an occupant load of ten
25 or less are permitted to be equipped with a night
26 latch, dead bolt or security chain, provided such
27 devices are openable from the inside without the use

1 of a key or tool.

2 5. Delayed egress locks, installed and maintained in
3 conformance with Section 1008.1.8.6.

4 6. Special egress-control devices installed and
5 maintained in conformance with Section 1008.1.11 are
6 allowed in Group R-3 and Group R-4 congregate care
7 facilities and in Group I occupancies.

8 7. Existing door-locking arrangements in Group I
9 occupancies that were installed prior to March 20,
10 1995, and comply with Appendix I may be allowed to
11 continue.

12 8. In rooms, other than cells, where occupants are
13 being restrained for safety or security reasons,
14 special locking arrangements that comply with the
15 requirements of Section 1008.1.10 are permitted.

16 Subp. 2. IFC Section 1008.1.8.6. IFC Section 1008.1.8.6
17 is amended to read:

18 1008.1.8.6 Delayed egress locks. Approved, listed,
19 delayed egress locks shall be permitted to be installed on doors
20 serving any occupancy except Group A and Group H occupancies in
21 buildings that are equipped throughout with an automatic
22 sprinkler system in accordance with Section 903.3.1.1 or an
23 approved automatic smoke-detection system installed in
24 accordance with Section 907, provided that the doors unlock in
25 accordance with Items 1 through 6. A building occupant shall
26 not be required to pass through more than one door equipped with
27 a delayed egress lock before entering an exit.

1 1. The doors unlock upon actuation of the automatic
2 sprinkler system or automatic fire detection system.

3 2. The doors unlock upon loss of power controlling
4 the lock or lock mechanism.

5 3. The door locks have the capability of being
6 unlocked by a signal from the fire command center.

7 4. The initiation of an irreversible process that
8 will release the latch in not more than 15 seconds
9 when a force of not more than 15 pounds (66 N) is
10 applied for one second to the release device.

11 Initiation of the irreversible process shall activate
12 an audible signal in the vicinity of the door. Once
13 the door lock has been released by the application of
14 force to the releasing device, relocking shall be by
15 manual means only.

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

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

22 6. Emergency lighting shall be provided at the door.

23 Subp. 3. IFC Section 1008.1. IFC Section 1008.1 is
24 amended by adding sections to read:

25 **1008.1.10 Special locking arrangements.** Special locking
26 arrangements meeting the requirements of Sections 1008.1.10
27 through 1008.1.10.5 are permitted for rooms, other than cells,
28 where the occupants are being restrained for safety or security

1 reasons. The use of sections 1008.1.10 through 1008.1.10.5 may
2 be revoked by the fire chief or building official for due cause.

3 **1008.1.10.1 Locking hardware.** Locking devices shall
4 release upon any of the following conditions:

- 5 1. Activation of the automatic sprinkler system.
- 6 2. Activation of any automatic fire detection device.
- 7 3. Activation of an automatic fire alarm system.
- 8 4. Loss of electrical power to the locking device or
9 the fire alarm system.
- 10 5. Activation of the fire alarm trouble signal.

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

15 **1008.1.10.2 Fire-extinguishing system.** When special
16 locking arrangements are used, the room or area being secured
17 must be protected with quick-response sprinklers.

18 **1008.1.10.3 Fire alarm and detection.** When special
19 locking arrangements are used, the room or area and spaces
20 between the room or area and an outside exit door shall be
21 protected with automatic smoke detection connected to the
22 building's fire alarm system. If the walls of the room or area
23 do not extend to the ceiling, automatic smoke detection can be
24 provided in the adjacent room or area, provided that there are
25 no substantial obstructions to delay activation of the smoke
26 detection.

27 **1008.1.10.4 Construction.** Rooms or areas containing

1 these special locking arrangements shall be constructed of
2 noncombustible materials having a minimum of one-hour
3 fire-resistive construction. Doors separating the room from
4 other spaces must swing with egress travel from the room and
5 have a fire-protection rating of not less than 20 minutes.
6 Doors need not be self-closing. The interior finish of the wall
7 and ceiling surfaces must not exceed a Class III (or Class C)
8 flame spread rating.

9 **1008.1.10.5 Testing of devices.** Special locking
10 arrangements shall be tested monthly to ensure that they will
11 release under the conditions set forth in Section 1008.1.10.1,
12 Items 1-5. Locking arrangements that are found not to comply
13 with the requirements of Sections 1008.1.10.1 through
14 1008.1.10.5 shall not be used.

15 **1008.1.11 Special egress control devices.** Where the
16 clinical needs of the patients require specialized security
17 measures for their safety, door-locking arrangements are
18 permitted in Group I-1 occupancies (this includes use groups as
19 described in Group I-1 occupancies that are identified as either
20 Group R-3 or Group R-4 occupancies because of occupant load) and
21 Group I-2 occupancies, provided that:

- 22 1. Keys or devices that function like keys are
23 carried by staff at all times;
- 24 2. In at least one egress path, not more than one
25 such arrangement is located;
- 26 3. The building or fire area is protected by an
27 approved automatic sprinkler system in accordance with

- 1 Section 903.3.1.1 and an approved fire alarm system
2 having smoke detection installed throughout the exit
3 corridor system and areas open to the exit corridor;
- 4 4. Locking devices automatically unlock upon
5 activation of any of the following:
- 6 a. Automatic sprinkler system;
7 b. Automatic smoke-detection system;
8 c. Automatic fire alarm system; or
9 d. Loss of electrical power;
- 10 5. Locking devices can be remotely unlocked from an
11 approved location within the secured area;
- 12 6. There is no public assembly space within the
13 secured area;
- 14 7. 24-hour patient supervision is provided within the
15 secured area;
- 16 8. Relocking of the locking device is by manual means
17 from an approved location within the secured area;
- 18 9. Locking devices are designed to fail in the open
19 position.
- 20 **1008.1.12 Exit stair door locking.** Doors are not to be
21 locked on the stairwell side unless meeting one of the following
22 criteria:
- 23 1. Delayed egress locks meeting Section 1008.1.8.6.
24 2. Locking devices meeting the requirements of
25 Section 403.12 of the International Building Code.
26 3. Non-high-rise buildings that are more than four
27 stories meeting NFPA 101 Section 7.2.1.5.2.

1 7511.1009 SECTION 1009, STAIRWAYS.

2 IFC Section 1009.5.2 is amended to read:

3 **1009.5.2 Outdoor conditions.** Outdoor ramps and associated
4 landings and approaches shall be designed so that water will not
5 accumulate on walking surfaces.

6 7511.1014 SECTION 1014, EXIT ACCESS.

7 IFC Section 1014.4 and all subsections are deleted and
8 replaced with the following:

9 **1014.4 Aisles and aisle accessways.** Aisles and aisle accessways
10 serving as a portion of the exit access in the means of egress
11 system shall comply with the requirements of this section.
12 Aisles and aisle accessways shall be provided from all occupied
13 portions of the exit access. Aisles and aisle accessways
14 serving assembly areas, other than seating at tables, shall
15 comply with Section 1024. Aisles and aisle accessways serving
16 reviewing stands, grandstands and bleachers shall comply with
17 Section 1024.

18 **1014.4.1 Width determination.** Where tables or counters are
19 served by fixed seats, the width of the aisle or aisle accessway
20 shall be measured from the back of the seat. Where seating is
21 located at a table or counter and is adjacent to an aisle or
22 aisle accessway, the measurement of required clear width of the
23 aisle or aisle accessway shall be made to a line 19 inches (483
24 mm) away from and parallel to the edge of the table or counter.
25 The 19-inch (483 mm) distance shall be measured perpendicular to
26 the side of the table or counter. In the case of other side

1 boundaries for aisle or aisle accessways, the clear width shall
2 be measured to walls, tread edges or other obstructions.

3 The required width of aisles and aisle accessways shall be
4 unobstructed.

5 **Exception:** Doors, when fully opened, and handrails shall
6 not reduce the required width by more than 7 inches (178
7 mm). Doors in any position shall not reduce the required
8 width by more than one-half. Other nonstructural
9 projections such as trim and similar decorative features
10 are permitted to project into the required width 1.5 inches
11 (38 mm) from each side.

12 **1014.4.1.1 Minimum aisle accessway width.** Aisle
13 accessways shall provide a minimum 12 inches (305 mm) of width
14 plus 0.5 inch (12.7 mm) of width for each additional 1 foot (305
15 mm), or fraction thereof, beyond 12 feet (3658 mm) of aisle
16 accessway length.

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

20 **1014.4.1.2 Minimum aisle width.** The minimum clear
21 width shall be determined by Section 1005.1 for the occupant
22 load served, but shall not be less than 36 inches (914 mm).

23 **Exception:** Aisles serving less than 50 people need not
24 exceed 28 inches (711 mm) in width.

25 **1014.4.2 Aisle accessway length.** The length of travel
26 along the aisle accessway shall not exceed 30 feet (9144 mm) to
27 an aisle or exit access doorway.

28 7511.1015 SECTION 1015, EXIT AND EXIT ACCESS DOORWAYS.

29 IFC Section 1015.1 is amended to read:

30 **1015.1 Exit or exit access doorways required.** Two exits or exit
31 access doorways from any space shall be provided where one of

1 the following conditions exists:

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

4 Exception: In Groups R-2 and R-3 occupancies, one means of
5 egress is permitted within and from individual dwelling
6 units with a maximum occupant load of 16 if the dwelling
7 unit is equipped throughout with an automatic sprinkler
8 system in accordance with Section 903.3.1.1 or 903.3.1.2.

