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## Connecticut State Fire Prevention Code

### **Sec. 29-291a-1. The Connecticut State Fire Prevention Code: title and administration**

(a) The Regulations of the Department of Public Safety, sections 29-291a-1 to 29-291a-10, inclusive, of the Regulations of Connecticut State Agencies and their adopted standards, shall be known as the Connecticut State Fire Prevention Code, hereinafter referred to as “the code” or “this code”.

(1) Severability. If a section, subsection, sentence, clause or phrase of this code is, for any reason, held to be unconstitutional, such decision shall not affect the validity of the remaining portions of this code.

(2) Validity. In the event any part or provision of this code is held to be illegal or void, this shall not have the effect of making void or illegal any of the other parts or provisions hereof, which are determined to be legal; and it shall be presumed that this code would have been adopted without such illegal or invalid parts or provisions.

(b) Sections 29-291a-1 to 29-291a-10, inclusive, of the Regulations of Connecticut State Agencies shall be administered as provided in Chapter 541 of the Connecticut General Statutes.

(c) The provisions of sections 29-291a-1a to 29-291a-10a, inclusive, of the Regulations of Connecticut State Agencies shall not apply any federal agency performing construction or operating on federally-owned land or on leased land totally under the control of the federal government.

(d) The provisions of sections 29-291a-1a to 29-291a-10a, inclusive, of the Regulations of Connecticut State Agencies shall not apply to detached one- and two-family dwellings nor to multiple single-family dwellings attached side-by-side (townhouse) not more than three stories in height with each dwelling having a separate means of egress.

(Adopted effective July 1, 2010)

### **Sec. 29-291a-2. Relationship to State Fire Safety and Building Codes**

(a) The requirements of the Connecticut State Fire Prevention Code shall not supersede the requirements of either the Connecticut State Fire Safety Code (CSFSC) or the State Building Code (SBC).

(b) Where any provision of this code conflicts with or duplicates any provision of either the CSFSC or SBC, the CSFSC or the SBC shall prevail.

(c) Where the CSFSC or SBC do not address an issue or have deleted a provision, the provisions of this code shall apply.

(d) No person shall remove or modify any fire protection system installed or maintained under the provisions of the CSFSC or the SBC, unless otherwise permitted by those codes. Buildings and structures, and parts thereof, shall be maintained in a safe condition. Devices or safeguards which are required by the CSFSC or the SBC shall be maintained in conformance with the code edition under which installed.

(Adopted effective July 1, 2010)

### **Sec. 29-291a-3. Scope of this code**

(a) The scope includes, but is not limited to, the following:

(1) Inspections of permanent and temporary buildings, processes, equipment, systems and other fire and related life safety situations.

(2) Review of design and construction plans, drawings, and specifications for life safety systems, fire protection systems, access, water supplies, processes, and hazardous materials and other fire and life safety issues.

(3) Fire and life safety education of fire brigades, employees, responsible parties and the general public.

(4) Existing occupancies and conditions.

(5) Access requirements for fire department operations.

(6) Hazards from outside fires in vegetation, trash, building debris and other materials.

(7) Regulation and control of special events including, but not limited to, assemblage of people, exhibits, trade shows, amusement parks, haunted houses, outdoor events and other similar special temporary and permanent occupancies.

(8) Interior finish, decorations, furnishings, and other combustibles that contribute to fire spread, fire load and smoke production.

(9) Storage, use, processing, handling, and on-site transportation of flammable and combustible gases, liquids and solids.

(10) Storage, use, processing, handling and on-site transportation of hazardous materials.

(11) Conditions affecting fire fighter safety.

(b) **Provisions in excess of code requirements.** Nothing in this code shall be construed to prohibit a better type of building construction, an additional means of egress, or an otherwise safer condition than that specified by the minimum requirements of this code.

(Adopted effective July 1, 2010)

#### **Sec. 29-291a-4. Authority having jurisdiction**

(a) For the purposes of the regulations adopted by reference under section 29-291a of the Connecticut General Statutes, the authority having jurisdiction or AHJ shall mean the State Fire Marshal regarding the proper administration, application, interpretation and modification of the requirements contained within sections 29-291a-1 to 29-291a-10, inclusive, of the Regulations of Connecticut State Agencies.

(b) The local fire marshal shall make the initial determination concerning compliance with sections 29-291a-1 to 29-291a-10, inclusive, of the Regulations of Connecticut State Agencies, except as expressly provided in the wording of a section or in subsection (c) or (d) of this section. Upon request, the initial determination of a local fire marshal may be reviewed by the State Fire Marshal.

(c) The State Fire Marshal shall make the determination concerning compliance with sections 29-291a-1 to 29-291a-10, inclusive, of the Regulations of Connecticut State Agencies on state-owned property.

(d) A decision of the local fire marshal may be reviewed by the State Fire Marshal in accordance with section 29-291d of the Connecticut General Statutes.

(Adopted effective July 1, 2010)

#### **Sec. 29-291a-5. Variations or exemptions**

(a) In accordance with section 29-291b of the Connecticut General Statutes, the State Fire Marshal may modify the requirements of sections 29-291a-1 to 29-291a-10, inclusive, of the Regulations of Connecticut State Agencies and their adopted standards.

(b) Buildings, facilities or properties with equivalencies, alternatives or modifications approved by the State Fire Marshal shall be considered as conforming with this code.

(Adopted effective July 1, 2010)

**Sec. 29-291a-6. Abatement of hazards; penalty**

(a) Hazardous conditions contrary to the provisions of this code shall be ordered remedied in accordance with section 29-291c of the Connecticut General Statutes by the local fire marshal or State Fire Marshal for their respective jurisdictions. An order to vacate all or part of a building may be issued by a local fire marshal or local police officer when severe hazardous conditions exist in accordance with section 29-306 of the Connecticut General Statutes. The penalty for the failure to abate such hazards shall be as described in sections 29-291c and 29-295 of the Connecticut General Statutes as appropriate.

(b) Pursuant to section 29-291c of the Connecticut General Statutes, section 29-291a-10 of the Regulations of Connecticut State Agencies lists those sections of this code for which a citation may be issued.

(Adopted effective July 1, 2010)

**Sec. 29-291a-7. Inspections, plan submittals**

(a) Each local fire marshal, the State Fire Marshal and their respective designees shall conduct inspections as prescribed in section 29-305 of the Connecticut General Statutes of buildings and facilities regulated by sections 29-291a-1 to 29-291a-10, inclusive, of the Regulations of Connecticut State Agencies within their jurisdictions.

(b) The minimum requirements for the frequency of inspections as prescribed in section 29-305 of the Connecticut General Statutes shall be as follows:

(1) Annual inspections for the occupancy classifications: all R Residential, A-1, A-2, E, H-1 and I-1.

(2) Inspections every two years for the occupancy classifications: A-3, H-2, I-2, I-3, I-4, B-Medical and B-College.

(3) Inspections every three years for occupancy classifications: B, H-3, M, S-1, A-4 and A-5.

(4) Inspections every four years for the occupancy classifications: F-1, F-2, H-4, H-5, S-2 and U.

(c) Each local fire marshal, the State Fire Marshal and their respective designees may conduct inspections as often as may be necessary during the construction of new buildings, structures or additions, and during the course of renovations, alterations or modernizations for the purpose of satisfying themselves that all work is in accordance with the approved plans and specifications, and this code.

(d) Detailed plans and specifications for new structures and additions, renovations or alterations to existing structures shall be submitted by the applicant to the local fire marshal having jurisdiction to demonstrate compliance with section 29-263 of the Connecticut General Statutes. The municipality or fire district may, by ordinance, establish a fee for construction document review. This schedule of fees shall be posted for public view.

(Adopted effective July 1, 2010)

**Sec. 29-291a-8. Adopted standard**

The following standard promulgated by the National Fire Protection Association (NFPA) is hereby adopted as part of sections 29-291a-1 to 29-291a-10, inclusive, of the Regulations of Connecticut State Agencies:

Uniform Fire Code™ of the National Fire Protection Association, Standard 1 (NFPA 1), 2003 edition, with relevant appendices, except as amended, altered or deleted and by the addition of certain provisions as indicated in section 29-291a-9 of the Regulations of Connecticut State Agencies.

This standard is available from the National Fire Protection Association, Bat-  
tery-march Park, Quincy, Massachusetts 02269; telephone 1-800-344-3555.  
(Adopted effective July 1, 2010)

**Sec. 29-291a-9. Connecticut amendments**

The adopted National Fire Protection Association standard NFPA 1 is amended  
to meet the needs of the State of Connecticut as follows:

*Note:*

*A section or subsection in the Connecticut Amendments  
preceded by “Amd” indicates the substitution of this provi-  
sion in the adopted referenced standard, National Fire  
Protection Association Standard 1, Uniform Fire Code™,  
2003 edition.*

*A section or subsection in the Connecticut Amendments  
preceded by “Del” indicates the deletion of this provision  
in the adopted referenced standard.*

*A section or subsection in the Connecticut Amendments  
preceded by “Add” indicates the addition of this provision  
in the adopted referenced standard.*

*A section or subsection in the Connecticut Amendments  
followed by an asterisk “\*” indicates that explanatory  
material on the section or subsection can be found in Appen-  
dix A of the adopted referenced standard.*

**Chapter 1**

**Administration**

(Del) **1.1.1** Delete section.

(Del) **1.1.2 Title.** Delete section.

(Add) **1.3.3.3** References to the NFPA 101®, Life Safety Code®, within the body  
of the model document shall be considered references to the CSFSC.

(Amd) **1.3.5 Vehicles and Vessels.** Vehicles, vessels or other similar conveyances  
when in fixed locations and occupied as buildings, as described in the CSFSC, shall  
be treated as buildings and comply with this code.

(Amd) **1.3.8** Repairs, renovations, alterations, reconstruction, change of occupancy  
and additions to buildings shall conform to the CSFSC and the SBC.

(Del) **1.4.2 Alternatives.** Delete section.

(Del) **1.4.3 Modifications.** Delete section.

(Del) **1.4.4** Delete section.

(Del) **1.6 Enforcement.** Delete section.

(Del) **1.7.2 Interpretations.** Delete section.

(Amd) **1.7.3 Enforcement Assistance.** The State Fire Marshal or local fire marshal  
may accept reports of the building official concerning a code compliance review  
or inspection in lieu of conducting the review or inspection himself or herself.

(Del) **1.7.5 Inspections.** Delete section.

(Del) **1.7.6** Delete section.

(Del) **1.7.7 Interference with Enforcement.** Delete section.

(Del) **1.7.8 Impersonation.** Delete section.

(Del) **1.7.9 Investigation.** Delete section.

(Del) **1.7.10 Plans and Specification.** Delete section.

(Del) **1.8 Duties and Powers of the Incident Commander.** Delete section.

(Del) **1.10 Board of Appeals.** Delete section.

(Del) **1.11.3 Emergency Response Records.** Delete section.

(Amd) **1.12.1** The AHJ shall be responsible for issuing permits, certificates, notices, approvals or orders pertaining to fire control and fire hazards pursuant to section 1.12.

(Amd) **1.12.2.1** Applications for permits shall be accompanied by such data as required by the AHJ and fees as prescribed by law.

(Amd) **1.12.19** Permits as prescribed by law shall be in accordance with Table 1.12.19(a).

(Amd) **Table 1.12.19(a) Permit Requirements**

<b>Table 1.12.19(a) Permit Requirements</b>		
<b>Operations and Materials</b>	<b>Permit Required</b>	<b>Cross Reference Section No.</b>
Aircraft Hangars	For servicing or repairing aircraft	21.1.1
Airport Terminal Buildings	For operation	21.2.2.1
Ambulatory Health Care occupancy	To operate a ambulatory health care occupancy	20.6.1.1
Ammonium Nitrate	For storage	65.10.2
Apartment Buildings and Dormitories	To operate an apartment building or dormitory	20.9.1.1
Automobile Wrecking Yards	To operate automobile wrecking yards	22.2
Battery System	To operate stationary lead-acid battery systems having an electrolyte capacity of more than 100 gal (379 L) in sprinklered buildings or 50 gal (189 L) in nonsprinklered buildings	52.2
Business occupancies	To operate a business occupancy	20.13.1.1

Candles, Open Flames, and Portable Cooking	To use in connection with assembly areas, dining areas of restaurants or drinking establishments	17.3.4.6.1 20.1.4.1.4.1
Fairs – No rides	To conduct the events	10.16.1
Cellulose Nitrate Film	For storage, handling or use	20.15.6.1
Cleanrooms	For operation	23.3
Combustible Material Storage	To store more than 2500 ft <sup>3</sup> (70.8 m <sup>3</sup> ) gross volume	19.1.1 20.15.4.2
Commercial Rubbish-Handling Operation	To operate	19.1.1
Consumer Fireworks (1.4G)	For the sale, on-site handling, manufacture and storage of consumer fireworks (1.4G)	65.5.2 65.11.3.1
Cutting and Welding Operation	For operations within a jurisdiction	17.3.4.6.1 41.1.5 41.3.1.2 41.3.3.1
Day-care occupancies	To operate a day-care occupancy	20.3.1.1
Drycleaning Plants	To engage in business of drycleaning or to change to a more hazardous cleaning solvent	24.2
Dust-Producing Operations	To operate a grain elevator, flour mill, starch mill, feed mill, or plant pulverizing aluminum, coal, cocoa, magnesium, spices or sugar, etc.	40.2
Educational occupancy	To operate an educational occupancy	20.2.1.1
Exhibit and Trade Shows	For operation of all exhibits and trade shows held within a jurisdiction	20.1.4.4.1
Fire Hydrants and Water-Control Valves	To use a fire hydrant or operate a water-control valve intended for fire suppression purposes on private property	13.1.1.1
Flame Effects	Use of flame effects before an audience	65.4.2
Health Care facility	To operate a health care occupancy	20.4.1.1