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

11 3. Where required by Sections 1015.3, 1015.4, and
12 1015.5.

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

16 Exception: Group I-2 occupancies shall comply with Section
17 1014.2.2.

18 7511.1019 SECTION 1019, NUMBER OF EXITS AND CONTINUITY.

19 Subpart 1. IFC Section 1019.1. IFC Section 1019.1 is
20 amended to read:

21 **1019.1 Minimum number of exits.** Occupants within rooms and
22 spaces shall be provided with and have access to the minimum
23 number of approved independent exits as required by Section
24 1015.1. Occupants on every story, in every basement, and in
25 every building shall be provided with and have access to the
26 minimum number of approved independent exits as required by
27 Table 1019.1, except as modified in Section 1019.2. For the
28 purposes of this chapter, occupied roofs shall be provided with
29 exits as required for stories. The required number of exits

1 from any story, basement or individual space shall be maintained
2 until arrival at grade or the public way. [Table 1019.1
3 unchanged.]

4 Subp. 2. IFC Section 1019.1.3. IFC Section 1019.1 is
5 amended by adding a section to read:

6 1019.1.3 Press box roof access. The means of egress from
7 occupied press box roofs shall comply with the provisions of
8 this chapter. Occupied press box roofs shall be provided with
9 guards in accordance with Section 1013.

10 Exception: Press box roofs used as camera, video, or
11 security platforms or similar uses having an occupant load
12 of nine or less shall have access to not less than one
13 means of egress. The means of egress is permitted to be by
14 way of a roof hatch or scuttle and ships ladder.

15 Subp. 3. IFC Section 1019.2. IFC Section 1019.2 is
16 amended to read as follows:

17 1019.2 Buildings or stories with one exit. Only one exit shall
18 be required in buildings or stories as described below:

19 1. Buildings or stories described in Table 1019.2,
20 provided that the building has not more than one level
21 below the first story above grade plane.

22 2. Buildings or stories of a Group R-3 occupancy.

23 3. Single-level buildings with the occupied space at
24 the level of exit discharge provided that the story or
25 space complies with Section 1015.1 as a space with one
26 means of egress.

27 Subp. 4. IFC Table 1019.2. IFC Table 1019.2 is amended to
28 read as follows:

29 Table 1019.2

Buildings or Stories with One Exit		
Occupancy	Maximum Height of Building Above Grade Plane	Maximum Occupants (or Dwelling Units) per Floor (with One Exit) and Travel Distance
A, B ^d , E ^e , F, M, U	1 story	49 occupants and 75 feet travel distance
H-2, H-3	1 story	3 occupants and 25 feet travel distance
H-4, H-5, I, R	1 story	10 occupants and 75 feet travel distance
S ^a	1 story	29 occupants and 100 feet travel distance
B ^b , F, M, S ^a	2 stories	30 occupants and 75 feet travel distance
R-2	2 stories ^c	4 dwelling units and 50 feet travel distance
[Footnotes unchanged.]		

7511.1025 SECTION 1025, ASSEMBLY.

Subpart 1. IFC Section 1025.6.4. IFC Section 1025.6 is amended by adding a section to read:

1025.6.4 Width of means of egress for bleacher facilities.

Aisles for bleachers shall not be required to be more than 66 inches (167 cm) in width when calculated in accordance with Section 1025.6.1 or 1025.6.3 when the following conditions are satisfied:

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

1 Subp. 2. IFC Section 1025.9.5. IFC Section 1025.9.5 is
2 amended by adding an exception to read:

3 5. Aisles serving bleachers in compliance with Section
4 1025.6.4.

5 Subp. 3. IFC Section 1025.14. IFC Section 1025.14 is
6 amended to read:

7 1025.14 Assembly guards. Assembly guards shall comply with
8 Sections 1025.14.1 through 1025.14.3.

9 **Exception:** In accordance with the Minnesota Bleacher
10 Safety Act, Minnesota Statutes, section 16B.616:

11 1. Guards are not required on bleachers 55 inches and less
12 in height; and

13 2. Bleachers must have vertical perimeter guards or other
14 approved guards that address climbability and are designed
15 to prevent accidents.

16 7511.1026 SECTION 1026, EMERGENCY ESCAPE AND RESCUE.

17 IFC Section 1026.1 is amended to read:

18 1026.1 Escape windows. In Group R and Group I-1 occupancies,
19 escape windows shall be provided, installed and maintained in
20 sleeping rooms in accordance with this section. Sleeping rooms
21 located in basements and levels below the fourth story shall
22 have at least one exterior emergency escape and rescue opening.

23 **Exceptions:**

24 1. An escape window is not required if the room has a door
25 that leads directly to the exterior of the building.

26 2. Escape windows installed prior to April 11, 1983, and
27 having a clear opening not less than 20 inches (508 mm) in
28 width, 24 inches (610 mm) in height and 5 square feet (0.46
29 m²) in area with a finished sill height not more than 48
30 inches (1219 mm) above the floor may be allowed to continue.

31 3. An escape window is not required if the building is
32 protected throughout by an approved, automatic sprinkler
33 system.

1 4. Escape windows need not be installed from rooms of
2 existing buildings having two separate means of escape,
3 provided that the means of escape are independent of each
4 other and they pass through only one adjacent nonlockable
5 room or area.

6 5. Existing escape windows at single-story resort
7 buildings installed prior to October 3, 1975, and having a
8 clear opening not less than 20 inches (508 mm) in width, 20
9 inches (508 mm) in height and 4.5 square feet (0.41 m²) in
10 area with a finished sill height not more than 36 inches
11 (914 mm) above the floor may be allowed to continue.

12 6. Escape windows are not required in Group R hotels or
13 motels constructed prior to April 11, 1983.

14 7511.1027 SECTION 1027, MEANS OF EGRESS FOR EXISTING BUILDINGS.

15 IFC Section 1027 is deleted in its entirety and replaced
16 with the following:

17 SECTION 1027

18 MEANS OF EGRESS FOR EXISTING BUILDINGS

19 1027.1 General. Means of egress in existing buildings shall
20 comply with Sections 1027.1 through 1027.23.4.

21 1027.1.1 Compliance option. Means of egress in existing
22 buildings conforming to NFPA 101 (Life Safety Code) shall be
23 deemed as evidence of compliance with this section.

24 1027.1.2 Previous codes. Means of egress in existing
25 buildings conforming to the requirements of the Fire Code or
26 Building Code under which they were constructed shall be
27 considered as complying means of egress if, in the opinion of
28 the fire code official, they do not constitute a distinct hazard
29 to life.

30 1027.1.3 Occupant loads. The number of occupants shall be
31 determined in accordance with Section 1004.

32 1027.1.4 Egress width. The minimum required egress width

1 shall be determined in accordance with Section 1005.1.

2 **1027.1.5 Ceiling height.** The ceiling height in corridors
3 and stairs shall be not less than 78 inches (1981 mm).

4 **1027.2 Elevators, escalators and moving walks.** Elevators,
5 escalators and moving walks can only be used as a component of a
6 required means of egress where previously approved.

7 **1027.3 Exit signs - general.** Exit signs shall comply with
8 Sections 1027.3.1 through 1027.3.5.

9 **1027.3.1 Where required.** Exits and exit access doors shall
10 be marked by an approved exit sign readily visible from any
11 direction of egress travel.

12 **1027.3.2 Number of exits.** Exit signs shall be provided
13 where two or more exits are required from a room, area or story.

14 **1027.3.3 Main exits.** Exit signs need not be provided for
15 main exterior exit doors that are obviously and clearly
16 identifiable as exits.

17 **1027.3.4 Certain occupancies exempt.** Exit signs are not
18 required in housing areas of Group I-3 occupancies; in sleeping
19 rooms or dwelling units in Group R-1, R-2 or R-3 occupancies;
20 and in Group U occupancies.

21 **1027.3.5 Exit sign illumination.** Exit signs shall be
22 internally illuminated, externally illuminated or
23 self-luminous. The face of an exit sign illuminated from an
24 external source shall have an intensity of not less than 5
25 foot-candles (54 lux). Internally illuminated signs shall
26 provide equivalent luminance and be listed for the purpose.
27 Approved self-luminous signs that provide evenly illuminated.

1 letters shall have a minimum luminance of 0.06 foot-lamberts
2 (0.21 cd/m²).

3 **1027.4 Power source.** Where emergency illumination is required
4 in Section 1027.5, exit signs shall be visible under emergency
5 illumination conditions. Approved signs that provide continuous
6 illumination independent of external power sources are not
7 required to be connected to an emergency electrical system.

8 **1027.5 Illumination - general.** Normal and emergency
9 illumination of the means of egress shall comply with Sections
10 1027.5.1 through 1027.5.3.

11 **1027.5.1 Illumination required.** The means of egress shall
12 be illuminated at all times the building space served by the
13 means of egress is occupied. Natural lighting in the interior
14 rooms or spaces can be used to satisfy this requirement during
15 periods of daylight.

16 **1027.5.1.1 Group U occupancies.** Illumination is not
17 required in Group U occupancies.

18 **1027.5.1.2 Aisle accessways.** Illumination is not
19 required for aisle accessways.

20 **1027.5.1.3 Dwelling units and sleeping rooms.**
21 Illumination is not required for dwelling units and sleeping
22 rooms of Group I, R-1, R-2, and R-3 occupancies.