High-Piled Combustible Storage	To use any building or portion thereof as a high-piled storage area exceeding 500 ft <sup>2</sup> (46.45 m <sup>2</sup> )	20.15.7.1.1
Hot Work Operations	For hot work. For additional permit requirements for hot work operations, see 41.1.5	17.3.4.6.1 41.1.5 41.3.3.1
Hotels and Bed and Breakfast Establishment	To operate a hotel, motel or bed and breakfast establishment	20.8.1.1
Industrial occupancies	To operate an industrial occupancy	20.14.1.1
Industrial Ovens and Furnaces	For operation of industrial ovens and furnaces covered by Chapter 51	51.1.2.1
Liquid- or Gas-Fueled Vehicles	To display, compete, or demonstrate liquid- or gas-fueled vehicles or equipment in assembly buildings	20.1.4.4.1
Lumberyards and Woodworking Plants	For storage of lumber exceeding 100,000 board ft	31.2
Membrane Structures, Tents, and Canopies — Permanent	For construction, location, erection, or placement	25.1.2
Membrane Structures, Tents, and Canopies — Temporary	To operate an air-supported temporary membrane structure or tent having an area in excess of 200 ft <sup>2</sup> (18.6 m <sup>2</sup> ) or a canopy in excess of 400 ft <sup>2</sup> (37.2 m <sup>2</sup> ).  <i>Exception: Temporary membrane structures, tents, or canopy structures used exclusively for camping</i>	25.1.2
Mercantile occupancies	To operate a mercantile occupancy	20.12.1.1
Organic Coatings	For operation and maintenance of a facility that manufactures organic coatings	43.1.1.4
Parade Floats	To use a parade float for public performance, presentation, spectacle, entertainment or parade	10.18.1

Places of Assembly, including Special Amusement Buildings	To operate a place of assembly	10.16.1 20.1.1
Pyrotechnics Before a Proximate Audience	For the display and use of pyrotechnic materials before a proximate audience	65.3.3
Refrigeration Equipment	To operate a mechanical refrigeration unit or system	53.4.1
Repair Garages and Service Stations	For operation of service stations and repair garages	30.1.1.3 30.2.1.1
Residential Board and Care occupancies	To operate a residential board and care occupancy	20.5.1.1
Rocketry Manufacturing	For the manufacturing of model rocket motors	65.7.2
Rooftop Heliports	For operation of a rooftop heliport	21.3.2.1
Special Outdoor Events, Carnivals, and Fairs	For the location and operation of special outdoor events, carnivals and fairs	10.16.1
Special Structures and High-Rise Buildings	To operate special structures and high-rise buildings	20.16.1.1.1
Storage occupancies	To operate a storage occupancy	20.15.1.1
Tar Kettles	For placement of a tar kettle, placement shall be obtained prior to the placement of a tar kettle	16.7.1.2 17.3.4.6.1
Tire-Rebuilding Plants	For operation and maintenance of a tire-rebuilding plant	20.15.4.2
Tire Storage	To use an open area or portion thereof to store tires in excess of 1000 ft <sup>3</sup> (28.3 m <sup>3</sup> )	20.15.4.2
Torch-Applied Roofing Operation	For the use of a torch for application of roofing materials	16.6.1
Wildland Fire-Prone Areas	For use of hazardous areas within fire-prone areas.	17.3.2
Wood Products	To store chips, hogged material, lumber or plywood in excess of 200 ft <sup>3</sup> (5.7 m <sup>3</sup> )	31.2

(Del) **1.13 Licenses.** Delete section.

(Del) **1.14.1\*** Delete section.

(Del) **1.14.3** Delete section.

(Del) **1.15\* Technical Assistance.** Delete section.

(Del) **1.16.4** Delete section.

## Chapter 2

### Referenced Publications

(Amd) **2.1 General.** The documents or portions thereof listed in this chapter are referenced within this code and shall be considered part of the requirements of this document to the extent called for by this code.

(Add) **2.1.1** The Connecticut State Fire Prevention Code (CSFPC) recognizes that it is sometimes impractical to continually upgrade existing buildings or installations to comply with all the requirements of the following referenced publications. Existing buildings or installations that do not comply with the provisions of the following referenced publications shall be permitted to be continued in service, provided the lack of conformity with these standards does not present a serious hazard to occupants as determined by the authority having jurisdiction.

(Amd) **2.2 NFPA Publications.** National Fire Protection Association. 1 Batterymarch Park, PO Box 9101, Quincy, MA 02269-9101

<i>Standard reference number</i>	<i>Title</i>
NFPA 10	Standard for Portable Fire Extinguishers, 2002 edition
NFPA 11	Standard for Low-, Medium-, and High-Expansion Foam, 2002 edition
NFPA 11A	Standard for Medium- and High-Expansion Foam Systems, 2002 edition
NFPA 12	Standard on Carbon Dioxide Extinguishing Systems, 2000 edition
NFPA 12A	Standard on Halon 1301 Fire Extinguishing Systems, 2004 edition
NFPA 13	Standard for the Installation of Sprinkler Systems, 2002 edition
NFPA 13D	Standard for the Installation of Sprinkler Systems in One- and Two-Family Dwellings and Manufactured Homes, 2002 edition
NFPA 13R	Standard for the Installation of Sprinkler Systems in Residential Occupancies Up to and Including Four Stories in Height, 2002 edition

NFPA 14	Standard for the Installation of Standpipe and Hose Systems, 2003 edition
NFPA 15	Standard for Water Spray Fixed Systems for Fire Protection, 2001 edition
NFPA 16	Standard for the Installation of Foam-Water Sprinkler and Foam-Water Spray Systems, 2003 edition
NFPA 17	Standard for Dry Chemical Extinguishing Systems, 2002 edition
NFPA 17A	Standard for Wet Chemical Extinguishing Systems, 2002 edition
NFPA 20	Standard for the Installation of Stationary Pumps for Fire Protection, 1999 edition
NFPA 22	Standard for Water Tanks for Private Fire Protection, 2003 edition
NFPA 24	Standard for the Installation of Private Fire Service Mains and Their Appurtenances, 2002 edition
NFPA 25	Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems, 2002 edition
NFPA 30	Flammable and Combustible Liquids Code - See the Regulations of Connecticut State Agencies adopted under the authority of section 29-320 of the Connecticut General Statutes, known as the Connecticut Flammable and Combustible Liquids Code
NFPA 30A	Code for Motor Fuel Dispensing Facilities and Repair Garages - See the Regulations of Connecticut State Agencies adopted under the authority of section 29-320 of the Connecticut General Statutes, known as the Connecticut Flammable and Combustible Liquids Code

NFPA 30B	Code for the Manufacture and Storage of Aerosol Products - See the Regulations of Connecticut State Agencies adopted under the authority of section 29-320 of the Connecticut General Statutes, known as the Connecticut Flammable and Combustible Liquids Code
NFPA 31	Standard for the Installation of Oil-Burning Equipment - See the Regulations of Connecticut State Agencies adopted under the authority of section 29-317 of the Connecticut General Statutes, known as the Connecticut Oil-Burning Equipment Code
NFPA 32	Standard for Drycleaning Plants, 2004 edition
NFPA 33	Standard for Spray Application Using Flammable or Combustible Liquids, 2000 edition
NFPA 34	Standard for Dipping and Coating Processes Using Flammable or Combustible Liquids - See the Regulations of Connecticut State Agencies adopted under the authority of section 29-320 of the Connecticut General Statutes, known as the Connecticut Flammable and Combustible Liquids Code
NFPA 35	Standard for the Manufacture of Organic Coatings - See the Regulations of Connecticut State Agencies adopted under the authority of section 29-320 of the Connecticut General Statutes, known as the Connecticut Flammable and Combustible Liquids Code
NFPA 36	Standard for Solvent Extraction Plants, 2001 editions
NFPA 37	Standard for the Installation and Use of Stationary Combustion Engines and Gas Turbines - See the Regulations of Connecticut State Agencies adopted under the authority of section 29-320 of the Connecticut General Statutes, known as the Connecticut Flammable and Combustible Liquids Code

NFPA 40	Standard for the Storage and Handling of Cellulose Nitrate Motion Picture Film, 2001 edition
NFPA 45	Standard on Fire Protection for Laboratories Using Chemicals - See the Regulations of Connecticut State Agencies adopted under the authority of section 29-337 of the Connecticut General Statutes, known as the Connecticut Hazardous Chemicals Code
NFPA 50	Standard for Bulk Oxygen Systems at Consumer Sites - See the Regulations of Connecticut State Agencies adopted under the authority of section 29-337 of the Connecticut General Statutes, known as the Connecticut Hazardous Chemicals Code
NFPA 50B	Standard for Liquefied Hydrogen Systems at Consumer Sites - See the Regulations of Connecticut State Agencies adopted under the authority of section 29-337 of the Connecticut General Statutes, known as the Connecticut Hazardous Chemicals Code
NFPA 51	Standard for the Design and Installation of Oxygen-Fuel Gas Systems for Welding, Cutting, and Allied Process - See the Regulations of Connecticut State Agencies adopted under the authority of section 29-337 of the Connecticut General Statutes, known as the Connecticut Hazardous Chemicals Code
NFPA 51A	Standard for Acetylene Cylinder Charging Plants, 2001 edition
NFPA 51B	Standard for Fire Prevention During Welding, Cutting, and Other Hot Work - See the Regulations of Connecticut State Agencies adopted under the authority of section 29-337 of the Connecticut General Statutes, known as the Connecticut Hazardous Chemicals Code

NFPA 52	Compressed Natural Gas (CNG) Vehicular Fuel Systems Code - See the Regulations of Connecticut State Agencies adopted under the authority of section 29-329 of the Connecticut General Statutes, known as the Connecticut Gas Equipment and Piping Code
NFPA 54	National Fuel Gas Code - See the Regulations of Connecticut State Agencies adopted under the authority of section 29-329 of the Connecticut General Statutes, known as the Connecticut Gas Equipment and Piping Code
NFPA 55	Standard for the Storage, Use, and Handling of Compressed Gases and Cryogenic Fluids in Portable and Stationary Containers, Cylinders, and Tanks - See the Regulations of Connecticut State Agencies adopted under the authority of section 29-337 of the Connecticut General Statutes, known as the Connecticut Hazardous Chemicals Code
NFPA 57	Liquefied Natural Gas (LNG) Vehicular Fuel Systems Code - See the Regulations of Connecticut State Agencies adopted under the authority of section 29-329 of the Connecticut General Statutes, known as the Connecticut Gas Equipment and Piping Code
NFPA 58	Standard for the Storage and Handling of Liquefied Petroleum Gases - See the Regulations of Connecticut State Agencies adopted under the authority of section 29-331 of the Connecticut General Statutes, known as the Connecticut Liquefied Petroleum Gas and Liquefied Natural Gas Code
NFPA 59	Utility LP-Gas Plant Code, 2001 edition
NFPA 59A	Standard for the Production, Storage, and Handling of Liquefied Natural Gas (LNG), 2001 edition

NFPA 61	Standard for the Prevention of Fires and Dust Explosions in Agricultural and Food Processing Facilities, 2002 edition
NFPA 69	Standard on Explosion Prevention Systems, 2002 edition
NFPA 70	National Electrical Code®, 2005 edition, as amended by the State Building Code
NFPA 72®	National Fire Alarm Code®, 2002 edition
NFPA 80	Standard for Fire Doors and Fire Windows, 1999 edition
NFPA 82	Standard on Incinerators and Waste and Linen Handling Systems and Equipment, 1999 edition
NFPA 85	Boiler and Combustion Systems Hazards Code, 2004 edition
NFPA 86	Standard for Ovens and Furnaces, 1999 edition
NFPA 86C	Standard for Industrial Furnaces Using a Special Processing Atmosphere, 1999 edition
NFPA 86D	Standard for Industrial Furnaces Using Vacuum as an Atmosphere, 1999 edition
NFPA 88A	Standard for Parking Structures, 2002 edition
NFPA 90A	Standard for the Installation of Air Conditioning and Ventilating Systems, 2002 edition
NFPA 90B	Standard for the Installation of Warm Air Heating and Air Conditioning Systems, 2002 edition
NFPA 91	Standard for Exhaust Systems for Air Conveying of Materials, 1999 edition
NFPA 96	Standard on Ventilation Control and Fire Protection of Commercial Cooking Operations, 2001 edition

NFPA 99	Standard for Health Care Facilities - See the Regulations of Connecticut State Agencies adopted under the authority of section 29-337 of the Connecticut General Statutes, known as the Connecticut Hazardous Chemicals Code
NFPA 101®	Life Safety Code® – See the Regulations of Connecticut State Agencies adopted under the authority of section 29-292 of the Connecticut General Statutes, known as the Connecticut State Fire Safety Code
NFPA 102	Standard for Grandstands, Folding and Telescopic Seating, Tents, and Membrane Structures, 1995 edition
NFPA 110	Standard for Emergency and Standby Power Systems, 2002 edition
NFPA 111	Standard on Stored Electrical Energy Emergency and Standby Power Systems, 2001 edition
NFPA 120	Standard for Coal Preparation Plants, 2004 edition
NFPA 140	Standard on Motion Picture and Television Production Studio Soundstages and Approved Production Facilities, 1999 edition
NFPA 160	Standard for Flame Effects Before an Audience, 2001 edition
NFPA 204	Standard for Smoke and Heat Venting, 2002 edition
NFPA 211	Standard for Chimneys, Fireplaces, Vents, and Solid Fuel-Burning Appliances, 2003 edition
NFPA 220	Standard on Types of Building Construction, 1999 edition
NFPA 221	Standard for Fire Walls and Fire Barrier Walls, 2000 edition
NFPA 230	Standard for the Fire Protection of Storage, 2003 edition
NFPA 232	Standard for the Production of Records, 2000 edition
NFPA 241	Standard for Safeguarding Construction, Alteration, and Demolition Operations, 2000 edition

NFPA 251	Standard Methods of Fire Tests of Building Construction and Materials, 1999 edition
NFPA 252	Standard Methods of Fire Tests of Door Assemblies, 2003 edition
NFPA 253	Standard Method of Test for Critical Radiant Flux of Floor Covering Systems Using a Radiant Heat Energy Source, 2000 edition
NFPA 255	Standard Method of Test of Surface Burning Characteristics of Building Materials, 2000 edition
NFPA 256	Standard Methods of Fire Tests of Roof Coverings, 1998 edition
NFPA 257	Standard on Fire Test for Window and Glass Block Assemblies, 2000 edition
NFPA 259	Standard Test Method for Potential Heat of Building Materials, 2003 edition
NFPA 260	Standard Methods of Tests and Classification System for Cigarette Ignition Resistance of Components of Upholstered Furniture, 1998 edition
NFPA 261	Standard Method of Test for Determining Resistance of Mock-Up Upholstered Furniture Material Assemblies to Ignition by Smoldering Cigarettes, 1998 edition
NFPA 265	Standard Methods of Fire Tests for Evaluating Room Fire Growth Contribution of Textile Coverings on Full Height Panels and Walls, 2002 edition
NFPA 267	Standard Method of Test for Fire Characteristics of Mattresses and Bedding Assemblies Exposed to Flaming Ignition Source, 1998 edition
NFPA 268	Standard Test Method for Determining Ignitability of Exterior Wall Assemblies Using a Radiant Heat Energy Source, 2001 edition

NFPA 285	Standard Method of Test for the Evaluation of Flammability Characteristics of Exterior Non-Load-Bearing Wall Assemblies Containing Combustible Components Using the Intermediate-Scale, Multistory Test Apparatus, 1998 edition
NFPA 286	Standard Methods of Fire Tests for Evaluating Contribution of Wall and Ceiling Interior Finish to Room Fire Growth, 2000 edition
NFPA 288	Standard Methods of Fire Tests of Floor Fire Door Assemblies Installed Horizontally in Fire Resistance-Rated Floor Systems, 2001 edition
NFPA 302	Fire Protection Standard for Pleasure and Commercial Motor Craft, 1998 edition
NFPA 303	Fire Protection Standard for Marinas and Boatyards, 2000 edition
NFPA 307	Standard for the Construction and Fire Protection of Marine Terminals, Piers, and Wharves, 2000 edition
NFPA 312	Standard for Fire Protection of Vessels During Construction, Repair, and Lay-Up, 2000 edition
NFPA 318	Standard for the Protection of Semiconductor Fabrication Facilities, 2002 edition
NFPA 385	Standard for Tank Vehicles for Flammable and Combustible Liquids - See the Regulations of Connecticut State Agencies adopted under the authority of section 29-320 of the Connecticut General Statutes, known as the Connecticut Flammable and Combustible Liquids Code
NFPA 395	Standard for the Storage of Flammable Liquids at Farms and Isolated Sites - See the Regulations of Connecticut State Agencies adopted under the authority of section 29-320 of the Connecticut General Statutes, known as the Connecticut Flammable and Combustible Liquids Code

NFPA 407	Standard for Aircraft Fuel Servicing - See the Regulations of Connecticut State Agencies adopted under the authority of section 29-320 of the Connecticut General Statutes, known as the Connecticut Flammable and Combustible Liquids Code
NFPA 409	Standard on Aircraft Hangars, 2004 edition
NFPA 410	Standard on Aircraft Maintenance, 1999 edition
NFPA 415	Standard on Airport Terminal Buildings, Fueling Ramp Drainage, and Loading Walkways - See the Regulations of Connecticut State Agencies adopted under the authority of section 29-320 of the Connecticut General Statutes, known as the Connecticut Flammable and Combustible Liquids Code
NFPA 418	Standard for Heliports, 2001 edition
NFPA 430	Code for the Storage of Liquid and Solid Oxidizers - See the Regulations of Connecticut State Agencies adopted under the authority of section 29-337 of the Connecticut General Statutes, known as the Connecticut Hazardous Chemicals Code
NFPA 432	Code for the Storage of Organic Peroxide Formulations, 2002 edition
NFPA 434	Code for the Storage of Pesticides, 2002 edition
NFPA 484	Standard for Combustible Metals, Metal Powders, and Metal Dusts, 2002 edition
NFPA 490	Code for the Storage of Ammonium Nitrate, 1998 edition
NFPA 495	Explosive Materials Code, 2001 edition
NFPA 498	Standard for Safe Havens and Interchange Lots for Vehicles Transporting Explosives, 2001 edition
NFPA 501	Standard on Manufactured Housing, 2003 edition

NFPA 501A	Standard for Fire Safety Criteria for Manufactured Home Installations, Sites, and Communities, 2003 edition
NFPA 505	Fire Safety Standard for Powered Industrial Trucks Including Type Designations, Areas of Use, Conversions, Maintenance, and Operation, 2002 edition
NFPA 560	Standard for the Storage, Handling, and Use of Ethylene Oxide for Sterilization and Fumigation, 2002 edition
NFPA 654	Standard for the Prevention of Fire and Dust Explosions from the Manufacturing, Processing, and Handling of Combustible Particulate Solids, 2000 edition
NFPA 655	Standard for Prevention of Sulfur Fires and Explosions, 2001 edition
NFPA 664	Standard for the Prevention of Fires and Explosions in Wood Processing and Woodworking Facilities, 2002 edition
NFPA 701	Standard Methods of Fire Tests for Flame Propagation of Textiles and Films, 2004 edition
NFPA 703	Standard for Fire Retardant Impregnated Wood and Fire Retardant Coatings for Building Materials, 2000 edition
NFPA 704	Standard System for the Identification of the Hazards of Materials for Emergency Response, 2001 edition
NFPA 750	Standard on Water Mist Fire Protection Systems, 2003 edition
NFPA 801	Standard for Fire Protection for Facilities Handling Radioactive Materials, 2003 edition
NFPA 909	Code for the Protection of Cultural Resources, 2001 edition
NFPA 1122	Code for Model Rocketry - See the Regulations of Connecticut State Agencies adopted under the authority of section 29-367 of the Connecticut General Statutes, known as the Connecticut Model Rocketry Code

NFPA 1123	Code for Fireworks Display, 2000 edition
NFPA 1124	Standard for the Manufacture, Transportation, Storage, and Retail Sales of Fireworks and Pyrotechnic Articles, 2006 edition
NFPA 1125	Code for the Manufacture of Model Rocket and High Power Rocket Motors, 2001 edition
NFPA 1126	Standard for the Use of Pyrotechnics before a Proximate Audience, 2001 edition
NFPA 1127	Code for High Power Rocketry, 2002 edition
NFPA 1141	Standard for Fire Protection in Planned Building Groups, 1998 edition
NFPA 1142	Standard on Water Supplies for Suburban and Rural Fire Fighting, 2001 edition
NFPA 1144	Standard for Protection of Life and Property from Wildfire, 2002 edition
NFPA 1192	Standard on Recreational Vehicles, 2002 edition
NFPA 1194	Standard on Recreational Vehicle Parks and Campgrounds, 2002 edition
NFPA 1600	Standard on Disaster/Emergency Management and Business Continuity Programs, 2004 edition
NFPA 1963	Standard for Fire Hose Connections, 1998 edition
NFPA 2001	Standard on Clean Agent Fire Extinguishing Systems, 2004 edition
NFPA 5000™	Building Construction and Safety Code™ - See the Regulations of Connecticut State Agencies adopted under the authority of section 29-252 of the Connecticut General Statutes, known as the State Building Code

(Amd) **2.3.3 ASME Publications.** American Society of Mechanical Engineers, Three Park Avenue, New York, NY 10016-5990

ASME A13.1, Scheme for the Identification of Piping Systems, 1996 edition

ASME/ANSI A17.1, Safety Code for Elevators and Escalators - See the Regulations of Connecticut State Agencies adopted under the authority of section 29-192 of the Connecticut General Statutes, known as the Connecticut Safety Code for Elevators and Escalators.

ASME/ANSI A17.3, Safety Code for Existing Elevators and Escalators - See the Regulations of Connecticut State Agencies adopted under the authority of section 29-192 of the Connecticut General Statutes, known as the Connecticut Safety Code for Elevators and Escalators.

ASME B31, Code for Pressure Piping, 1998 edition

ASME B31.3, Process Piping, 2002 edition

ASME Boiler Pressure Vessel Code, Section VIII, "Rules for the Construction of Unfired Pressure Vessels," 1998 edition

ASME Code Case Interpretations and Addenda, 1998 edition

(Add) **2.3.16 Regulations of Connecticut State Agencies.** State of Connecticut - Department of Public Safety, 1111 Country Club Road, Middletown, CT 06457-2389

**State Building Code.** See the Regulations of Connecticut State Agencies adopted under the authority of section 29-252 of the Connecticut General Statutes.

**Connecticut State Fire Safety Code.** See the Regulations of Connecticut State Agencies adopted under the authority of section 29-292 of the Connecticut General Statutes.

**Connecticut Fireworks and Special Effects Code.** See the Regulations of Connecticut State Agencies adopted under the authority of section 29-357 of the Connecticut General Statutes.

**Connecticut Flammable and Combustible Liquids Code.** See the Regulations of Connecticut State Agencies adopted under the authority of section 29-320 of the Connecticut General Statutes.

**Connecticut Oil Burning Equipment Code.** See the Regulations of Connecticut State Agencies adopted under the authority of section 29-317 of the Connecticut General Statutes.

**Connecticut Liquefied Petroleum Gas and Liquefied Natural Gas Code.** See the Regulations of Connecticut State Agencies adopted under the authority of section 29-331 of the Connecticut General Statutes.

**Connecticut Gas Equipment and Piping Code.** See the Regulations of Connecticut State Agencies adopted under the authority of section 29-329 of the Connecticut General Statutes.

**Connecticut Safety Code for Elevators and Escalators.** See the Regulations of Connecticut State Agencies adopted under the authority of section 29-192 of the Connecticut General Statutes.

**Connecticut Tent and Portable Shelter Code.** See the Regulations of Connecticut State Agencies adopted under the authority of section 29-140 of the Connecticut General Statutes.

**Connecticut Explosives Code.** See the Regulations of Connecticut State Agencies adopted under the authority of section 29-349 of the Connecticut General Statutes.

**Connecticut Model Rocketry Code.** See the Regulations of Connecticut State Agencies adopted under the authority of section 29-367 of the Connecticut General Statutes.

### Chapter 3

#### Definitions

(Add) **3.1.1 CSFSC.** Connecticut State Fire Safety Code.

(Add) **3.1.2 SBC.** State Building Code.

(Amd) **3.3.22\* Building.** Any structure used or intended for supporting or sheltering any use or occupancy. For application of this code, each portion of a building which is completely separated from other portions by fire walls which have been designed and constructed in accordance with the State Building Code and have been approved by the building official shall be considered a separate building.

(Amd) **3.3.26 Certificate of Fitness.** A written document issued by the State Fire Marshal to any person for the purpose of granting permission to such person to conduct or engage in any operation or act for which certification is required. Where specified in this code, certificate of fitness shall mean license.

(Amd) **3.3.66 Dwelling Unit.** One or more rooms arranged for the use of one or more individuals living together, providing complete, independent living facilities, including permanent provisions for living, sleeping, eating, cooking and sanitation. A dwelling unit consists of more than six lodgers or boarders where care is not provided.

(Add) **3.3.138.4.1 In-home Group B occupancies.** Customary in-home business occupancies located within a single-family dwelling unit that provide professional services that employ a maximum of one employee within the dwelling in addition to the residents of the dwelling unit shall be classified as a single family dwelling.

(Amd) **3.3.138.9\* Dormitory.** A building or a space in a building in which group sleeping accommodations are provided for more than 16 persons who are not members of the same family in one room, or a series of closely associated rooms, under joint occupancy and single management, with or without meals, and with or without individual cooking facilities.

(Amd) **3.3.138.10\* Educational Occupancy.** An occupancy used for educational purposes through the twelfth grade by six or more persons for four or more hours per day or more than 12 hours per week. Training and skill development not within a school or academic program shall be classified as business occupancies.

(Add) **3.3.138.23.1 Bed and Breakfast or Bed and Breakfast Establishment.** A building:

- (1) That provides sleeping accommodations to the public for a fee for no more than 16 persons with guest rooms limited to the first or second floor of the structure, and
- (2) Where the owner occupies the facility or an adjacent property as his or her primary place of residence, and
- (3) Where cooking or food warming of any type is not allowed in guest rooms, and

(4) That has a maximum of three stories in height and does not contain a mixed occupancy.

(Del) **Chapter 4 General Requirements.** Delete chapter.

(Del) **Chapter 5 Performance-Based Option.** Delete chapter.

## **Chapter 6 - 9**

### **Reserved**

## **Chapter 10**

### **General Fire Safety**

(Amd) **10.1.2\*** Every new and existing building shall comply with this code, the CSFSC and the SBC.

(Del) **10.1.3 Building Code.** Delete section.

(Amd) **10.2.5** All records required to be kept shall be maintained until their useful life has been served, as required by law.

(Amd) **10.3.4.1** In any building or structure, whether or not a physical alteration is needed, a change from one occupancy classification to another shall be permitted only where such a structure, building, or portion thereof conforms with the requirements of the CSFSC.

(Amd) **10.4.1** Whenever or wherever any device, equipment, system, condition, arrangement, level of protection, or any other feature is required for compliance with the provisions of this code, the CSFSC or the SBC, such device, equipment, system, condition, arrangement, level of protection or other feature shall thereafter be continuously maintained in accordance with applicable NFPA requirements or as directed by the AHJ.

(Amd) **10.4.3\*** Existing fire and life safety features obvious to the public, if not required by this code, the CSFSC or the SBC, shall be either maintained or removed.

(Del) **10.5 Building Evacuation.** Delete section.

(Amd) **10.6.1 Where Required.** Emergency egress and relocation drills conforming to the provisions of this code shall be conducted as specified by the provisions of Chapter 20 of this code or the CSFSC. Drills shall be designed in cooperation with the local authorities and shall consider the needs of the physically challenged.

(Amd) **10.6.2\* Drill Frequency.** Emergency egress and relocation drills, where required by this code or the CSFSC, shall be held at frequencies established by Chapter 20 of this code to familiarize occupants with the drill procedure and to establish conduct of the drill as a matter of routine. Drills shall include suitable procedures to ensure that all persons subject to the drill participate.

(Amd) **10.9.1 Where Required.** Emergency plans shall be provided for high-rise, health care, ambulatory health care, residential board and care, assembly, day care centers, specials amusement buildings, detention and correctional occupancies, underground and windowless structures and facilities storing or handling materials covered by Chapter 20.