23 **1027.5.2 Illumination level.** Floors and other walking
24 surfaces within the means of egress shall be illuminated as
25 follows:

26 **1027.5.2.1 General.** The means of egress illumination
27 level shall not be less than one foot-candle (11 lux) at the

1 floor level.

2 **1027.5.2.2 Assembly performances.** In assembly
3 occupancies, the illumination of the floors of exit access shall
4 be at least 0.2 foot-candle (2.2 lux) during periods of
5 performances or projections involving directed light.

6 **1027.5.3 Illumination emergency power.** The power supply
7 for means of egress illumination shall normally be provided by
8 the premises' electrical supply. In the event of power supply
9 failure, illumination shall be automatically provided from an
10 emergency system for the following occupancies where such
11 occupancies require two or more means of egress:

- 12 1. Group A having more than 50 occupants. Assembly
13 occupancies used exclusively as a place of worship and
14 having an occupant load of less than 300 are not
15 required to have emergency illumination.
- 16 2. Group B buildings three or more stories in height,
17 buildings with 100 or more occupants above or below
18 the level of exit discharge, or buildings with 1,000
19 or more total occupants.
- 20 3. Group E in interior stairs, corridors, windowless
21 areas with student occupancy, shops, and laboratories.
- 22 4. Group F having more than 100 occupants. Buildings
23 used only during daylight hours that are provided with
24 windows for natural light are not required to have
25 emergency illumination.
- 26 5. Group I.
- 27 6. Group M buildings greater than 3,000 square feet

1 (2879 m²) in gross sales area or exceeding one story
2 in height.

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

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

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

12 The emergency power system shall provide power for not less
13 than 30 minutes and consist of storage batteries, unit equipment
14 or an onsite generator. The installation of the emergency power
15 system shall be in accordance with Section 604.

16 1027.6 Guards. Guards complying with this section shall be
17 provided at the open sides of means of egress that are more than
18 30 inches (762 mm) above the floor or grade below.

19 1027.6.1 Height of guards. Guards shall form a protective
20 barrier not less than 42 inches (1067 mm) high except for the
21 following existing guards:

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

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

27 3. Existing guards in assembly areas.

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

4 **1027.6.2 Opening limitations.** Open guards shall have
5 balusters or ornamental patterns such that a 6-inch (152 mm)
6 diameter sphere cannot pass through any opening up to a height
7 of 34 inches (864 mm) except when one of the following
8 conditions exist:

9 1. At elevated walking surfaces for access to and use
10 of electrical, mechanical or plumbing systems or
11 equipment, guards shall have balusters or be of solid
12 materials such that a sphere with a diameter of 21
13 inches (533 mm) cannot pass through any opening.

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

18 3. Approved existing open guards.

19 **1027.7 Doors - general.** Except where modified by Section
20 1008.1.2, doors shall be of the side-hinged swing type. Doors
21 shall swing in the direction of egress travel where serving an
22 occupant load of 50 or more persons. The minimum width of each
23 door opening shall be sufficient for the occupant load thereof.
24 Locks and latches shall comply with Sections 1008.1.8 and
25 1008.1.9.

26 **1027.7.1 Size of doors.** Except where modified by this
27 section, each required means of egress door shall comply with

1 the minimum dimensions specified herein. Doors shall provide a
2 clear width of not less than 28 inches (711 mm). Where this
3 section requires a minimum clear width of 28 inches (711 mm) and
4 a door opening includes two door leaves without a mullion, one
5 leaf shall provide a clear opening width of 28 inches (711 mm).
6 The maximum width of a swinging door leaf shall be 48 inches
7 (1219 mm) nominal. The height of doors shall not be less than
8 80 inches (2032 mm).

9 **1027.7.1.1 Closets.** Door openings to storage closets
10 less than 10 square feet (0.93 m^2) in area shall not be limited
11 by the minimum width.

12 **1027.7.1.2 Revolving doors.** Width of door leafs in
13 revolving doors shall not be limited.

14 **1027.7.1.3 Dwelling units.** Door openings within a
15 dwelling unit are permitted to be 78 inches (1981 mm) in height.

16 **1027.7.1.4 Small rooms.** Exit access doors serving a
17 room not larger than 70 square feet (6.5 m^2) are permitted to be
18 24 inches (610 mm) in door width.

19 **1027.7.1.5 Health care facilities.** The minimum clear
20 width for doors in the means of egress from hospitals; nursing
21 homes; limited care facilities; psychiatric hospital sleeping
22 rooms; and diagnostic and treatment areas, such as x-ray,
23 surgery, or physical therapy, shall be not less than 32 inches
24 (810 mm) wide. Existing 34-inch (865 mm) doors shall be
25 permitted. Existing 28-inch (710 mm) corridor doors in
26 facilities where the fire plans do not require evacuation by
27 bed, gurney, or wheelchair shall be permitted.

1 **1027.8 Opening force for doors.** The opening force for interior
2 side swinging doors without closers shall not exceed a 5-pound
3 (22 N) force. For other side swinging, sliding and folding
4 doors, the door latch shall release when subjected to a force of
5 not more than 15 pounds (66 N). The door shall be set in motion
6 when subjected to a force not exceeding a 30-pound (133 N)
7 force. The door shall swing to a full-open position when
8 subjected to a force of not more than 50 pounds (222 N). Forces
9 shall be applied to the latch side.

10 **1027.9 Revolving doors.** Revolving doors shall comply with
11 Sections 1027.9.1 through 1027.9.6.

12 **1027.9.1 Location.** A revolving door shall not be located
13 within 10 feet (3048 mm) of the foot or top of stairs or
14 escalators. A dispersal area shall be provided between the
15 stairs or escalators and the revolving doors.

16 **1027.9.2 Speed.** The revolutions per minute for a revolving
17 door shall not exceed those shown in Table 1027.9.

18 **1027.9.3 Side-hinged door required.** Each revolving door
19 shall have a conforming side-hinged swinging door in the same
20 wall as the revolving door and within 10 feet (3048 mm).

21 **1027.9.4 Elevator lobbies.** A revolving door is permitted
22 to be used without an adjacent swinging door for street floor
23 elevator lobbies provided a stairway, escalator or door from
24 other parts of the building does not discharge through the lobby
25 and the lobby does not have any occupancy or use other than as a
26 means of travel between elevators and a street.

27 **1027.9.5 Side-hinged door option.** The requirement for a

1 side-hinged swinging door shall not apply where the number of
 2 revolving doors does not exceed the number of swinging doors
 3 within 20 feet (6096 mm).

4 **1027.9.6 Egress component.** A revolving door used as a
 5 component of a means of egress shall comply with Section 1027.9
 6 and all of the following conditions:

- 7 1. Revolving doors shall not be given credit for more
 8 than 50 percent of the required egress capacity.
- 9 2. Each revolving door shall be credited with not
 10 more than a 50-person capacity.
- 11 3. Revolving doors shall be capable of being
 12 collapsed when a force of not more than 130 pounds
 13 (578 N) is applied within 3 inches (76 mm) of the
 14 outer edge of a wing.

15 TABLE 1027.9

16 REVOLVING DOOR SPEEDS

17 Inside Diameter	18 Power-Driven-Type Speed Control (RPM)	19 Manual-Type Speed Control (RPM)
20 6'6"	11	12
21 7'0"	10	11
22 7'6"	9	11
23 8'0"	9	10
24 8'6"	8	9
25 9'0"	8	9
26 9'6"	7	8
27 10'0"	7	8

28
 29 For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm.

30 **1027.10 Stair dimensions for existing stairs.** Existing stairs
 31 in buildings shall be permitted to remain if the rise does not
 32 exceed 8.25 inches (210 mm) and the run is not less than nine
 33 inches (229 mm). Existing stairs are permitted to have a

1 minimum width of 36 inches (914 mm) but not less than the width
2 required for the number of occupants served as determined by
3 Section 1005.1. Existing stairs can be rebuilt.

4 **1027.10.1 Stair dimensions for replacement stairs.** The
5 replacement of an existing stairway in a structure shall not be
6 required to comply with the new stairway requirements of Section
7 1009 where the existing space and construction will not allow a
8 reduction in pitch or slope.

9 **1027.11 Winders.** Existing winders shall be allowed to remain in
10 use if they have a minimum tread depth of 6 inches (152 mm) and
11 a minimum tread depth of 9 inches (229 mm) at a point 12 inches
12 (305 mm) from the narrowest edge.

13 **1027.12 Circular stairways.** Existing circular stairs shall be
14 allowed to continue in use provided the minimum depth of tread
15 is 10 inches (254 mm) and the smallest radius shall not be less
16 than twice the width of the stairway.

17 **1027.13 Stairway handrails.** Stairways shall have handrails on
18 at least one side. Handrails shall be located so that all
19 portions of the stairway width required for egress capacity are
20 within 44 inches (1118 mm) of a handrail. Aisle stairs provided
21 with a center handrail are not required to have additional
22 handrails.

23 **1027.13.1 Height.** Handrail height, measured above stair
24 tread nosings, shall be uniform, not less than 30 inches (762
25 mm) and not more than 42 inches (1067 mm).

26 **1027.14 Slope of ramps.** Ramp runs utilized as part of a means
27 of egress shall have a running slope not steeper than one unit

1 vertical in ten units horizontal (ten percent slope). The slope
2 of other ramps shall not be steeper than one unit vertical in
3 eight units horizontal (12.5 percent slope).