(Amd) **10.9.2\* Plan Requirements.** Emergency plans shall be developed in accordance with NFPA 1600, *Standard on Disaster/Emergency Management and Business Continuity Programs*, and shall include the procedures for reporting of emergencies; occupant and staff response to emergencies; and the type, coverage and impairment of building fire protection systems.

(Del) **10.11 Open Fires, Incinerators, and Commercial Fireplaces.** Delete section.

(Amd) **10.13.3.1** Stairs serving five or more stories shall be provided with special signage within the enclosure at each floor landing. The signage shall indicate the floor level, the terminus of the top and bottom of the stair enclosure, and the identification of the stair enclosure. The signage also shall state the floor level of, and the direction to, exit discharge. The signage shall be located inside the enclosure approximately 60 in. (1525 mm) above the floor landing in a position that is visible when the door is in the open or closed position. The signage shall comply with the CSFSC. The floor level designation shall also be tactile in accordance with ICC/ANSI A117.1, *American National Standard for Accessible and Usable Buildings and Facilities*.

(Amd) **10.13.3.2** Wherever an enclosed stair requires travel in an upward direction to reach the level of exit discharge, special signs with directional indicators showing the direction to the level of exit discharge shall be provided at each floor level landing from which upward direction of travel is required, unless otherwise provided in sections 10.13.3.2(A) and 10.13.3.2(B). The following also shall apply:

(1) Such signage shall comply with the CSFSC.

(2) Such signage shall be visible when the door is in the open or closed position.

(A) The requirement of section 10.13.3.2 shall not apply where signs required by section 10.13.3.1 are provided.

(B) The requirement of section 10.13.3.2 shall not apply to stairs extending not more than one story below the level of exit discharge where the exit discharge is clearly obvious.

(Amd) **10.13.3.5** The stairway identification letter shall be located at the top of the sign in minimum 1 in. (25 mm) high lettering and shall be in accordance with the CSFSC.

(Amd) **10.13.3.6** Roof access or the lack thereof shall be designated by a sign that reads ROOF ACCESS or NO ROOF ACCESS and located under the stairway identification letter. Lettering shall be a minimum of 1 in. (25 mm) high and shall be in accordance with the CSFSC.

(Amd) **10.13.3.7** The floor level number shall be located in the middle of the sign in minimum 5 in. (125 mm) high numbers and shall be in accordance with the CSFSC.

(Del) Delete sections 10.14.1 through 10.14.3, inclusive, and replace in their entirety as follows:

(Add) **10.14.1 General.** Temporarily unoccupied buildings, structures, premises or portions thereof, including tenant spaces, shall be safeguarded and maintained in accordance with this section.

(Add) **10.14.1.1 Abandoned Premises.** Buildings, structures and premises for which an owner cannot be identified or located by dispatch of a certificate of mailing to

the last known or registered address, which persistently or repeatedly become unprotected or unsecured; which have been occupied by unauthorized persons or for illegal purposes; or which present a danger of structural collapse or fire spread to adjacent properties shall be considered abandoned, declared unsafe and abated or demolished in accordance with this code.

(Add) **10.14.2 Safeguarding Vacant Premises.** Temporarily unoccupied buildings, structures, premises or portions thereof shall be secured and protected in accordance with this section.

(Add) **10.14.2.1 Security.** Exterior openings and interior openings accessible to other tenants or unauthorized persons shall be boarded, locked, blocked or otherwise protected to prevent entry by unauthorized individuals.

(Add) **10.14.2.2 Fire Protection.** Fire alarm, sprinkler and standpipe systems shall be maintained in an operable condition at all times.

**Exceptions:**

1. When the premises have been cleared of all combustible materials and debris and, in the opinion of the code official, the type of construction, fire separation distance and security of the premises do not create a fire hazard.
2. Where buildings will not be heated and fire protection systems will be exposed to freezing temperatures, fire alarm and sprinkler systems are permitted to be placed out of service and standpipes are permitted to be maintained as dry systems (without an automatic water supply) provided the building has no contents or storage, and windows, doors and other openings are secured to prohibit entry by unauthorized persons.

(Add) **10.14.2.3 Fire Separation.** Fire-resistance-rated partitions, fire barriers and fire walls separating vacant tenant spaces from the remainder of the building shall be maintained.

(Add) **10.14.3 Removal of Combustibles.** Persons owning, or in charge or control of, a vacant building or portion thereof, shall remove all accumulations of combustible materials and flammable or combustible waste or rubbish from such space and shall securely lock or otherwise secure doors, windows and other openings to prevent entry by unauthorized persons. The premises shall be maintained clear of waste or hazardous materials.

**Exceptions:**

1. Buildings or portions of buildings undergoing additions, alterations, repairs or change of occupancy under a valid permit in accordance with this code.
2. Seasonally occupied buildings.

(Add) **10.14.4 Removal of hazardous materials.** Persons owning, or in charge or control of, a vacant building or portion thereof, shall remove all accumulations of hazardous materials as defined by this code.

(Amd) **Table 10.15.1**

**Table 10.15.1 Provisions for Christmas Trees by Occupancy**

<b>Occupancy</b>	<b>No Trees Permitted</b>	<b>Cut Tree Permitted With Automatic Sprinkler System</b>	<b>Cut Tree Permitted Without Automatic Sprinkler System</b>	<b>Balled Tree Permitted</b>
Ambulatory health care				X
Apartment buildings		Within Unit	Within Unit	X
Assembly				X
Board and care				X
Business		X		X
Day-care		X		X
Detention and correctional	X			
Dormitories				X
Educational				X
Health care				X
Hotels				X
Industrial		X	X	X
Lodging and rooming		X		X
Mercantile		X		X
Storage		X	X	X

(Amd) **10.16.3 Life Safety Evaluation.** The AHJ shall be permitted to order a life safety evaluation in accordance with the CSFSC.

(Add) **10.20 Contents and Furnishings.**

(Add) **10.20.1** Where required by the applicable provisions of this code, draperies, curtains and other similar loosely hanging furnishings and decorations shall be flame resistant as demonstrated by testing in accordance with NFPA 701, *Standard Methods of Fire Tests for Flame Propagation of Textiles and Films*.

(Add) **10.20.2** Where required by the applicable provisions of this code, upholstered furniture and mattresses shall be resistant to a cigarette ignition (that is, smoldering) in accordance with the following:

- (1) Where required by the applicable provisions of this code, the components of the upholstered furniture, unless located in rooms or spaces protected by an approved automatic sprinkler system, shall meet the requirements for Class I when tested in accordance with NFPA 260, *Standard Methods of Tests and Classification System for Cigarette Ignition Resistance of Components of Upholstered Furniture*.
- (2) Where required by the applicable provisions of this code, mocked-up composites of the upholstered furniture, unless located in rooms or spaces protected by an approved automatic sprinkler system, shall have a char length not exceeding 38 mm (1½ in.) when tested in accordance with NFPA 261, *Standard Method of Test for Determining Resistance of Mock-Up Upholstered Furniture Material Assemblies to Ignition by Smoldering Cigarettes*.
- (3) Where required by the applicable provisions of this code, mattresses, unless located in rooms or spaces protected by an approved automatic sprinkler system, shall have a char length not exceeding 51 mm (2 in.) when tested in accordance with 16 CFR 1632.

(Add) **10.20.3** Where required by the applicable provisions of this code, upholstered furniture, unless the furniture is located in a building protected throughout by an approved automatic sprinkler system, shall have limited rates of heat release when tested in accordance with ASTM E 1537, *Standard Method for Fire Testing of Real Scale Upholstered Furniture Items*, 2001 edition, as follows:

- (1) The peak rate of heat release for the single upholstered furniture item shall not exceed 250 kW.
- (2) The total energy released by the single upholstered furniture item during the first 5 minutes of the test shall not exceed 40 MJ.

(Add) **10.20.4** Where required by the applicable provisions of this code, mattresses, unless the mattress is located in a building protected throughout by an approved automatic sprinkler system, shall have limited rates of heat release when tested in accordance with ASTM E 1590, *Standard Method for Fire Testing of Real Scale Mattresses*, 2001 edition, as follows:

- (1) The peak rate of heat release for the mattress shall not exceed 250 kW.
- (2) The total energy released by the mattress during the first 5 minutes of the test shall not exceed 40 MJ.

## Chapter 11

### Building Services

(Amd) **11.2.2 Ventilating or Heat-Producing Equipment.** Ventilating or heat-producing equipment shall be in accordance with the CSFSC. Approved existing installations shall be permitted to be continued in service.

(Amd) **11.2.3 Commercial Cooking Equipment.** Commercial cooking equipment shall be in accordance with the International Mechanical Code or NFPA 96, *Standard*

for Ventilation Control and Fire Protection of Commercial Cooking Operations, as determined by the CSFSC. Approved existing installations shall be permitted to be continued in service.

(Del) **11.3.1.1** Delete section.

(Del) **11.3.1.2** Delete section.

(Del) **11.3.2 Number of Cars.** Delete section.

(Del) **11.3.3\* Elevator Machine Rooms.** Delete section.

(Del) **11.3.4 Elevator Testing.** Delete section.

(Amd) **11.5.2.1** Kerosene burners and oil stoves shall be equipped with a primary safety control furnished as an integral part of the appliance by the manufacturer to stop the flow of oil in the event of flame failure. Barometric oil feed is not permitted. All unvented fuel-burning room heaters shall be listed by a nationally recognized testing laboratory.

(Amd) **11.5.2.2** Unvented kerosene burners and oil stoves shall not be used in any residence other than a single family detached home.

(Amd) **11.6.1.1** Rubbish chutes and laundry chutes shall be separately enclosed by walls or partitions in accordance with the provisions of the CSFSC.

(Amd) **11.6.1.2** Inlet openings serving chutes shall be protected in accordance with the CSFSC.

(Amd) **11.6.1.4** The room used for accessing the chute opening shall be separated from other spaces in accordance with the CSFSC.

## Chapter 12

### Features of Fire Protection

(Amd) **12.3.1** The design and construction of fire walls and fire barriers that are required to separate buildings or subdivide a building to prevent the spread of fire shall comply with section 12.3 and the CSFSC.

(Amd) **12.7.3.2\*** Fire protection ratings for products required to comply with the CSFSC shall be as determined and reported by a nationally recognized testing agency in accordance with NFPA 252, *Standard Methods of Fire Tests of Door Assemblies*, or NFPA 257, *Standard on Fire Test for Window and Glass Block Assemblies*.

(A) Fire protection-rated glazing shall be evaluated under positive pressure in accordance with NFPA 257.

(B) All products required to comply with Part IV section 8.3.3.2 of the CSFSC shall bear an approved label.

(Amd) **12.7.3.3** Unless otherwise specified, fire doors shall be self-closing or automatic-closing in accordance with the CSFSC.

(Amd) **Table 12.7.4.2 Minimum Fire Protection Ratings for Opening Protectives in Fire Resistance-Rated Assemblies**

Component	Walls and Partitions (hr)	Fire Door Assemblies (hr)	Fire Window Assemblies (hr)
Elevator hoistways	2	1 <sup>1/2</sup>	NP
	1	1	NP
Vertical shafts (including stairways, exits, and refuse chutes)	2	1 <sup>1/2</sup>	NP
	1	1	NP (3/4 in other than exits)
	1/2	1/3	NP (1/3 in other than exits)
Fire barriers	2	1 <sup>1/2</sup>	NP
	1	3/4	3/4
Horizontal exits	2	1 <sup>1/2</sup>	NP
Exit access corridors <sup>1</sup>	1	1/3	3/4
	1/2	1/3	1/3
Smoke barriers <sup>1</sup>	1/2	1/3	3/4
Smoke partitions <sup>1,2</sup>	1/2	1/3	1/3

Note: NP = not permitted.

<sup>1</sup>Fire doors are not required to have a hose stream test per NFPA 252.

<sup>2</sup>For residential board and care, see CSFSC.

(Add) **12.7.4.3.1** Doors having a 20-min fire protection rating or door assemblies consisting of door frames constructed of at least 1 3/4 in. thick hardwood stock and 1 3/4 in. thick solid core doors that are self-closing and positive latching may be used in vertical openings and exit enclosures provided the building has at least either partial automatic sprinkler protection in accordance with Part IV section 9.7 of the CSFSC or a partial fire detection system in accordance with Part IV section 9.6 of the CSFSC. These systems shall include either a sprinkler or fire detector opposite the center of and inside any door that opens into the exit if a partial system, and provisions for occupant notification in accordance with Part IV section 9.6.3 of the CSFSC.

(Amd) **12.7.4.4** Where a 20-minute fire protection-rated door is required in an existing building, an existing 1 3/4 in. (44 mm) solid-bonded wood-core door, an existing steel-clad (tin-clad) wood door, or an existing solid-core steel door with positive latch and closer shall be permitted, unless otherwise specified by the CSFSC.

(Amd) **12.7.5 Penetrations.** The provisions of section 12.7.5 shall govern the materials and methods of construction used to protect through-penetrations and membrane penetrations in fire walls, fire barrier walls, and fire resistance-rated horizontal assemblies. The provisions of section 12.7.5 shall not apply to approved, existing materials and methods of construction used to protect existing through-penetrations and existing membrane penetrations in fire walls, fire barrier walls, and fire resistance-rated horizontal assemblies, unless otherwise required by the CSFSC.

(Amd) **12.7.5.7 Openings for Air-Handling Ductwork.** Openings in fire barriers for air-handling ductwork or air movement shall be protected in accordance with the CSFSC.

(Amd) **12.8.3.1** Doors in smoke partitions shall comply with the CSFSC.

(Amd) **12.8.3.5** Doors shall be self-closing or automatic-closing in accordance with the CSFSC.

(Amd) **12.8.5.1** The provisions of section 12.8.5 shall govern the materials and methods of construction used to protect the joints in between and at the perimeter of smoke partitions or, where smoke partitions meet other smoke partitions, the floor or roof deck above, or the outside walls. The provisions of section 12.8.5 shall not apply to approved existing materials and methods of construction used to protect existing joints in smoke partitions, unless otherwise required by the CSFSC.

(Amd) **12.9.1\* General.** Where required by the CSFSC, smoke barriers shall be provided to subdivide building spaces for the purpose of restricting the movement of smoke.