4 **1027.15 Width of ramps.** Existing ramps are permitted to have a
5 minimum width of 30 inches (762 mm) but not less than the width
6 required for the number of occupants served as determined by
7 Section 1005.1.

8 **1027.16 Fire escape stairs.** Fire escape stairs shall comply
9 with Sections 1027.16.1 through 1027.16.7.

10 **1027.16.1 Existing means of egress.** Fire escape stairs
11 shall be permitted in existing buildings but shall not
12 constitute more than 50 percent of the required exit capacity.

13 **1027.16.2 Protection of openings.** Openings within 10 feet
14 (3048 mm) of fire escape stairs shall be protected by fire
15 assemblies having a minimum 3/4-hour fire-resistance rating. In
16 buildings equipped throughout with an approved automatic
17 sprinkler system, opening protection is not required.

18 **1027.16.3 Dimensions.** Fire escape stairs shall meet the
19 minimum width, capacity, riser height, and tread depth as
20 specified in Table 1027.16.

21 **1027.16.4 Access.** Access to a fire escape from a corridor
22 shall not be through an intervening room. Access to a fire
23 escape stair shall be from a door or window meeting the criteria
24 of Table 1005.1. Access to a fire escape stair shall be
25 directly to a balcony, landing, or platform. These shall be no
26 higher than the floor or windowsill level and no lower than 8
27 inches (203 mm) below the floor level or 18 inches (457 mm)

1 below the windowsill.

2 **1027.16.5 Materials and strength.** Components of fire escape
3 stairs shall be constructed of noncombustible materials.

4 Fire escape stairs and balconies shall support the dead
5 load plus a live load of not less than 100 pounds per square
6 foot (4.78 kN/m²). Fire escape stairs and balconies shall be
7 provided with a top and intermediate handrail on each side.

8 The fire code official is authorized to require testing or
9 other satisfactory evidence that an existing fire escape stair
10 meets the requirements of this section.

11 **1027.16.6 Termination.** The lowest balcony shall not be
12 more than 18 feet (5486 mm) from the ground. Fire escape stairs
13 shall extend to the ground or be provided with counter-balanced
14 stairs reaching the ground. For fire escape stairs serving ten
15 or fewer occupants, an approved fire escape ladder is allowed to
16 serve as the termination for fire escape stairs.

17 **1027.16.7 Maintenance.** Fire escapes shall be kept clear
18 and unobstructed at all times and shall be maintained in good
19 working order.

20 TABLE 1027.16

21 DIMENSIONS FOR EXISTING FIRE ESCAPE STAIRS

22 Features	23 Serving More Than 24 10 Occupants	25 Serving 10 or 26 Fewer Occupants
27 Minimum Width	22 inches	18 inches
28 Maximum Height of Risers	9 inches	12 inches
29 Minimum Tread Depth	9 inches	6 inches

30 **1027.17 Corridors.** Corridors and the openings therein shall
31 provide an effective barrier to resist the movement of smoke.
Corridors, common path of travel, and travel distance shall

1 comply with Sections 1027.17.1 through 1027.17.6. Corridors
2 complying with Section 1017.1 need not be fire-resistance rated.

3 **1027.17.1 Construction.** Corridors shall be fire-resistance
4 rated in accordance with this section and Table 1027.17.1.
5 Existing walls surfaced with wood lath and plaster in good
6 condition or 1/2-inch gypsum wallboard are ~~permitted~~ acceptable
7 for corridor walls and ceilings. Where Table 1027.17.1 allows a
8 sprinkler system in lieu of fire-resistance-rated construction,
9 the building shall be protected throughout with an automatic
10 sprinkler system in accordance with Section 903.3.1.1 or
11 903.3.1.2 (where allowed).

12 **1027.17.1.1 Existing churches.** In Group A occupancies
13 used as churches, existing corridor walls, ceilings and opening
14 protection not in compliance with Section 1027.17.1 may be
15 continued when such buildings are protected with an approved
16 automatic fire alarm system. The fire alarm system shall
17 include automatic smoke detection throughout the exit system and
18 approved detection in all boiler rooms, furnace rooms,
19 mechanical rooms, and storage rooms.

20 **1027.17.1.2 Existing Group B occupancies.** In office
21 areas of Group B occupancies not exceeding 10,000 square feet
22 (929 m²) in size, existing corridor walls, ceilings and opening
23 protection not in compliance with Section 1027.17.1 may be
24 continued when such buildings are protected with an approved
25 automatic fire alarm system. The fire alarm system shall
26 include automatic smoke detection throughout the exit system and
27 approved detection in all boiler rooms, furnace rooms,

1 mechanical rooms and storage rooms.

2 **1027.17.1.3 Existing Group E occupancies.** In Group E
3 occupancies, existing corridor walls, ceilings and opening
4 protection not in compliance with Section 1027.17.1 may be
5 continued when such buildings are protected with an approved
6 automatic fire alarm system that is monitored by a central,
7 proprietary or remote station service. The fire alarm system
8 shall include automatic smoke detection throughout the exit
9 system and approved detection in all rooms and areas other than
10 classrooms and offices.

11 TABLE 1027.17.1

12 CORRIDOR FIRE-RESISTANCE RATING

		Required Fire-Resistance Rating (hours)	
Occupancy	Occupant Load Served by Corridor	Without Sprinkler System	With Sprinkler System
A, B, E, F, H, M, S, U	Greater than 30	1	0
I	Greater than 10	1 (see Section 1027.17.2.3)	0
R	Greater than 10	1	0

13
14
15
16
17
18
19 **1027.17.2 Corridor openings.** Openings into corridors shall
20
21
22
23
24
25
26
27
28 comply with Sections 1027.17.2.1 through 1027.17.2.3.

29 **1027.17.2.1 Doors.** Doors opening into corridors
30 required by Table 1027.17.1 to be fire-resistance rated shall be
31 protected by 20-minute fire assemblies or solid wood doors not
32 less than 1-3/4 inches (45 mm) thick. Where the existing frame
33 will not accommodate the 1-3/4 inches (45 mm) thick door, a
34 1-3/8 inches (35 mm) thick solid bonded wood core door or

1 equivalent insulated steel door shall be permitted. Doors shall
2 be self-closing or automatic-closing by smoke detection.

3 **1027.17.2.2 Other openings.** Openings with fixed wired
4 glass set in steel frames are permitted for corridor walls and
5 ceilings. Transoms, louvers and openings other than doors from
6 corridors to rooms shall be automatic-closing by smoke detection
7 or shall be covered with a minimum of three-quarter inch (19 mm)
8 gypsum wallboard or equivalent material on the room side.

9 **1027.17.2.3 Existing Group I-2 and I-3 occupancies.**
10 Patient room doors in corridors in Group I-2 occupancies and
11 Group I-3 corridor doors need not be fire-resistance rated or
12 self-closing where smoke barriers are provided in accordance
13 with the Building Code or NFPA 101.

14 **1027.17.3 Corridor width.** The minimum corridor width shall
15 be in accordance with Sections 1027.17.3.1 through 1027.17.3.2.

16 **1027.17.3.1 Minimum width.** The minimum corridor width
17 shall be as determined by the occupant load calculations in
18 Section 1005.1, but not less than 36 inches.

19 **1027.17.3.2 Minimum width in mechanical areas.** The
20 minimum corridor width is allowed to be reduced to 24 inches
21 (610 mm) for spaces providing access to electrical, mechanical
22 or plumbing systems.

23 **1027.17.4 Dead ends.** Where more than one exit or exit
24 access doorway is required, the exit access shall be arranged
25 such that dead ends do not exceed the limits specified in
26 Sections 1027.17.4.1 through 1027.17.4.2 and Table 1027.17.4.

27 **1027.17.4.1 Wide corridors and dead-end provisions.** A

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1	Group H-4	75	75	20	20	150	175
2	Group H-5	75	75	20	50	150	200
3	Group I-1	75	75	20	20	200	250
4	Group I-2						
5	(Health Care)	N/R	N/R	N/R	N/R	150	200 ^c
6	Group I-3	100	100	N/R	N/R	150 ^c	200 ^c
7	Group I-4						
8	(Day Care)	N/R	N/R	20	20	200	250
9	Group M						
10	(Covered Mall)	75	100	50	50	200	400
11	Group M						
12	(Mercantile)	75	100	50	50	200	250
13	Group R-1						
14	(Hotels)	75	75	50	50	200	250
15	Group R-2						
16	(Apartments)	75	75	50	50	200	250
17	Groups R-3,						
18	R-4	N/R	N/R	N/R	N/R	N/R	N/R
19	Group U	75	75	20	20	200	400
20							

21 "Unspr" means unsprinklered and "Spr" means sprinklered.

22 For SI: 1 foot = 304.8 mm.

23 a. 20 feet for common path serving more than 50 persons;
24 75 feet for common path serving 50 or fewer persons.

25 b. See Section 1024.9.5 for dead-end aisles in Group A
26 occupancies.

27 c. This dimension is for the total travel distance,
28 assuming incremental portions have fully utilized their
29 allowable maximums. For travel distance within the room,

1 and from the room exit access door to the exit, see the
2 appropriate occupancy chapter.

3 d. See the International Building Code for special
4 requirements on spacing of doors in aircraft hangers.