(Amd) **12.9.4.2\*** Where required by the CSFSC, doors in smoke barriers shall comply with the requirements of the CSFSC.

(Amd) **12.9.4.3** Latching hardware shall not be required on doors in smoke barriers where permitted by the CSFSC.

(Amd) **12.9.4.4\*** Doors in smoke barriers shall be self-closing or automatic-closing in accordance with the CSFSC and shall comply with the provisions of the CSFSC.

(Amd) **12.9.4.5** Fire window assemblies shall comply with the CSFSC.

(Amd) **12.9.5.2 Smoke Damper Exceptions.** Smoke dampers shall not be required under any of the following conditions:

- (1) Where specifically exempted by the provisions of the CSFSC.
- (2) Where ducts or air-transfer openings are part of an engineered smoke control system.
- (3) Where the air in ducts continues to move and the air-handling system installed is arranged to prevent recirculation of exhaust or return air under fire emergency conditions.
- (4) Where the air inlet or outlet openings in ducts are limited to a single smoke compartment.
- (5) Where ducts penetrate floors that serve as smoke barriers.

(Amd) **12.9.6.3** Where a smoke barrier is also constructed as a fire barrier, the penetrations shall be protected in accordance with the requirements of the CSFSC to limit the spread of fire for a time period equal to the fire resistance rating of the assembly and section 12.9.6 to restrict the transfer of smoke, unless the requirements of section 12.9.6.4 are met.

(Amd) **12.9.7.1** The provisions of section 12.9.7 shall govern the materials and methods of construction used to protect the joints in between and at the perimeter of smoke barriers or, where smoke barriers meet other smoke barriers, the floor or roof deck above, or the outside walls. The provisions of section 12.9.7 shall not apply to approved existing materials and methods of construction used to protect existing joints in smoke barriers, unless otherwise required by the CSFSC.

## Chapter 13

### Fire Protection Systems

(Amd) **13.1.1** Where a fire protection system is required by any other provisions of this code or its referenced standards or installed to achieve compliance with this code, the system shall be maintained as provided by this chapter.

(Del) **13.1.11** Delete section.

(Del) **13.2.1 General.** Delete section.

(Del) **13.2.2 Where Required.** Delete section.

(Amd) **13.2.3.1** A standpipe system installed in accordance with the CSFSC shall be properly maintained to provide at least the same level of performance and protection as designed.

(Del) **13.2.3.4 Existing Systems.** Delete section.

(Amd) **13.3.1.4** Sprinkler piping serving not more than six sprinklers for any isolated hazardous area shall be permitted to be connected directly to a domestic water supply system having a capacity sufficient to provide 6.1 L/min/m<sup>2</sup> (0.15 gpm/sq ft) throughout the entire enclosed area. Such system shall be installed in accordance with NFPA 13, *Standard for the Installation of Sprinkler Systems*, with respect to the materials and installation practices. An indicating shutoff valve, supervised in accordance with section 9.7.2 or NFPA 13, *Standard for the Installation of Sprinkler Systems*, shall be permitted to be installed in an accessible, visible, location between the sprinklers and the connection to the domestic water supply.

(Add) **13.3.1.8** Buildings provided with standby electrical power for the purpose of continuing operations or occupancy shall provide standby power for any electric fire pump installed to provide an adequate water supply or minimum operating pressure to a required automatic sprinkler system, except that existing installations may be continued in service subject to the approval of the authority having jurisdiction. Standby power in accordance with NFPA 70®, *National Electrical Code*®, and NFPA 110, *Standard for Emergency and Standby Power Systems, Type 60* shall be provided. The standby power system shall have a capacity and rating sufficient to supply all required equipment. Selective load pickup and load shedding shall be permitted in accordance with NFPA 70®, *National Electrical Code*®.

(Del) **13.3.2.2** Delete section.

(Del) **13.3.2.4 New Assembly Occupancies.** Delete section.

(Del) **13.3.2.5 Existing Assembly Occupancies.** Delete section.

(Del) **13.3.2.6 New Educational Occupancies.** Delete section.

(Del) **13.3.2.7 Existing Educational Occupancies.** Delete section.

(Del) **13.3.2.8 New Health Care Occupancies.** Delete section.

(Del) **13.3.2.9 Existing Health Care Occupancies.** Delete section.

(Del) **13.3.2.10 New Detention and Correction Facilities.** Delete section.

(Del) **13.3.2.11 Existing Detention and Correctional Facilities.** Delete section.

(Del) **13.3.2.12 New Hotels and Dormitories.** Delete section.

(Del) **13.3.2.13 Existing Hotels and Dormitories.** Delete section.

(Del) **13.3.2.14 New Apartment Buildings.** Delete section.

(Del) **13.3.2.15 Existing Apartment Buildings.** Delete section.

(Del) **13.3.2.16 Lodging and Rooming Houses.** Delete section.

- (Del) **13.3.2.17 New Residential Board and Care Facilities.** Delete section.
- (Del) **13.3.2.18 Existing Residential Board and Care Facilities.** Delete section.
- (Del) **13.3.2.19 New Mercantile Occupancies.** Delete section.
- (Del) **13.3.2.20 Existing Mercantile Occupancies.** Delete section.
- (Del) **13.3.2.21 Underground and Windowless Structures.** Delete section.
- (Del) **13.3.2.22 High-Rise Buildings.** Delete section.
- (Del) **13.3.2.23\* New Storage Occupancies.** Delete section.
- (Del) **13.3.2.24 New and Existing Day Care.** Delete section.
- (Add) **13.3.3.2.1 Maintenance of NFPA 13D systems.**
- (Add) **13.3.3.2.1.1** A minimum monthly maintenance program shall include the following:
- (1) Visual inspection of all sprinklers to ensure against obstruction of spray.
  - (2) Inspection of all valves to ensure they are open.
  - (3) Checking of the pressure of air used with dry systems.
  - (4) Checking of water level in storage tanks.
- (Add) **13.3.3.2.1.2** A minimum quarterly maintenance program shall include the following:
- (1) Testing of all water flow alarms.
  - (2) Testing of the alarm system.
- (Add) **13.3.3.2.1.3** Sprinklers which have activated or been damaged shall be replaced with sprinklers having the same performance characteristics as the original equipment.
- (Add) **13.3.3.2.1.4** Any sprinklers that have been painted outside the factory shall be replaced with a new listed sprinkler.
- (Amd) **13.5.3\* Backflow Prevention Devices.** The installation of devices to protect the public water supply from contamination shall comply with the provisions of NFPA 13, *Standard for the Installation of Sprinkler Systems*, or NFPA 24, *Installation of Private Fire Service Mains and Their Appurtenances*, and the SBC.
- (Amd) **13.6.1.2\* Where Required.** Fire extinguishers shall be provided as follows:
- (1) Where required by other parts of this code.
  - (2) As specified in sections 13.6.1.2.1 through 13.6.1.2.6.
  - (3) Where required by the referenced codes and standards listed in Chapter 2 and Part II of the CSFSC.
- (Del) **Table 13.6.1.2 Portable Fire Extinguishers Required.** Delete table.
- (Add) **13.6.1.2.1** Portable fire extinguishers shall be required in all occupancies, except storage Use Groups S-1 and S-2, outside and immediately adjacent to the entrance to all special hazardous areas except general storage areas. If the only entrance to a hazardous area is from the exterior of the building, the fire extinguisher may be located just inside the entrance door.
- (Add) **13.6.1.2.2** Portable fire extinguishers shall be required throughout health care occupancies including Use Groups I-1 and I-2 occupancies.

(Add) **13.6.1.2.3** Portable fire extinguishers shall be required throughout ambulatory health care occupancies including Use Group B medical occupancies.

(Add) **13.6.1.2.4** Portable fire extinguishers shall be required in staff locations within detention and correctional occupancies including Use Group I-3 occupancies. Access to portable fire extinguishers shall be permitted to be locked.

(Add) **13.6.1.2.5** Portable fire extinguishers shall be required in Group R-1 bed and breakfast establishments as required by the CSFSC.

(Add) **13.6.1.2.6** Portable fire extinguishers shall be provided where commercial cooking equipment is utilized.

(Amd) **13.7.1.4.9.2** Smoke alarms shall receive their operating power as follows:

- (1) In buildings for which a building permit for new occupancy was issued on or after October 1, 1985, smoke alarms shall be powered by both alternating current (AC) and batteries (DC).
- (2) In buildings for which a building permit for new occupancy was issued on or after October 1, 1976, until September 30, 1985, smoke alarms shall be powered by the household electrical service.
- (3) In buildings for which a building permit was issued prior to October 1, 1976, smoke alarms may be battery powered.

(Amd) **13.7.1.4.9.3** Where two or more smoke alarms are required within a dwelling unit, suite of rooms, or similar area, they shall be arranged so that operation of any smoke alarm shall cause the alarm in all smoke alarms within the dwelling unit, suite of rooms, or similar area to sound, unless otherwise permitted by the following:

- (1) The requirement of section 13.7.1.4.9.3 shall not apply where permitted by another section of this code.
- (2) The requirement of section 13.7.1.4.9.3 shall not apply to configurations that provide equivalent distribution of the alarm signal.
- (3) The requirement of section 13.7.1.4.9.3 shall not apply to installations existing prior to October 16, 1989.

(Amd) **13.7.1.4.9.5** Where required by the CSFSC, an automatic fire detection system shall be provided in hazardous areas for initiation of the signaling system.

(Amd) **13.7.1.4.10.2** Occupant notification shall be in accordance with sections 13.7.1.4.10.3 through 13.7.1.4.10.11, unless otherwise provided in sections 13.7.1.4.10.2(A) through 13.7.1.4.10.2(D).

- (A)\* Elevator lobby, hoistway, and associated machine room smoke detectors used solely for elevator recall, and heat detectors used solely for elevator power shutdown, shall not be required to activate the building evacuation alarm if the power supply and installation wiring to such detectors are monitored by the building fire alarm system, and if the activation of such detectors results in an audible and visible alarm signal at a constantly attended location.
- (B)\* Smoke detectors used solely for closing dampers or heating, ventilating, and air-conditioning system shutdown shall not be required to activate the building evacuation alarm.
- (C)\* Detectors located at doors for the exclusive operation of automatic door release shall not be required to activate the building evacuation alarm.

(D) Detectors in accordance with the CSFSC shall not be required to activate the building evacuation alarm.

(Amd) **13.7.1.4.10.3** Where permitted by the CSFSC, a presignal system shall be permitted where the initial fire alarm signal is automatically transmitted without delay to a municipal fire department, a fire brigade (if provided), and an on-site staff person trained to respond to a fire emergency.

(Amd) **13.7.1.4.10.4** Where permitted by the CSFSC, a positive alarm sequence shall be permitted, provided that it is in accordance with NFPA 72, *National Fire Alarm Code*.

(Amd) **13.7.1.4.10.5** Unless otherwise provided in sections 13.7.1.4.10.5(A) through 13.7.1.4.10.5(G), notification signals for occupants to evacuate shall be audible and visible signals in accordance with NFPA 72, *National Fire Alarm Code*, and ICC/ANSI A117.1, *American National Standard for Accessible and Usable Buildings and Facilities*, or other means of notification acceptable to the AHJ shall be provided.

- (A) Areas not subject to occupancy by persons who are hearing impaired shall not be required to comply with the provisions for visible signals.
- (B) Visible-only signals shall be provided where specifically permitted in health care occupancies in accordance with the provisions of the CSFSC.
- (C) Existing alarm systems shall not be required to comply with the provision for visible signals.
- (D) Visible signals shall not be required in lodging or rooming houses in accordance with the provisions of the CSFSC.
- (E) Visible signals shall not be required in exit stair enclosures.
- (F) Visible signals shall not be required in elevator cars.
- (G) When selective occupant notification is utilized in accordance with the CSFSC, the portions of the building that do not receive the initial notification of alarm shall be separated from areas of the immediate emergency and initial evacuation by construction having a fire resistance rating of at least 1 hour.

(Amd) **13.7.1.4.10.6** The general evacuation alarm signal shall operate in accordance with one of the methods prescribed by the CSFSC.

- (A) The general evacuation alarm signal shall operate throughout the entire building.
- (B)\* Where total evacuation of occupants is impractical due to building configuration, only the occupants in the affected zones shall be notified initially. Provisions shall be made to selectively notify occupants in other zones to afford orderly evacuation of the entire building.
- (C) Where occupants are incapable of evacuating themselves because of age, physical or mental disabilities, or physical restraint, the private operating mode as described in NFPA 72®, *National Fire Alarm Code*®, shall be permitted to be used. Only the attendants and other personnel required to evacuate occupants from a zone, area, floor, or building shall be required to be notified. The notification shall include means to readily identify the zone, area, floor, or building in need of evacuation.
- (D) In mall buildings, notification within the mall shall be permitted in accordance with the CSFSC.
- (E) The general evacuation signal shall not be required to operate in exit stair enclosures.

(F) The general evacuation signal shall not be required to operate in elevator cars.

(Amd) **13.7.1.4.10.10** Unless otherwise permitted by another section of this code, audible and visible fire alarm notification appliances shall comply with the CSFSC.

(A) Audible and visible fire alarm notification appliances shall be used only for fire alarm system or other emergency purposes.

(B) Voice communication systems shall be permitted to be used for other purposes, subject to the approval of the AHJ, if the fire alarm system takes precedence over all other signals.

(Amd) **13.7.1.4.12.3** The functions specified in section 13.7.1.4.12.2 shall be permitted to be actuated by any fire alarm and control system where otherwise not required by this code. Additionally, such a fire alarm and control system shall be permitted to recall elevators, as required by the CSFSC, if the activation of the system for this purpose comes only from elevator lobby, hoistway, or associated machine room detectors.

(Amd) **13.7.1.4.14.8** If a floor area exceeds 22,500 ft<sup>2</sup> (2090 m<sup>2</sup>), additional fire alarm zoning shall be provided, and the length of any single fire alarm zone shall not exceed 300 ft (91 m) in any direction, except as provided in section 13.7.1.4.14.8(A) through 13.7.1.4.14.8(C) or otherwise modified by another section of this code.