5 ~~e.--As-applicable-in-Section-1001.1-~~

6 NR N/R = No requirements.

7 **1027.18 Exit access travel distance.** Exits shall be located so
8 that the maximum length of exit access travel, measured from the
9 most remote point to an approved exterior exit, vertical exit
10 enclosure, horizontal exit, or exit passageway along the natural
11 and unobstructed path of egress travel, does not exceed the
12 distances given in Table 1027.17.4.

13 **1027.19 Common path of egress travel.** The common path of egress
14 travel shall not exceed the distances given in Table 1027.17.4.

15 **1027.20 Stairway discharge identification.** A stairway in an
16 exit enclosure that continues below the level of exit discharge
17 shall be arranged and marked to make the direction of egress to
18 a public way readily identifiable. Stairs that continue
19 one-half story beyond the level of exit discharge need not be
20 provided with barriers where the exit discharge is obvious.

21 **1027.20.1 Exterior stairway protection.** Exterior exit
22 stairs shall be separated from the interior of the building as
23 required in Section 1023.6.

24 **1027.21 Minimum aisle width.** The minimum clear width of aisles
25 and aisle accessways shall be in accordance with this section
26 and Table 1027.21.

27 **1027.21.1 Aisle and aisle accessway width.** Aisles and
28 aisle accessway widths shall be as determined by the occupant

1 load calculations in Section 1005.1, but not less than the
2 widths shown in Table 1027.21.

3 **1027.21.2 Aisle accessway width for table and chair seating.**

4 Aisle accessway width for the table and chair seating (distance
5 between two rows of seats) shall comply with Section 1014.4.1.

6 **TABLE 1027.21**

7 **MINIMUM AISLE AND AISLE ACCESSWAY WIDTHS**

8 Condition	9 Minimum width (in inches)
10 Aisle accessways serving seating areas	
11 having 50 or fewer seats, tables, or desks	24 inches (610 mm)
12	
13 Aisle accessways serving seating areas	
14 having more than 50 seats, tables, or desks	30 inches (760 mm)
15	
16 Aisle accessways serving employee areas	
17 only	24 inches (610 mm)
18	
19 Level or ramped aisles having seating on	
20 each side and serving 50 or fewer seats	36 inches (914 mm)
21	
22 Level or ramped aisles having seating on	
23 each side and serving more than 50 seats	42 inches (1067 mm)
24	
25 Level or ramped aisles having seating on	
26 one side and serving 60 or fewer seats	30 inches (760 mm)
27	
28 Level or ramped aisles having seating on	
29 one side and serving more than 60 seats	36 inches (914 mm)
30	
31 Aisle stairs having seating on each side	
32 and serving 50 or fewer seats	36 inches (914 mm)
33	
34 Aisle stairs having seating on each side	
35 and serving more than 50 seats	42 inches (1067 mm)
36	
37 Aisle stairs having seating on one side	
38 and serving 60 or fewer seats	30 inches (760 mm)
39	
40 Aisle stairs having seating on one side	
41 and serving more than 60 seats	36 inches (914 mm)
42	
43 Aisle stair - distance between seating	
44 and aisle handrail or guard when the	
45 aisle is subdivided	20 inches (508 mm)
46	
47	

1 1027.22 Stairway floor number signs. Existing stairs shall be
2 marked in accordance with Section 1020.1.7.

3 1027.23 Number of means of egress or exits. The number of means
4 of egress doors or exits from a room, area, story or building
5 shall be in accordance with Sections 1027.23.1 through 1027.23.4
6 and Table 1027.23.

7 1027.23.1 Number based on capacity. Two means of egress
8 doors or exits are required from rooms, areas, stories or
9 buildings when the number of occupants exceeds the values shown
10 in Table 1027.23.

11 1027.23.2 Three egress doors on exits required. Three
12 means of egress doors or exits are required from rooms, areas,
13 stories or buildings when the number of occupants exceeds 501
14 persons.

15 1027.23.3 Four egress doors or exits required. Four means
16 of egress doors or exits are required from rooms, areas, stories
17 or buildings when the number of occupants is 1001 or more
18 persons.

19 1027.23.4 Group E laboratories. Group E science
20 laboratories containing hazardous materials shall have two exits
21 when exceeding 1,000 square feet (93 m²) in size.

22 TABLE 1027.23

23 TWO EGRESS DOORS OR EXITS REQUIRED

24	Occupancy	Number of Occupants
25	A,B,E,F,M,S,U	50 Occupants
26	H,I,R	10 Occupants
27		
28		

29 7511.1028 SECTION 1028, MAINTENANCE OF THE MEANS OF EGRESS.

1 Subpart 1. IFC Section 1028.2. IFC Section 1028.2 is
2 amended to read:

3 **1028.2 Reliability.** Required exit accesses, exits or exit
4 discharges shall be continuously maintained free from
5 obstructions or impediments to full instant use in the case of
6 fire or other emergency. Security devices affecting means of
7 egress shall be subject to approval of the fire code official.

8 Subp. 2. IFC Section 1028.3. IFC Section 1028.3 is
9 amended to read:

10 **1028.3 Obstructions.** A means of egress shall be free from
11 obstructions that would prevent its use, including the
12 accumulation of snow and ice. Means of egress shall remain free
13 of any material or matter where its presence would obstruct or
14 render the means of egress hazardous. No combustible storage is
15 allowed in corridors or exit stairs.

16 Subp. 3. IFC Section 1028.6. IFC Section 1028.6 is
17 amended to read:

18 **1028.6 Emergency escape openings.** Required emergency escape
19 openings shall be maintained in accordance with the following:
20 required emergency escape and rescue openings shall be
21 operational from the inside of the room without the use of keys
22 or tools. Bars, grilles, grates or similar devices are allowed
23 to be placed over emergency escape and rescue openings provided
24 the minimum net clear opening size complies with the code that
25 was in effect at the time of construction and such devices shall
26 be releasable or removable from the inside without the use of a
27 key, tool or force greater than that which is required for

1 normal operation of the escape and rescue opening.

2 7511.1408 SECTION 1408, OWNER'S RESPONSIBILITY FOR FIRE
3 PROTECTION.

4 IFC Section 1408 is amended by adding a section to read:
5 **1408.8 Construction barriers.** Where construction, remodeling or
6 demolition is taking place involving the use of cutting and
7 welding, temporary heating with open flames, or
8 flammable-liquid-fueled equipment, such areas shall be separated
9 from occupied areas of a building by materials that will resist
10 the spread of fire and smoke as specified for draft-stopping
11 materials in the Building Code.

12 7511.2206 SECTION 2206, FLAMMABLE AND COMBUSTIBLE LIQUID MOTOR
13 FUEL-DISPENSING FACILITIES.

14 Subpart 1. IFC Section 2206.2.3. IFC Section 2206.2.3 is
15 amended by adding exceptions to Item 1 to read:

16 **Exceptions:**

17 1. When approved by the fire chief, other aboveground
18 tanks that comply with Chapter 34 are allowed to be used
19 for outside, above-grade storage and dispensing of Class I
20 liquids, provided the tanks are located in accordance with
21 Table 2206.2.3.

22 2. Existing nonprotected tanks are designed, fabricated
23 and constructed in accordance with Section 3404.2.7 and not
24 exceeding 6,000 gallons individual capacity and 18,000
25 gallons aggregate capacity are allowed to be located not
26 less than 30 feet from the nearest dispenser and the
27 nearest side of any public way, property line, building or
28 combustible storage located on the same property.

29 Subp. 2. IFC Section 2206.2.3. IFC Section 2206.2.3 is
30 amended by adding an exception to Item 2 to read:

31 **Exception:** Existing nonprotected tanks designed,
32 fabricated and constructed in accordance with Section

1 3404.2.7 and not exceeding 10,000 gallons individual
2 capacity and 30,000 gallons aggregate capacity are allowed
3 to be located not less than 30 feet from the nearest
4 dispenser and the nearest side of any public way, property
5 line, building or combustible storage located on the same
6 property.

7 Subp. 3. IFC Section 2206.2.3. IFC Section 2206.2.3 is
8 amended by adding Items 5 and 6 to read:

9 5. For operations not open to the public and for
10 resort operations serving registered guests only,
11 which dispense Class I liquids from one tank having a
12 capacity of 560 gallons (2120 L) or less, having the
13 dispenser located on or adjacent to the tank is
14 permitted. Such tanks shall be located in accordance
15 with Table 2206.2.3.

16 6. For operations not open to the public and for
17 resort operations serving registered guests only,
18 which dispense Class II liquids from two tanks having
19 a capacity of up to 1,000 gallons (3785 L) each,
20 having the dispenser located on or adjacent to the
21 tank is permitted. Such tanks shall be located in
22 accordance with Table 2206.2.3.

23 Subp. 4. IFC Table 2206.2.3. IFC Table 2206.2.3 is
24 amended by modifying footnote "a" to read:

25 a. When approved by the fire chief, dispensing devices are
26 permitted to be installed on top of or adjacent to
27 protected aboveground tanks or tanks in vaults.

28 7511.2210 SECTION 2210, MARINE MOTOR FUEL-DISPENSING FACILITIES.

29 IFC Section 2210.3.1 is deleted.

30 7511.2306 SECTION 2306, GENERAL FIRE PROTECTION AND LIFE SAFETY

1 FEATURES.

2 IFC Section 2306.1 is amended to read:

3 **2306.1 General.** Fire-protection and life-safety features for
4 high-piled storage areas shall be in accordance with Section
5 2306. Nationally recognized standards or guidelines, as
6 applicable, are allowed to be used when approved by the fire
7 chief.