(A) Where permitted by another section of this code, fire alarm zones shall be permitted to exceed 22,500 ft<sup>2</sup> (2090 m<sup>2</sup>), and the length of a zone shall be permitted to exceed 300 ft (91 m) in any direction.

(B) Where the building is protected by an automatic sprinkler system in accordance with the CSFSC, the area of the fire alarm zone shall be permitted to coincide with the allowable area of the sprinkler system.

(C) Where the building is protected by an automatic sprinkler system in accordance with the CSFSC, the sprinkler system shall be permitted to be annunciated on the fire alarm system as a single zone.

(Amd) **13.7.2.2 Existing Assembly Occupancies.** Assembly occupancies with occupant loads of more than 300 and all theaters with more than one audience-viewing room shall be provided with an approved fire alarm system in accordance with section 13.7.1.4 of this code and the CSFSC, unless otherwise permitted by the following:

(1) Assembly occupancies that are a part of a multiple occupancy protected as a mixed occupancy shall be permitted to be served by a common fire alarm system, provided that the individual requirements of each occupancy are met.

(2) Voice communication or public address systems complying with Part IV section 13.3.4.3.3 of the CSFSC shall not be required to comply with section 13.7.1.4 of this code.

(3) This requirement shall not apply to assembly occupancies where, in the judgment of the AHJ, adequate alternative provisions exist or are provided for the discovery of a fire and for alerting the occupants promptly.

(Amd) **13.7.2.5.2 Detection in Spaces Open to Corridors.** Detectors shall be installed in spaces open to the corridor in accordance with the CSFSC.

(Amd) **13.7.2.5.3\* Nursing Homes.** An approved automatic smoke detection system shall be installed in corridors throughout smoke compartments containing patient sleeping rooms and in spaces open to corridors as permitted in nursing homes by the CSFSC, unless otherwise permitted by the following:

- (1) Corridor systems shall not be required where each patient sleeping room is protected by an approved smoke detection system.
- (2) Corridor systems shall not be required where patient room doors are equipped with automatic door-closing devices with integral smoke detectors on the room side installed in accordance with their listing, provided that the integral detectors provide occupant notification.

(Amd) **13.7.2.6.2 Corridors.** An approved automatic smoke detection system in accordance with 13.7.1 shall be installed in all corridors of limited care facilities, unless otherwise permitted by the following:

- (1) Where each patient sleeping room is protected by an approved smoke detection system, and a smoke detector is provided at smoke barriers and horizontal exits in accordance with section 13.7.1.4 of this code, the corridor smoke detection system shall not be required on the patient sleeping room floors.
- (2) Smoke compartments protected throughout by an approved, supervised automatic sprinkler system in accordance with the CSFSC shall be permitted.

(Amd) **13.7.2.6.3 Detection in Spaces Open to Corridors.** Detectors shall be installed in spaces open to the corridor in accordance with the CSFSC.

(Amd) **13.7.2.7.1** Detention and correctional occupancies shall be provided with a fire alarm system in accordance with section 13.7.1.4, except as modified by the CSFSC.

(Amd) **13.7.2.7.2.2** Other arrangements and positioning of smoke detectors shall be permitted to prevent damage or tampering, or for other purposes. Such arrangements shall be capable of detecting any fire, and the placement of detectors shall be such that the speed of detection is equivalent to that provided by the spacing and arrangements required by the installation standards referenced in section 13.7.1.4. Detectors shall be permitted to be located in exhaust ducts from cells, behind grilles, or in other locations. The equivalent performance of the design, however, shall be acceptable to the AHJ in accordance with the equivalency concepts specified in the CSFSC.

(Amd) **13.7.2.8.1** Detention and correctional occupancies shall be provided with a fire alarm system in accordance with section 13.7.1.4, except as modified by the CSFSC.

(Amd) **13.7.2.8.2.2** Other arrangements and positioning of smoke detectors shall be permitted to prevent damage or tampering, or for other purposes. Such arrangements shall be capable of detecting any fire, and the placement of detectors shall be such that the speed of detection is equivalent to that provided by the spacing and arrangements required by the installation standards referenced in section 13.7.1.4. Detectors shall be permitted to be located in exhaust ducts from cells, behind grilles, or in other locations. The equivalent performance of the design, however, shall be determined by the AHJ in accordance with the equivalency concepts specified in the CSFSC.

(Amd) **13.7.2.8.2.4** In smoke compartments protected throughout by an approved automatic sprinkler system in accordance with the CSFSC, smoke detectors shall not be required, except in corridors, common spaces, and sleeping rooms with more than four occupants.

(Amd) **13.7.2.9.1** A fire alarm system in accordance with section 13.7.1.4, except as modified by the CSFSC, shall be provided.

(Amd) **13.7.2.9.2 Detection.** A corridor smoke detection system in accordance with section 13.7.1.4 shall be provided in buildings other than those protected throughout by an approved, supervised automatic sprinkler system in accordance with the CSFSC.

(Amd) **13.7.2.10.1** A fire alarm system in accordance with 13.7.1.4, except as modified by the CSFSC, shall be provided in buildings other than those where each guest room has exterior exit access in accordance with the CSFSC, and the building does not exceed three stories in height.

(Amd) **13.7.2.11.1** Apartment buildings with more than three stories or with more than 11 dwelling units, other than those meeting section 13.7.2.11.2 or 13.7.2.11.3, shall be provided with a fire alarm system in accordance with section 13.7.1.4, except as modified by the CSFSC.

(Amd) **13.7.2.11.2** A fire alarm system shall not be required in buildings where each dwelling unit is separated from other contiguous dwelling units by fire barriers having a fire resistance rating of not less than 1 hour, and where each dwelling unit has either its own independent exit or its own independent stairway or ramp discharging at grade.

(Amd) **13.7.2.11.3** A fire alarm system shall not be required in buildings that are protected throughout by an approved, automatic sprinkler system in accordance with the CSFSC, that do not exceed four stories in height, and that contain not more than 16 dwelling units.

(Amd) **13.7.2.11.5** In buildings other than those protected throughout by an approved, supervised automatic sprinkler system installed in accordance with the CSFSC, approved single-station smoke alarms shall be installed in every sleeping room in accordance with 13.7.1.4.10.

(Amd) **13.7.2.12.1** Apartment buildings with more than three stories or with more than 11 dwelling units, other than those meeting the CSFSC, shall be provided with a fire alarm system in accordance with section 13.7.1.4, except as modified by the CSFSC.

(Amd) **13.7.2.12.1.1** A fire alarm system shall not be required where each dwelling unit is separated from other contiguous dwelling units by fire barriers having a fire resistance rating of not less than  $\frac{1}{2}$  hour, and where each dwelling unit has either its own independent exit or its own independent stairway or ramp discharging at grade.

(Amd) **13.7.2.13.1** A fire alarm system in accordance with section 13.7.1.4 shall not be required in existing lodging and rooming houses that have an existing smoke detection system meeting or exceeding the requirements of the CSFSC where that detection system includes not less than one manual fire alarm box per floor arranged to initiate the smoke detection alarm.

(Amd) **13.7.2.13.2.3** Each lodging and rooming house shall install a smoke alarm which, when activated, shall provide an approved visible alarm suitable to warn occupants in at least one room.

(Amd) **13.7.2.14.4** Residential buildings designed to be occupied by one family for which a building permit for new occupancy was issued prior to October 1, 1978 are not required to comply with this section 13.7.2.14.

(Amd) **13.7.2.15.1.3** Additional smoke alarms shall be installed in all living areas as defined in the CSFSC.

(Amd) **13.7.2.16.1.4\* Smoke Alarms.** Approved smoke alarms shall be provided in accordance with the CSFSC.

- (A) Smoke alarms shall be powered from the building electrical system and, when activated, shall initiate an alarm that is audible in all sleeping areas.
- (B) Smoke alarms shall be installed on all levels, including basements but excluding crawl spaces and unfinished attics.
- (C) Additional smoke alarms shall be installed for living rooms, dens, day rooms, and similar spaces.

(Del) **13.7.2.16.1.5** Delete section.

(Del) **13.7.2.16.1.6** Delete section.

(Amd) **13.7.2.16.2.1** A fire alarm system in accordance with section 13.7.1.4 shall be provided unless each sleeping room has exterior exit access in accordance with the CSFSC and the building is not more than three stories in height.

(Amd) **13.7.2.16.2.2 Smoke Alarms.** Smoke alarms shall be provided in accordance with the CSFSC. Each sleeping room shall be provided with an approved smoke alarm in accordance with section 13.7.1.4.10 that is powered from the building electrical system.

(Amd) **13.7.2.16.2.3 Smoke Detection Systems.** All living areas as defined in the CSFSC and all corridors shall be provided with smoke detectors that comply with NFPA 72®, *National Fire Alarm Code*, and are arranged to initiate an alarm that is audible in all sleeping areas, as modified by sections 13.7.2.16.2.3(A) and (B).

- (A) Detectors shall not be required in living areas in facilities protected throughout by an approved automatic sprinkler system installed in accordance with the CSFSC.
- (B) Detectors shall not be required in unenclosed corridors, passageways, balconies, colonnades, or other arrangements with one or more sides along the long dimension fully or extensively open to the exterior at all times.

(Amd) **13.7.2.23.3.3** One of the following shall be provided in all rooms used for sleeping:

- (1) Single-station or multiple-station smoke alarms in accordance with section 13.7.1.4.9 that are powered by the building electrical system
- (2) System detectors with integral sounding devices in accordance with the CSFSC.

(Amd) **13.7.2.24.3.3** One of the following shall be provided in all rooms used for sleeping:

- (1) Single-station or multiple-station smoke alarms in accordance with section 13.7.1.4.9 that are powered by the building electrical system
- (2) System detectors with integral sounding devices in accordance with the CSFSC.

(Amd) **13.7.2.26 Existing Ambulatory Health Care Occupancies.** Ambulatory health care facilities shall be provided with fire alarm systems in accordance with section 13.7.1.4, except as modified by the CSFSC.

(Amd) **13.7.4.4.1** The maintenance and testing schedules and procedures for fire alarm and fire detection systems shall be in accordance with Chapter 10 of NFPA 72®, *National Fire Alarm Code*®.

(Amd) **13.7.4.7\*** Sensitivity of smoke detectors in other than one- and two-family dwellings shall be tested in accordance with sections 13.7.4.7.1 through 13.7.4.7.6.

(Amd) **13.8 Other Fire Protection Systems.** Where other fire protection systems are required to be installed by the provisions of this code, or are installed with the approval of the AHJ as an alternative or equivalency, the design and installation of the system shall comply with the appropriate standards listed in Table 13.8. The system shall be tested and maintained in accordance with the CSFSC.

## Chapter 14

### Means of Egress

(Amd) **14.2 Exit Access Corridors.** Corridors used as exit access and serving an area having an occupant load exceeding 30 shall be separated from other parts of the building by walls having not less than a 1-hour fire resistance rating in accordance with the CSFSC, unless otherwise permitted by the following:

- (1) This requirement shall not apply to existing buildings, provided that the occupancy classification does not change.
- (2) This requirement shall not apply where otherwise provided in the CSFSC and SBC.

(Amd) **14.3.1** Where the CSFSC requires an exit to be separated from other parts of the building, the separating construction shall meet the requirements of the CSFSC and the following:

- (1)\* The separation shall have not less than a 1-hour fire resistance rating where the exit connects three stories or less.
- (2)\* The separation shall have not less than a 2-hour fire resistance rating where the exit connects four or more stories, unless one of the following conditions exists:
  - (a) In existing non-high-rise buildings, existing exit stair enclosures shall have not less than a 1-hour fire resistance rating.
  - (b) In existing buildings protected throughout by an approved, supervised automatic sprinkler system in accordance with the CSFSC, existing exit stair enclosures shall have not less than a 1-hour fire resistance rating.
  - (c) One-hour enclosures in accordance with the CSFSC shall be permitted as an alternative to the requirement of section 7.1.3.2.1(2).
- (3) The 2-hour fire resistance separation required by section 14.3.1(2) shall be constructed of an assembly of noncombustible or limited-combustible materials and shall be supported by construction having not less than a 2-hour fire resistance rating.
- (4) Openings in the separation shall be protected by fire door assemblies equipped with door closers complying with the CSFSC.
- (5)\* Openings in exit enclosures shall be limited to doors from normally occupied spaces and corridors and doors for egress from the enclosure, unless one of the following conditions exists:

- (a) Openings in exit passageways in mall buildings as provided in the CSFSC shall be permitted.
- (b) In buildings of Type I or II construction, existing fire-protection rated doors to interstitial spaces shall be permitted, provided that such spaces meet all of the following criteria:
  - i. The space is used solely for distribution of pipes, ducts, and conduits.
  - ii. The space contains no storage.
  - iii. The space is separated from the exit enclosure in accordance with the CSFSC.
- (c) Existing openings to mechanical equipment spaces protected by approved existing fire protection-rated doors shall be permitted, providing that the following criteria are met:
  - i. The space is used solely for non-fuel-fired mechanical equipment.
  - ii. The space contains no storage of combustible materials.
  - iii. The building is protected throughout by an approved, supervised automatic sprinkler system in accordance with the CSFSC.
- (6) Penetrations into, and openings through, an exit enclosure assembly shall be limited to the following:
  - (a) Doors permitted by the CSFSC.
  - (b) Electrical conduit serving the stairway.
  - (c) Required exit doors.
  - (d) Duct work and equipment necessary for independent stair pressurization.
  - (e) Water or steam piping necessary for the heating or cooling of the exit enclosure.
  - (f) Sprinkler piping.
  - (g) Standpipes.
  - (h) Existing penetrations protected in accordance with the CSFSC.
  - (i) Penetrations for fire alarm circuits where the circuits are installed in metallic conduit and the penetrations are protected in accordance with the CSFSC.
  - (j) Penetrations by ductwork for required ventilation of the exit enclosure shall be permitted when:
    - i. The exit enclosure does not have any portion of its walls or roof exposed to the exterior of the building;
    - ii. The duct opening is protected by a combination smoke and fire damper in accordance with the CSFSC; and
    - iii. The smoke damper closes upon shutdown of the associated heating, ventilation and cooling unit.
- (7) Penetrations or communicating openings shall be prohibited between adjacent exit enclosures.