8 **Exception:** Limited high-piled storage areas in Group
9 M occupancies not exceeding five percent of the total
10 square footage of the building or not exceeding 2,500
11 square feet (232 m²) in size, whichever is less, need
12 not be separated by fire-resistance-rated construction
13 and need not comply with the smoke and heat removal
14 and draft curtain requirements of this article when
15 these buildings are protected throughout by an
16 approved automatic sprinkler system.

17 7511.2701 SECTION 2701, GENERAL.

18 IFC Section 2701.1 is amended by adding a section to read:

19 **2701.1.2 Medical gases.** The storage, handling,
20 transferring and use of medical gases intended for inhalation or
21 sedation at hospitals, nursing homes and similar facilities
22 shall be in accordance with NFPA 99 and the general provisions
23 of Sections 2701, 2703.2.6 through 2703.2.6.2, and 2703.9
24 through 2703.9.4. Compressed gases shall also comply with
25 Chapter 30. Cryogenic fluids shall also comply with Chapter 32.

26 7511.2703 SECTION 2703, GENERAL REQUIREMENTS.

1 Subpart 1. IFC Section 2703.8.3.4. IFC Section 2703.8.3.4
2 is amended to read:

3 2703.8.3.4 Separation. The required fire-resistance
4 rating for fire barrier assemblies shall be in accordance with
5 Table 2703.8.3.2.

6 Subp. 2. IFC Section 2703.8.3. IFC Section 2703.8.3 is
7 amended by adding a section to read:

8 2703.8.3.6 Hazardous materials above the third floor
9 in laboratories in Group B, E or I-2 occupancies. Control areas
10 containing laboratories located above the third floor in Group
11 B, E or I-2 occupancies may be exempted from the provisions of
12 Sections 2703.8.3.1, 2703.8.3.3, and 2703.8.3.4 provided the
13 following conditions are met:

14 1. The buildings containing the laboratories are
15 equipped throughout with automatic sprinkler
16 protection installed in accordance with Section
17 903.3.1.1.

18 2. Control areas containing laboratories located
19 above the third floor are separated from each other
20 and other portions of the building by a fire barrier
21 having a fire-resistance rating of not less than two
22 hours.

23 3. The maximum amount of hazardous materials in
24 storage and use in control areas containing
25 laboratories does not exceed 10 percent of the maximum
26 allowable quantities listed in Tables 2703.1.1(1) and
27 2703.1.1(2) with all increases allowed in the

1 footnotes of those tables.

2 4. The maximum number of control areas containing
3 laboratories shall not exceed 5 per floor.

4 7511.3006 SECTION 3006, MEDICAL GAS SYSTEMS.

5 IFC Section 3006.4 is amended to read:

6 **3006.4 Medical gases.** The storage, handling, transferring and
7 use of medical gases in portable cylinders and containers and
8 medical gas systems including, but not limited to, distribution
9 piping, supply manifolds, connections, pressure regulators, and
10 relief devices and valves, shall comply with NFPA 99 and the
11 general provisions of this chapter.

12 7511.3201 SECTION 3201, GENERAL.

13 IFC Section 3201.1 is amended by adding a section to read:

14 **3201.1.1 Medical gases.** The storage, handling,
15 transferring and use of oxidizing cryogenic fluids used as
16 medical gases shall comply with NFPA 99 and the general
17 provisions of this chapter.

18 7511.3301 SECTION 3301, GENERAL.

19 IFC Section 3301.2 and all subsections are deleted.

20 7511.3308 SECTION 3308, FIREWORKS DISPLAY.

21 Subpart 1. IFC Section 3308.1.1. IFC Section 3308.1 is
22 amended by adding a section to read:

23 **3308.1.1 Displays.** Permits are required to conduct a
24 fireworks display. A fireworks display is only permitted when
25 supervised by a pyrotechnic operator certified by the state fire

1 marshal. Unless specifically exempted by the jurisdiction, the
2 sponsor of the proposed fireworks display must submit a written
3 application for permit at least fifteen (15) days in advance of
4 the date of the display. In addition to the information
5 required in Section 3308.2, the permit application shall include
6 the number, type and size of the fireworks to be discharged.
7 For proximate audience displays, the plans required by Section
8 3308.2 shall also show the fallout radius for each pyrotechnic
9 device used during the display. At the time of permit
10 application, the fire chief shall be consulted regarding
11 requirements for standby fire apparatus and personnel.

12 **Exception:** Jurisdictions are authorized to not require
13 permits for displays involving the use of smoke pots, flash
14 pots and theatrical flash powder for ceremonial, theatrical
15 and musical productions. Such displays must be conducted
16 in accordance with this code.

17 Subp. 2. IFC Section 3308.11. IFC Section 3308.11 is
18 deleted.

19 ~~7510.3401~~ 7511.3401 SECTION 3401, GENERAL.

20 IFC Section 3401.2 is amended by adding an exception to
21 read:

22 10. The use of wall-mounted dispensers containing
23 nonaerosol, alcohol-based hand sanitizers classified as
24 Class I or Class II liquids shall be in accordance with
25 Section 3405.5.

26 7511.3402 SECTION 3402, DEFINITIONS.

27 IFC Section 3402.1 is amended by adding a definition to
28 read:

29 **INTERMEDIATE BULK CONTAINER.** A storage container meeting the
30 requirements of and containing products authorized by the U.S.

1 Department of Transportation Hazardous Materials Regulations,
2 Code of Federal Regulations, title 49, or by Part 6 of the
3 United Nations Recommendations on the Transport of Dangerous
4 Goods for classes 31H1, 31H2 and 31HZ1.

5 7511.3404 SECTION 3404, STORAGE.

6 Subpart 1. IFC Section 3404.1.1. IFC Section 3401.1 is
7 amended by adding a section to read:

8 **3404.1.1 Application of sprinkler protection tables.**

9 Tables 3404.3.6.3 (4) through 3404.3.6.3 (8) shall only apply to
10 liquids stored in metal containers and tanks. For liquids
11 stored in nonmetallic containers, nonmetallic portable tanks or
12 rigid nonmetallic intermediate bulk containers, sprinkler
13 protection shall be designed and installed in accordance with
14 criteria based on full-scale fire testing conducted at an
15 approved testing laboratory or based on other nationally
16 recognized fire safety standards approved by the code official.

17 Subp. 2. IFC Section 3404.2.11.3. IFC Section 3404.2.11.3
18 is amended by adding sections to read:

19 **3404.2.11.3.1 Burial depth.** The maximum burial
20 depth for underground storage tanks shall be specified by the
21 tank manufacturer, marked on the tank, and in accordance with
22 NFPA 30.

23 **3404.2.11.3.2 Minimum depth of cover.**

24 Underground tanks shall be covered with not less than 24 inches
25 (600 mm) of earth, or not less than 12 inches (300 mm) of earth
26 on top of which shall be placed a slab of reinforced concrete
27 not less than 4 inches (100 mm) thick. Where the tanks are

1 subjected to traffic, they shall be protected against damage
2 from vehicles passing over them by at least 36 inches (900 mm)
3 of earth cover, or 18 inches (450 mm) of well-tamped earth plus
4 either 6 inches (150 mm) of reinforced concrete or 8 inches (200
5 mm) of asphaltic concrete. When asphaltic or reinforced
6 concrete paving is used as part of the protection, it shall
7 extend at least 12 inches (300 mm) horizontally beyond the
8 outline of the tank in all directions.

9 Subp. 3. IFC Section 3404.3.1.2. IFC Section 3404.3.1 is
10 amended by adding a section to read:

11 **3404.3.1.2 Rigid nonmetallic intermediate bulk**
12 **containers.** The design, construction and capacity of rigid
13 nonmetallic intermediate bulk containers for the storage of
14 flammable and combustible liquids shall be in accordance with
15 this section and NFPA 30. When inside buildings, rigid
16 nonmetallic intermediate bulk containers containing flammable or
17 combustible liquids shall be subjected to a standard fire test
18 that demonstrates acceptable inside storage fire performance and
19 shall be listed and labeled in accordance with UL 2368, Standard
20 for Fire Exposure Testing of Intermediate Bulk Containers for
21 Flammable and Combustible Liquids, 2001.

22 Subp. 4. IFC Section 3404.3.3.11. IFC Section 3404.3.3 is
23 amended by adding a section to read:

24 **3404.3.3.11 Fire-extinguishing systems.** Automatic
25 sprinkler and foam-water systems provided for the protection of
26 container, intermediate bulk container and portable tank storage
27 shall be of the wet pipe, deluge or preaction type. If

1 preaction systems are used, they shall be designed so that water
2 or foam solution discharges immediately from the sprinkler
3 opened by heat from a fire.

4 7511.3405 SECTION 3405, DISPENSING, USE, MIXING AND HANDLING.

5 IFC Section 3405.5 is amended to read:

6 **3405.5 Alcohol-based hand sanitizers.** Alcohol-based hand-rub
7 dispensers containing liquids classified as Class I or Class II
8 liquids shall comply with the following:

9 1. Where dispensers are installed in a corridor, the
10 corridor shall have a minimum width of at least 6 feet
11 (1830 mm).

12 2. The maximum individual dispenser fluid capacity
13 shall be as follows:

14 2.1. 0.32 gallons (1.2 L) for dispensers in rooms,
15 corridors and areas open to corridors.

16 2.2. 0.53 gallons (2.0 L) for dispensers in suites of
17 rooms.

18 3. The dispensers shall be separated from each other
19 by a horizontal spacing of not less than 48 inches
20 (1220 mm).

21 4. Not more than an aggregate 10 gallons (37.8 L) of
22 alcohol-based hand sanitizer solution shall be in use
23 outside of a storage cabinet in a single smoke
24 compartment.

25 5. Storage quantities greater than 5 gallons (18.9 L)
26 in a single smoke compartment shall meet the
27 requirements of this chapter.

1 6. The dispenser shall not be installed over or
2 within 6 inches to the centerline of the dispenser to
3 an electrical receptacle, switch, appliance, device or
4 other ignition source.

5 7. Dispensers installed directly over carpeted floors
6 shall be permitted only in sprinklered smoke
7 compartments.

8 7511.3406 SECTION 3406, SPECIAL OPERATIONS.

9 Subpart 1. IFC Section 3406.5.1.18. IFC Section
10 3406.5.1.18 is amended by adding an exception to read:

11 4. Facilities where all control valves are locked in the
12 closed position or the power supply to the pumps is locked
13 in the off position in an approved manner to prevent the
14 dispensing of liquids by unauthorized persons.

15 Subp. 2. IFC Section 3406.5.4. IFC Section 3406.5.4 is
16 amended to read:

17 3406.5.4 General. Class I liquids shall be transferred
18 from a tank vehicle or tank car only into an approved
19 atmospheric tank or approved portable tank, except as provided
20 in Sections 3406.5.4.1 through 3406.5.4.4. Class II and III-A
21 liquids shall be transferred from a tank vehicle or tank car
22 only into an approved atmospheric tank, approved container or
23 approved portable tank, except as provided in Sections
24 3406.5.4.1 through 3406.5.4.4.

25 Subp. 3. IFC Section 3406.5.4.1. IFC Section 3406.5.4.1
26 is amended to read:

27 3406.5.4.1 Marine craft and special equipment.
28 Liquids intended for use as motor fuels are allowed to be

1 transferred from tank vehicles into the fuel tanks of marine
2 craft and motor vehicles when approved by the fire chief, and
3 when:

- 4 1. The tank vehicle's specific function is that of
- 5 supplying fuel to motor vehicles;
- 6 2. The operation is not performed where the public
- 7 has access or where there is unusual exposure to life
- 8 or property;
- 9 3. The distance between the tank vehicle and vehicle
- 10 being refueled does not exceed 50 feet in length; and
- 11 4. All equipment is approved for use with the fuel
- 12 being transferred.

13 7511.3800 CHAPTER 38 - LIQUEFIED PETROLEUM GASES.

14 Chapter 38 is deleted in its entirety and replaced with the
15 following:

16 **CHAPTER 38**

17 **LIQUEFIED PETROLEUM GASES**

18 **SECTION 3801**

19 **NFPA STANDARD NO. 58 INCORPORATED**

20 **3801.1 Incorporation by reference.** The storage, handling,
 21 transportation, and use of liquefied petroleum gas and the
 22 installation of all equipment pertinent to systems for such uses
 23 shall be designed, constructed, installed, operated, and
 24 maintained in accordance with the provisions of the National
 25 Fire Protection Association Standard No. 58, Standard for the
 26 Storage and Handling of Liquefied Petroleum Gases (Quincy,
 27 Massachusetts, 2004). Standard No. 58, as amended by Section

1 3802, is incorporated by reference, is not subject to frequent
2 change, and is available at the State Law Library, 25 Rev. Dr.
3 Martin Luther King Jr. Blvd., Saint Paul, Minnesota 55155.

4 **SECTION 3802**

5 **AMENDMENTS TO NFPA STANDARD NO. 58**

6 **3802.1 Amendments.** NFPA 58 shall apply to the storage,
7 handling, transportation and use of liquefied petroleum gas and
8 the installation of all equipment pertinent to systems for such
9 uses, except as amended by this section.

10 1. **Section 6.4.5.6.** Section 6.4.5.6 of NFPA Standard No.
11 58 is amended to read:

12 **6.4.5.6** No horizontal separation shall be
13 required between aboveground LP-Gas containers and underground
14 tanks containing flammable or combustible liquids installed in
15 accordance with Chapter 34 of the International Fire Code.

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

18 **6.4.5.10** The minimum separation between LP-Gas
19 containers and liquefied hydrogen containers shall be in
20 accordance with Chapter 32 of the International Fire Code.

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

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

26 4. **Section 6.6.7.1.** Section 6.6.7.1 of NFPA Standard No.
27 58 is amended to read:

28 **6.6.7.1.** Installation of containers on roofs of

1 buildings shall be prohibited.

2 5. Section 6.6.7.2. Section 6.6.7.2 of NFPA Standard No.
3 58 is deleted.

4 6. Section 6.17.11.1. Section 6.17.11.1 of NFPA Standard
5 No. 58 is deleted.

6 7. Section 6.20.2.1. Section 6.20.2.1 of NFPA Standard
7 No. 58 is amended to read:

8 6.20.2.1 Electrical equipment and wiring shall be
9 of a type specified by and shall be installed in accordance with
10 the Electrical Code for ordinary locations except that fixed
11 electrical equipment in classified areas shall comply with
12 Section 6.20.2.2.

13 8. Section 6.20.2.2. The first sentence of Section
14 6.20.2.2 of NFPA Standard No. 58 is amended to read:

15 6.20.2.2 Fixed electrical equipment and wiring
16 installed within the classified areas specified in Table
17 6.20.2.2 shall comply with Table 6.20.2.2 and shall be installed
18 in accordance with the Electrical Code.

19 9. Section 10.2.3. Section 10.2.3 of NFPA Standard No. 58
20 is amended to read:

21 10.2.3 Structure or building heating. Heating shall
22 be by steam or hot water radiation or other heating transfer
23 medium with the heat source located outside the building or
24 structure (see Section 6.20, Ignition Source Control), or by
25 electrical appliances listed for Class I, Group D, Division 2
26 locations, in accordance with the Electrical Code.

27 7511.4500 CHAPTER 45 - REFERENCED STANDARDS.

1 Chapter 45 of the IFC is amended by changing the effective
2 date of National Fire Protection Association (NFPA) Standards
3 Nos. 1123 and 1126 to 2006. The standard reference number
4 listed for NFPA 1123 is changed to 1123-06, and the standard
5 reference number listed for NFPA 1126 is changed to 1126-06.

6 7511.4600 CHAPTER 46 - ADULT DAY CARE CENTERS, RESIDENTIAL
7 HOSPICE FACILITIES AND SUPERVISED LIVING FACILITIES.

8 The IFC is amended by adding Chapter 46 to read:

9 **CHAPTER 46**

10 **ADULT DAY CARE CENTERS, RESIDENTIAL HOSPICE FACILITIES**
11 **AND SUPERVISED LIVING FACILITIES**

12 **SECTION 4601**

13 **GENERAL**

14 **4601.1 Requirements.** Adult day care centers, residential
15 hospice facilities and supervised living facilities shall meet
16 the requirements of this chapter.

17 **SECTION 4602**

18 **ADULT DAY CARE CENTERS**

19 **4602.1 Classification of adult day care centers.** Adult day care
20 centers are classified in accordance with the following and must
21 meet the fire safety requirements for the designated occupancy
22 classification.

23 **4602.1.1 Serving only participants capable of**
24 **self-preservation.** Centers serving only participants who are
25 capable of taking appropriate action for self-preservation under
26 emergency conditions shall meet all applicable requirements for
27 Group E occupancies.

1 **4602.1.2 Serving only participants not capable of**
2 **self-preservation.** Centers serving only participants who are
3 not capable of taking appropriate action for self-preservation
4 under emergency conditions shall meet all applicable
5 requirements for Group I-4 occupancies.

6 **4602.1.3 Serving both participants capable and participants**
7 **not capable of self-preservation.** Centers serving a population
8 that includes both participants who are capable and participants
9 who are not capable of taking appropriate action for
10 self-preservation under emergency conditions shall meet the
11 occupancy requirements for Group I-4 or Group E occupancies. In
12 addition to the requirements for Group E occupancies, the center
13 shall meet the requirements set forth in Sections 4602.1.3.1
14 through 4602.1.3.4.

15 **4602.1.3.1 Population.** Not more than 50 percent of
16 the center's licensed capacity shall be made up of participants
17 who are not capable of taking appropriate action for
18 self-preservation under emergency conditions.

19 **4602.1.3.2 Location.** The center must be located on a
20 floor level with all exits directly to grade without any
21 intervening stairs.

22 **4602.1.3.3 Fire alarm and detection.** The center shall
23 be protected with a complete automatic fire detection system
24 consisting of automatic smoke detection in all corridors and at
25 the top of all stairways and automatic detection in boiler and
26 furnace rooms, kitchens, storage rooms, janitor closets,
27 laundries, and other hazardous areas. In buildings equipped

1 with manual fire alarm systems, the manual fire alarm and
2 automatic detection systems shall be electrically interconnected.

3 **4602.1.3.4 Evacuation time.** The center shall
4 demonstrate the ability to evacuate the entire population of the
5 center within three minutes.