(Amd) **14.4.1\*** Means of egress and primary means of escape shall be continuously maintained free of all obstructions or impediments to full instant use in the case of fire or other emergency.

(Add) **14.4.1.1** Where horizontal-sliding or vertical-rolling security grilles or doors are permitted to be located in part of the required means of egress, they shall meet the following operational criteria:

- (1) Such grilles or doors shall remain secured in the fully open position during the period of occupancy by the general public.
- (2) On or adjacent to the grille or door, there shall be a readily visible, durable sign in letters not less than 25 mm (1 in.) high on a contrasting background that reads as follows:

**THIS DOOR TO REMAIN OPEN WHEN THE BUILDING IS OCCUPIED.**

- (3) Doors or grilles shall not be brought to the closed position when the space is occupied.
- (4) Doors or grilles shall be operable from within the space without the use of any special knowledge or effort.

(Add) **14.4.1.2 Powered Doors.** Where means of egress doors are operated by power upon the approach of a person or are provided with power-assisted manual operation, they shall meet the following operational criteria:

A readily visible, durable sign in letters not less than 25 mm (1 in.) high on a contrasting background that reads as follows shall be located on the egress side of each door:

**IN EMERGENCY, PUSH TO OPEN**

(Add) **14.4.1.3** Open space within the exit enclosure shall not be used for any purpose that has the potential to interfere with egress.

(Amd) **14.4.3 Impediments to Egress.** Any device or alarm installed to restrict the improper use of a means of egress shall be designed and installed so that it cannot, even in case of failure, impede or prevent emergency use of such means of egress unless otherwise provided in the CSFSC.

(Add) **14.4.3.1 Security Device.** Any security device or system that emits any medium that could obscure a means of egress in any building, structure or premises shall be prohibited.

(Amd) **14.5.1.1.1** Sliding doors in detention and correction occupancies as provided in the CSFSC shall be permitted.

(Del) **14.5.1.1.2** Delete section.

(Amd) **14.5.1.1.3** Doors in residential board and care occupancies as provided in the CSFSC shall be permitted.

(Amd) **14.5.1.1.4** Where permitted in the CSFSC, horizontal-sliding or vertical-rolling security grilles or doors that are part of the required means of egress shall be permitted, provided that they meet the following criteria:

- (1) Such grilles or doors shall remain secured in the fully open position during the period of occupancy by the general public.
- (2) On or adjacent to the grille or door, there shall be a readily visible, durable sign in letters not less than 1 in. (25 mm) high on a contrasting background that reads as follows:

**THIS DOOR TO REMAIN OPEN WHEN THE BUILDING IS OCCUPIED.**

- (3) Doors or grilles shall not be brought to the closed position when the space is occupied.
- (4) Doors or grilles shall be operable from within the space without the use of any special knowledge or effort.
- (5) Where two or more means of egress are required, not more than half of the means of egress shall be equipped with horizontal-sliding or vertical-rolling grilles or doors.

(Amd) **14.5.1.1.5** Horizontal-sliding doors complying with the CSFSC shall be permitted.

(Amd) **14.5.1.1.7** Revolving doors complying with the CSFSC shall be permitted.

(Amd) **14.5.1.1.8** Existing fusible link-operated horizontal-sliding or vertical-rolling fire doors shall be permitted to be used as provided in the CSFSC.

(Amd) **14.5.1.2** Doors required to be of the side-hinged or pivoted-swinging type shall swing in the direction of egress travel where serving a room or area with an occupant load of 50 or more, except under the following conditions:

- (1) Doors in horizontal exits shall not be required to swing in the direction of egress travel where permitted by the CSFSC.
- (2) Smoke barrier doors shall not be required to swing in the direction of egress travel in existing health care occupancies as provided in the CSFSC.

(Amd) **14.5.1.3** A door shall swing in the direction of egress travel under either of the following conditions:

- (1) Where the door is used in an exit enclosure, unless (A) the door is the door of an individual living unit that opens directly into an exit enclosure or (B) in an existing building where the door serves an occupant load of fewer than 50 persons and does not serve a high hazard contents area.
- (2) When the door serves a high hazard contents area.

(Amd) **14.5.1.5.4** The opening forces for horizontal-sliding doors in detention and correctional occupancies shall be as provided in the CSFSC.

(Amd) **14.5.1.5.5** The opening forces for power-operated doors shall be as provided in the CSFSC.

(Amd) **14.5.2.3** The requirements of sections 14.5.2.1 and 14.5.2.2 shall not apply where otherwise provided in the CSFSC.

(Amd) **14.5.2.4** Exterior doors shall be permitted to have key-operated locks from the egress side, provided that the following criteria are met:

- (1) This alternative is permitted in the CSFSC for the specific occupancy.
- (2) A readily visible, durable sign in letters not less than 1 in. (25 mm) high on a contrasting background that reads as follows is located on or adjacent to the door:

**THIS DOOR TO REMAIN UNLOCKED WHEN THE BUILDING IS OCCUPIED.**

- (3) The locking device is of a type that is readily distinguishable as locked.
- (4) A key is immediately available to any occupant inside the building when it is locked.

(Amd) **14.5.2.6** Where permitted by the CSFSC, key operation shall be permitted, provided that the key cannot be removed when the door is locked from the side from which egress is to be made.

(Amd) **14.5.2.7.2** The requirement of section 14.5.2.7 shall not apply to the following:

- (1) Existing installations as permitted in the CSFSC.
- (2) Stair enclosures serving a building permitted to have a single exit in accordance with the CSFSC.
- (3) Stair enclosures in health care occupancies where otherwise provided in the CSFSC.

- (4) Stair enclosures in detention and correctional occupancies where otherwise provided in the CSFSC.

(Amd) **14.5.3.1 Delayed-Egress Locks.** Approved, listed, delayed-egress locks shall be permitted to be installed on doors serving low and ordinary hazard contents in buildings protected throughout by an approved, supervised automatic fire detection system in accordance with section 13.7 or an approved, supervised automatic sprinkler system in accordance with section 13.3, and where permitted in the CSFSC, provided that the following criteria are met:

- (1) The doors shall unlock upon actuation of one of the following:
  - (a) An approved, supervised automatic sprinkler system in accordance with section 13.3.
  - (b) Any heat detector.
  - (c) Not more than two smoke detectors of an approved, supervised automatic fire detection system in accordance with section 13.7.
- (2) The doors shall unlock upon loss of power controlling the lock or locking mechanism.
- (3) An irreversible process shall release the lock within 15 seconds, or 30 seconds where approved by the AHJ, upon application of a force to the release device required in section 14.5.2.9 under the following conditions:
  - (a) The force shall not be required to exceed 15 lbf (67 N).
  - (b) The force shall not be required to be continuously applied for more than 3 seconds.
  - (c) The initiation of the release process shall activate an audible signal in the vicinity of the door.
  - (d) Once the door lock has been released by the application of force to the releasing device, relocking shall be by manual means only.
- (4) A readily visible, durable sign in letters not less than 1 in. (25 mm) high and not less than  $\frac{1}{8}$  in. (3.2 mm) in stroke width on a contrasting background that reads as follows shall be located on the door adjacent to the release device:

PUSH UNTIL ALARM SOUNDS  
DOOR CAN BE OPENED IN 15 SECONDS

Where the AHJ has permitted a longer time for release, the sign shall reflect such time.

(Amd) **14.5.3.2 Access-Controlled Egress Doors.** Where permitted in the CSFSC, entrance doors to buildings and tenant spaces in the means of egress shall be permitted to be equipped with an approved entrance and egress access control system, provided that the following criteria are met:

- (1) One of the following shall be provided:
  - (a) A sensor on the egress side, arranged to detect an occupant approaching doors that are arranged to unlock in the direction of egress upon detection of an approaching occupant or loss of power to the sensor.
  - (b) Listed panic hardware or fire exit hardware that, when operated, unlocks the door.
- (2) Loss of power to the part of the access control system that locks the doors shall automatically unlock the doors in the direction of egress.
- (3) The doors shall be arranged to unlock in the direction of egress from a manual release device located 40 in. to 48 in. (1015 mm to 1220 mm) vertically above the floor and within 60 in. (1525 mm) of the secured doors.

- (4) The manual release device specified in section 14.5.3.2(3) shall be readily accessible and clearly identified by a sign that reads as follows: PUSH TO EXIT.
- (5) When operated, the manual release device shall result in direct interruption of power to the lock - independent of the access control system electronics - and the doors shall remain unlocked for not less than 30 seconds.
- (6) Activation of the building fire-protective signaling system, if provided, shall automatically unlock the doors in the direction of egress, and the doors shall remain unlocked until the fire-protective signaling system has been manually reset.
- (7) Activation of the building automatic sprinkler or fire detection system, if provided, shall automatically unlock the doors in the direction of egress, and the doors shall remain unlocked until the fire-protective signaling system has been manually reset.

(Amd) **14.5.3.3.3** Required panic hardware and fire exit hardware, in other than detention and correctional occupancies as otherwise provided in the CSFSC, shall not be equipped with any locking device, set screw, or other arrangement that prevents the release of the latch when pressure is applied to the releasing device.

(Amd) **14.5.4.2** In any building of low or ordinary hazard contents, as defined in the CSFSC, or where approved by the AHJ, doors shall be permitted to be automatic-closing, provided that the following criteria are met:

- (1) Upon release of the hold-open mechanism, the door becomes self-closing.
- (2) The release device is designed so that the door instantly releases manually and, upon release, becomes self-closing, or the door can be readily closed.
- (3) The automatic releasing mechanism or medium is activated by the operation of approved smoke detectors installed in accordance with the requirements for smoke detectors for door release service in NFPA 72®, *National Fire Alarm Code*®.
- (4) Upon loss of power to the hold-open device, the hold-open mechanism is released and the door becomes self-closing.
- (5) The release by means of smoke detection of one door in a stair enclosure results in closing all doors serving that stair.

(Amd) **14.6.1.2** Inside stairs, other than those serving as an exit or exit component, shall be protected in accordance with the CSFSC.

(Amd) **14.6.3.2** Enclosed, usable space shall be permitted under stairs, provided that the following criteria are met:

- (1) The space is separated from the stair by the same fire resistance as the exit enclosure.
- (2) Entrance to the enclosed, usable space shall not be from within the stair enclosure.

(Amd) **14.6.4.1** Stairs serving five or more stories shall be provided with special signage within the enclosure at each floor landing. The signage shall indicate the floor level, the terminus of the top and bottom of the stair enclosure, and the identification of the stair enclosure. The signage also shall state the floor level of, and the direction to, exit discharge. The signage shall be located inside the enclosure approximately 60 in. (1525 mm) above the floor landing in a position that is visible when the door is in the open or closed position. The signage shall comply with the

CSFSC. The floor level designation shall also be tactile in accordance with ICC/ANSI A117.1, *American National Standard for Accessible and Usable Buildings and Facilities*.

(Amd) **14.6.4.2** Wherever an enclosed stair requires travel in an upward direction to reach the level of exit discharge, special signs with directional indicators showing the direction to the level of exit discharge shall be provided at each floor level landing from which upward direction of travel is required, unless otherwise provided in sections 14.6.4.2.1 and 14.6.4.2.2, and the following also shall apply:

- (1) Such signage shall comply with the CSFSC.
- (2) Such signage shall be visible when the door is in the open or closed position.

(Amd) **14.6.4.4** The stairway identification letter shall be located at the top of the sign in minimum 1 in. (25 mm) high lettering and shall be in accordance with the CSFSC.

(Amd) **14.6.4.5** Roof access or the lack thereof shall be designated by a sign that reads ROOF ACCESS or NO ROOF ACCESS and located under the stairway identification letter. Lettering shall be a minimum of 1 in. (25 mm) high and shall be in accordance with the CSFSC.

(Amd) **14.6.4.6** The floor level number shall be located in the middle of the sign in minimum 5 in. (125 mm) high numbers and shall be in accordance with the CSFSC. Mezzanine levels shall have the letter “M” or other appropriate identification letter preceding the floor number, while basement levels shall have the letter “B” or other appropriate identification letter preceding the floor level number.

(Amd) **14.6.4.7** Identification of the lower and upper terminus of the stairway shall be located at the bottom of the sign in minimum 1 in. (25 mm) high letters or numbers and shall be in accordance with the CSFSC.

(Amd) **14.7.1\* General.** Exit passageways used as egress components shall conform to the general requirements of the CSFSC and to the special requirements of section 14.7.

(Amd) **14.7.2 Enclosure.** An exit passageway shall be separated from other parts of the building as specified in section 14.3, and the following alternatives shall be permitted:

- (1) Fire windows in accordance with the CSFSC shall be permitted to be installed in the separation in a building protected throughout by an approved, supervised automatic sprinkler system in accordance with section 13.3.
- (2) Existing fixed wired glass panels in steel sash shall be permitted to be continued in use in the separation in buildings protected throughout by an approved, supervised automatic sprinkler system in accordance with section 13.3.

(Amd) **14.7.4 Width.** The width of an exit passageway shall be adequate to accommodate the aggregate required capacity of all exits that discharge through it, unless one of the following conditions applies:

- (1) Where an exit passageway serves occupants of the level of exit discharge as well as other stories, the capacity shall not be required to be aggregated.
- (2) As provided in the CSFSC, an exit passageway in a mall building shall be permitted to accommodate occupant loads independently from the mall and the tenant spaces.