6 **SECTION 4603**

7 **RESIDENTIAL HOSPICE FACILITIES**

8 **4603.1 Classification of residential hospice facilities.**

9 Residential hospice facilities meeting the fire-protection
10 provisions of Chapter 22 of the National Fire Protection
11 Association Standard No. 101 (Quincy, Massachusetts, 1997) for
12 impractical evacuation capabilities shall be classified as Group
13 R-4 occupancies, if serving six to 12 persons, or as Group R-3
14 occupancies, if serving five or fewer persons. For purposes of
15 this section, Standard No. 101 (1997) Chapter 22 is incorporated
16 by reference, is not subject to frequent change and is available
17 at the State Law Library, 25 Rev. Dr. Martin Luther King Jr.
18 Blvd., St. Paul, Minnesota 55155.

19 **SECTION 4604**

20 **SUPERVISED LIVING FACILITIES**

21 **4604.1 Classification of supervised living facilities.**

22 Supervised living facilities are classified in accordance with
23 Chapter 2 and must meet the fire safety requirements for the
24 designated occupancy classification.

25 **4604.1.1 Class A-1 supervised living facilities.** Class A-1
26 supervised living facilities must meet Group R-3 occupancy
27 requirements.

1 **4604.1.2 Class A-2 supervised living facilities.** Class A-2
2 supervised living facilities housing not more than 16 persons,
3 excluding staff, must meet Group R-4 occupancy requirements.
4 Class A-2 supervised living facilities housing more than 16
5 persons, excluding staff, must meet Group I-1 occupancy
6 requirements.

7 **4604.1.3 Class B-1 supervised living facilities.** Class B-1
8 supervised living facilities meeting the fire-protection
9 provisions of Chapter 21 of the National Fire Protection
10 Association Standard No. 101 (Quincy, Massachusetts, 1985) for
11 impractical evacuation capabilities shall be classified as Group
12 R-3 occupancies. For the purposes of Sections 4604.1.3 and
13 4604.1.4, Standard No. 101 (1985) Chapter 21 is incorporated by
14 reference, is not subject to frequent change and is available at
15 the State Law Library, 25 Rev. Dr. Martin Luther King Jr. Blvd.,
16 Saint Paul, Minnesota 55155.

17 **4604.1.4 Class B-2 supervised living facilities.** Class B-2
18 supervised living facilities meeting the fire-protection
19 provisions of Chapter 21 of the National Fire Protection
20 Association Standard No. 101 (Quincy, Massachusetts, 1985) for
21 impractical evacuation capabilities shall be classified as Group
22 R-4 occupancies.

23 **4604.1.5 Class B-3 supervised living facilities.** Class B-3
24 supervised living facilities must meet Group I-2 occupancy
25 requirements.

26 7511.7900 AMENDMENTS TO APPENDICES OF INTERNATIONAL FIRE CODE.

27 Subpart 1. Adoption. IFC Appendix I, as amended by this

1 part, shall be deemed a part of this code and shall be enforced
2 as such.

3 Subp. 2. IFC Appendix H. The IFC is amended by adding an
4 Appendix H to read:

5 **APPENDIX H**

6 **FIRES OR BARBECUES ON BALCONIES OR PATIOS**

7 **SECTION 1 - OPEN FLAME AND FUEL STORAGE PROHIBITED**

8 **1.1 Open Flame Prohibited.** In any structure containing three or
9 more dwelling units, no person shall kindle, maintain, or cause
10 any fire or open flame on any balcony above ground level, or on
11 any ground floor patio within 15 feet (4572 mm) of the structure.

12 **1.2 Fuel Storage Prohibited.** No person shall store or use any
13 fuel, barbecue, torch, or other similar heating or lighting
14 chemical or device in the locations designated in Section 1.1.

15 **Exception:** Listed electric or gas-fired barbecue grills
16 that are permanently mounted and wired or plumbed to the
17 building's gas supply or electrical system and that
18 maintain a minimum clearance of 18 inches (457 mm) on all
19 sides, unless listed for lesser clearances, may be
20 installed on balconies and patios when approved by the fire
21 chief.

22 Subp. 3. IFC Appendix I. The IFC is amended by adding an
23 Appendix I to read:

24 **APPENDIX I**

25 **SPECIAL LOCKING ARRANGEMENTS FOR GROUP I OCCUPANCIES**

26 **SECTION 1 - GENERAL**

27 When approved by the fire chief and where there is a
28 demonstrated safety or security concern for the patients or
29 residents, existing door-locking arrangements conforming to this
30 appendix are permitted in Group I-2 occupancies.

1 1.1 Arrangement. Each egress path shall have not more than one
2 such locking arrangement.

3 1.2 Public Use of Space. Public assembly space is not permitted
4 within the secured area.

5 **SECTION 2 - SUPERVISION**

6 Patients or residents shall be supervised by staff personnel at
7 all times. Keys or devices that function like keys to unlock
8 the doors shall be carried by staff at all times.

9 **SECTION 3 - FIRE DETECTION**

10 The building must be provided throughout with an approved fire
11 alarm system having automatic smoke detection installed
12 throughout the exit corridor system.

13 **SECTION 4 - RELEASE OF LOCKING DEVICES**

14 All locking devices shall be designed to fail in the open or
15 unlocked position. The locking devices shall immediately
16 release upon any one or more of the following conditions:

- 17 1. Activation of the fire alarm system.
- 18 2. Activation of any automatic fire detector.
- 19 3. Activation of an automatic sprinkler system.
- 20 4. Activation of the fire alarm system's trouble signal.
- 21 5. Loss of electrical power to the device or the fire
22 alarm system.
- 23 6. Activation of an unlocking arrangement from an approved
24 location within the secured area.

25 **SECTION 5 - RELOCKING OF DEVICES**

26 Relocking of the locking devices can only be by manual means
27 from an approved location within the secured area.

1 **SECTION 6 - TESTING OF DEVICES AND SYSTEMS**

2 Special locking arrangements shall be tested at least monthly in
3 conjunction with the fire alarm system to ensure that they will
4 release under the conditions as set forth above.

5 **SECTION 7 - SYSTEMS NOT IN COMPLIANCE**

6 The use of special locking arrangements and related systems that
7 are found to not comply with the requirements of this chapter
8 shall be immediately discontinued until such time that the
9 necessary repairs or modifications can be made.

10 Subp. 4. IFC Appendix J. The IFC is amended by adding an
11 appendix to read as follows:

12 **APPENDIX J**

13 **OPTIONAL HOUSING OR PROPERTY MAINTENANCE CODE**

14 **SECTION 1 - HOUSING OR PROPERTY MAINTENANCE CODE ADOPTED AS AN**
15 **OPTION.**

16 The International Property Maintenance Code 2003, as promulgated
17 by the International Code Council, Inc., (Falls Church,
18 Virginia, December 2002) is hereby incorporated as part of the
19 Minnesota State Fire Code for optional adoption by
20 jurisdictions. The International Property Maintenance Code is
21 not subject to frequent change and is available at the State Law
22 Library, 25 Rev. Dr. Martin Luther King Jr. Blvd., Saint Paul,
23 Minnesota 55155.

24 **REPEALER.** Minnesota Rules, parts 7510.3490; 7510.3500;
25 7510.3510; 7510.3520, subparts 1, 2, 2a, 2b, 2c, 2d, 2e, 3, 3a,
26 and 7; 7510.3530, subparts 1a, 1b, 2, 3, 3a, 4, 5, 6, 7, 8, 9,
27 10, and 11; 7510.3532; 7510.3534; 7510.3535; 7510.3536;

1 7510.3538; 7510.3542; 7510.3560, subparts 1a, 2, 2a, 2b, 2c, 2d,
 2 3, 3a, 4a, 4b, 4c, 5, 7a, 7b, 7c, 7d, 7e, 8, 9, 10, 10a, 10b,
 3 11a, 12, 13a, 13b, 14, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26,
 4 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, and 37; 7510.3580,
 5 subparts 1a, 1b, 1c, 1d, 1e, 3, 3a, 3b, 4, 9, 10, 11, 12, 13,
 6 14, 15, 16, 17, 18, and 19; 7510.3585; 7510.3610, subparts 4, 5,
 7 7, and 8; 7510.3611; 7510.3625; 7510.3640, subparts 1, 4, and 5;
 8 7510.3650, subparts 1a, 1b, 1c, 1d, 1e, 2, and 3; 7510.3670;
 9 7510.3674; 7510.3675; 7510.3710, subparts 1, 11, and 12; and
 10 7510.5540, subpart 4, are repealed.

11 **RENUMBERER.** The revisor of statutes shall renumber each part or
 12 subpart of Minnesota Rules listed in column A with the
 13 corresponding part or subpart number listed in column B.

14	Column A	Column B
15		
16	7510.4500	7511.8000
17	7510.4600	7511.8010
18	7510.4700	7511.8020
19	7510.4800	7511.8030
20	7510.4900	7511.8040
21	7510.5500	7511.8500
22	7510.5510	7511.8510
23	7510.5520	7511.8520
24	7510.5530	7511.8530
25	7510.5540	7511.8540
26	7510.5550	7511.8550
27	7510.5560	7511.8560

1 7510.5570 7511.8570

2 **INSTRUCTIONS TO REVISOR.**

3 The revisor of statutes shall indicate successor parts or
4 subparts, if any, to those parts and subparts repealed by these
5 rules by historical notes placed appropriately in Minnesota
6 Rules, chapter 7510.

7 The revisor of statutes shall change any cross-references
8 in Minnesota Rules to parts or subparts repealed or renumbered
9 to the correct successor part or subpart.

10 **EFFECTIVE DATE.** These amendments are effective May 31, 2007,
11 or five working days after publication of the notice of
12 adoption, whichever is later.