**(Amd) Table 14.8.1.2 Occupant Load Factor**

<b>Use</b>	<b>ft<sup>2</sup> (per person)<sup>1</sup></b>	<b>m<sup>2</sup> (per person)<sup>1</sup></b>
<b>Assembly Use</b>		
Concentrated use, without fixed seating	7 net	0.65 net
Less concentrated use, without fixed seating	15 net	1.4 net
Bench-type seating	1 person/18 linear in.	1 person/455 linear mm
Fixed seating	Number of fixed seats	Number of fixed seats
Waiting spaces	See the CSFSC	See the CSFSC
Courtrooms – other than fixed seating	40 net	3.7 net
Kitchens	200	18.6
Library stack areas	100	9.3
Library reading rooms	50 net	4.6 net
Swimming pools	50 (water surface)	4.6 (water surface)
Swimming pool decks	30	2.8
Exercise rooms	50	4.6
Stages	15 net	1.4 net
Lighting and access catwalks, galleries, gridirons	100 net	9.3 net
Casinos and similar gaming areas	11	1
Skating rinks	50	4.6
<b>Airport Terminal Areas</b>		
Baggage claim	20	1.9
Baggage handling	300	27.9
Concourse	100	9.3
Waiting areas	15	1.4
<b>Educational Use</b>		
Classrooms	20 net	1.9 net
Shops, laboratories, vocational rooms	50 net	4.6 net
<b>Day-Care Use</b>		
	35 net	3.3 net
<b>Health Care Use</b>		
Inpatient treatment departments	240	22.3
Outpatient treatment departments	100	9.3
Sleeping departments	120	11.1
<b>Detention and Correctional Use</b>		
	120	11.1
<b>Residential Use</b>		
Hotels and dormitories	200	18.6

Apartment buildings	200	18.6
Board and care, large	200	18.6
<b>Industrial Use</b>		
General and high hazard industrial	100	9.3
Special purpose industrial	NA	NA
<b>Business Use</b>		
<b>Storage Use</b> (other than mercantile storerooms)	NA	NA
Accessory storage areas, mechanical equipment rooms	300 gross	27.9 gross
Warehouses	500 gross	46.5 gross
<b>Mercantile Use</b>		
Sales area on street floor <sup>2,3</sup>	30	2.8
Sales area on two or more street floors <sup>3</sup>	40	3.7
Sales area on floor below street floor <sup>3</sup>	30	2.8
Sales area on floors above street floor <sup>3</sup>	60	5.6
Floors or portions of floors used only for offices	See business use	See business use
Floors or portions of floors used only for storage, receiving, and shipping, and not open to general public	300	27.9
Mall buildings <sup>4</sup>	Per factors applicable to use of space <sup>5</sup>	Per factors applicable to use of space <sup>5</sup>

Note: NA = not applicable. The occupant load is the maximum probable number of occupants present at any time.

<sup>1</sup> All factors are expressed in gross area unless marked "net."

<sup>2</sup> For the purpose of determining occupant load in mercantile occupancies where, due to differences in grade of streets on different sides, two or more floors directly accessible from streets (not including alleys or similar back streets) exist, each such floor is permitted to be considered a street floor. The occupant load factor is one person for each 40 ft<sup>2</sup> (3.7 m<sup>2</sup>) of gross floor area of sales space.

<sup>3</sup> For the purpose of determining occupant load in mercantile occupancies with no street floor, as defined in the CSFSC, but with access directly from the street by stairs or escalators, the floor at the point of entrance to the mercantile occupancy is considered the street floor.

<sup>4</sup> For any food court or other assembly use areas located in the mall that are not included as a portion of the gross leasable area of the mall building, the occupant load is calculated based on the occupant load factor for that use as specified in this table. The remaining mall area is not required to be assigned an occupant load.

<sup>5</sup> The portions of the mall that are considered a pedestrian way and not used as gross leasable area are not required to be assessed an occupant load based on this

table. However, means of egress from a mall pedestrian way are required to be provided for an occupant load determined by dividing the gross leasable area of the mall building (not including anchor stores) by the appropriate lowest whole number occupant load factor from Figure 14.8.1.2.

Each individual tenant space is required to have means of egress to the outside or to the mall based on occupant loads calculated by using the appropriate occupant load factor from this table.

Each individual anchor store is required to have means of egress independent of the mall.

Source: Part IV Table 7.3.1.2 of the CSFSC.

(Amd) **14.8.3.3.1** The width of any means of egress, unless otherwise provided in sections 14.8.3.3.1.1 through 14.8.3.3.1.3, shall be as follows:

- (1) Not less than that required for a given egress component in the CSFSC.
- (2) Not less than 36 in. (915 mm).

(Amd) **14.8.3.3.1.3** The requirement of section 14.8.3.3.1 shall not apply to the following:

- (1) Doors as otherwise provided for in the CSFSC.
- (2) Aisles and aisle accessways in assembly occupancies as otherwise provided in the CSFSC.
- (3) Industrial equipment access as otherwise provided in the CSFSC.

(Amd) **14.9.1.1** The number of means of egress from any balcony, mezzanine, story, or portion thereof shall be not less than two, except under one of the following conditions:

- (1) Where a single means of egress is permitted in the CSFSC.
- (2) Where a single means of egress is permitted for a mezzanine or balcony and the common path of travel limitations of the CSFSC are met.

(Amd) **14.9.1.2** The number of means of egress from any story or portion thereof, other than for existing buildings as permitted in the CSFSC, shall be as follows:

- (1) Occupant load more than 500 but not more than 1000 - not less than 3.
- (2) Occupant load more than 1000 - not less than 4.

(Amd) **14.9.1.3** Accessible means of egress in accordance with the CSFSC that do not utilize elevators shall be permitted to serve as any or all of the required minimum number of means of egress.

(Add) **14.9.1.6.1** The provisions of section 14.9.1.6 shall not apply to buildings for which a building permit was issued prior to June 15, 1994.

(Amd) **14.10.1.1.3** The requirement of sections 14.10.1.1.1 and 14.10.1.1.2 shall not apply where a single exit is permitted in the CSFSC.

(Amd) **14.10.1.1.4** Where common paths of travel are permitted for an occupancy in the CSFSC, such common paths of travel shall be permitted but shall not exceed the limit specified.

(Amd) **14.10.1.2.1** Approved existing corridors that require passage through a room to access an exit shall be permitted to continue to be used, provided that the following criteria are met:

- (1) The path of travel is marked in accordance with the CSFSC.
- (2) Doors to such rooms comply with the CSFSC.
- (3) Such arrangement is not prohibited by the applicable occupancy chapter in the CSFSC.

(Amd) **14.10.1.4.2\*** Existing interlocking or scissor stairs shall be permitted to be considered separate exits if they meet the following criteria:

- (1) They are enclosed in accordance with the CSFSC.
- (2) They are separated from each other by 2-hour fire resistance-rated noncombustible construction.
- (3) No protected or unprotected penetrations or communicating openings exist between the stair enclosures.

(Amd) **14.10.1.5\*** Exit access shall be arranged so that there are no dead ends in corridors, unless permitted by, and limited to, the length specified in the CSFSC.

(Amd) **14.10.1.6** Exit access from rooms or spaces shall be permitted to be through adjoining or intervening rooms or areas, provided that such rooms or areas are accessory to the area served. Foyers, lobbies, and reception rooms constructed as required for corridors shall not be construed as intervening rooms. Exit access shall be arranged so that it is not necessary to pass through any area identified under Protection from Hazards as specified in Chapters 12 through 42, inclusive, in the CSFSC.

(Amd) **14.10.2 Impediments to Egress.**

(Amd) **14.10.2.1** Access to an exit shall not be through kitchens, storerooms other than as provided in the CSFSC, restrooms, workrooms, closets, bedrooms or similar spaces, or other rooms or spaces subject to locking, unless passage through such rooms or spaces is permitted for the occupancy by the CSFSC.

(Amd) **14.10.3.1** Exit access shall be permitted to be by means of any exterior balcony, porch, gallery, or roof that conforms to the requirements of the CSFSC.

(Amd) **14.10.3.4** Exterior exit access shall be arranged so that there are no dead ends in excess of those permitted for dead-end corridors in the CSFSC.

(Amd) **14.10.4.3** Each required accessible means of egress shall be continuous from each accessible occupied area to a public way or area of refuge in accordance with the CSFSC.

(Amd) **14.10.4.4** Where an exit stair is used in an accessible means of egress, it shall comply with the CSFSC and shall either incorporate an area of refuge within an enlarged story-level landing or shall be accessed from an area of refuge.

(Amd) **14.10.4.5** To be considered part of an accessible means of egress, an elevator shall be in accordance with the CSFSC.

(Amd) **14.10.4.6** To be considered part of an accessible means of egress, a smoke barrier in accordance with the CSFSC with not less than a 1-hour fire resistance rating, or a horizontal exit in accordance with the CSFSC, shall discharge to an area of refuge in accordance with the CSFSC.

(Amd) **14.11.1.4** Means of egress shall be permitted to terminate in an exterior area of refuge for detention and correctional occupancies as provided in the CSFSC.

(Amd) **14.11.2 Discharge through Areas on Level of Exit Discharge.** Not more than 50 percent of the required number of exits, and not more than 50 percent of the required egress capacity, shall be permitted to discharge through areas on the level of exit discharge, unless otherwise permitted in sections 14.11.2.1 and 14.11.2.2, provided that the criteria of sections 14.11.2.3 through 14.11.2.6 are met.

(Amd) **14.11.2.1** One hundred percent of the exits shall be permitted to discharge through areas on the level of exit discharge in detention and correctional occupancies as provided in the CSFSC.

(Amd) **14.11.2.4** The level of discharge shall be protected throughout by an approved, automatic sprinkler system in accordance with section 13.3, or the portion of the level of discharge used for discharge shall be protected by an approved, automatic sprinkler system in accordance with section 13.3 and shall be separated from the nonsprinklered portion of the floor by a fire resistance rating meeting the requirements for the enclosure of exits.

(Amd) **14.11.2.7** Levels below the level of discharge in an atrium shall be permitted to be open to the level of discharge where such level of discharge is protected in accordance with the CSFSC.

(Amd) **14.11.5 Signs.** See the CSFSC.

(Amd) **14.12.1.5** The equipment or units installed to meet the requirements of the CSFSC also shall be permitted to serve the function of illumination of means of egress, provided that all requirements of the CSFSC for such illumination are met.

(Amd) **14.12.2.2** Battery-operated electric lights and other types of portable lamps or lanterns shall not be used for primary illumination of means of egress. Battery-operated electric lights shall be permitted to be used as an emergency source to the extent permitted under the CSFSC.

(Amd) **14.13.1.1\*** Emergency lighting facilities for means of egress shall be provided in accordance with section 14.13 for the following:

- (1) Buildings or structures where required in the CSFSC.
- (2) Underground and limited access structures as addressed in the CSFSC.
- (3) High-rise buildings as required by the CSFSC.
- (4) Doors equipped with delayed-egress locks.
- (5) Stair shaft and vestibule of smokeproof enclosures, for which the following also apply:
  - (a) The stair shaft and vestibule shall be permitted to include a standby generator that is installed for the smokeproof enclosure mechanical ventilation equipment.
  - (b) The standby generator shall be permitted to be used for the stair shaft and vestibule emergency lighting power supply.

(Amd) **14.14.1.1 Where Required.** Means of egress shall be marked in accordance with Section 14.14 where required in the CSFSC.

(Amd) **14.14.1.6\* Floor Proximity Exit Signs.** Where floor proximity exit signs are required in the CSFSC, such signs shall be located near the floor level in addition to those signs required for doors or corridors. The signs shall be illuminated in accordance with the CSFSC. Externally illuminated signs shall be sized in accordance with the CSFSC. The bottom of the sign shall be not less than 6 in. (150 mm) but

not more than 18 in. (455 mm) above the floor. For exit doors, the sign shall be mounted on the door or adjacent to the door, with the nearest edge of the sign within 4 in. (100 mm) of the door frame.

(Amd) **14.14.1.7\* Floor Proximity Egress Path Marking.** Floor proximity egress path marking shall be provided as required by the CSFSC.

(Amd) **14.14.2\* Directional Signs.** A sign complying with the CSFSC with a directional indicator showing the direction of travel shall be placed in every location where the direction of travel to reach the nearest exit is not apparent.

(Amd) **14.14.4\* Power Source.** Where emergency lighting facilities are required by the applicable provisions of the CSFSC for individual occupancies, the signs, other than approved self-luminous signs, shall be illuminated by the emergency lighting facilities. The level of illumination of the signs shall be in accordance with section 14.14.5.2.1 or 14.14.5.2.2 for the required emergency lighting duration as specified in the CSFSC. However, the level of illumination shall be permitted to decline to 60 percent at the end of the emergency lighting duration.

(Amd) **14.14.5.2.1** Every sign required to be illuminated by sections 14.14.6.3 and 14.14.6.4 shall be continuously illuminated as required under the provisions of the CSFSC unless otherwise provided in section 14.14.5.2.2.

(Amd) **14.14.6.5.1.2** Where emergency lighting facilities are required by the applicable provisions of the CSFSC, the required illumination of special signs shall additionally be provided under emergency lighting conditions.

(Del) **Chapter 15. Planned Building Groups.** Delete chapter.

## Chapter 16

### Safeguards During Building Construction, Alteration, and Demolition Operations

(Amd) **16.1.3** In buildings under construction, adequate escape facilities shall be maintained at all times for the use of construction workers. Escape facilities shall consist of doors, walkways, stairs, ramps, fire escapes, ladders, or other approved means or devices, insofar as they can reasonably be applied to buildings under construction.

(Amd) **16.2.2.2** Rubbish shall not be burned on the premises without first obtaining applicable approval.

(Del) **16.3.5.1\*** Delete section.

(Del) **16.3.5.4\*** Delete section.

(Amd) **16.3.7.5.1** In all buildings over one story in height, at least one stairway shall be provided that is in usable condition at all times.

(Del) **16.3.9.1\*** Delete section.

(Del) **16.3.9.3** Delete section.

(Del) **16.3.9.4** Delete section.

(Amd) **16.4.2.1** Protection shall be provided to separate an occupied portion of the structure from a portion of the structure undergoing alteration, construction, or demolition operations as required by the SBC.

(Del) **16.4.2.2** Delete section.

(Del) **16.4.2.3** Delete section.

(Del) **16.4.2.4** Delete section.

(Del) **16.4.3.1.1** Delete section.

(Del) **16.4.3.2.3** Delete section.

(Del) **16.8.2 Permits.** Delete section.

(Del) **Chapter 17 Wildland Urban Interface.** Delete chapter.

## Chapter 18

### Fire Department Access and Water Supply

(Amd) **18.1 General.** Fire department access shall comply with this chapter.

(Del) **18.3 Water Supplies and Fire Hydrants.** Delete section.

## Chapter 19

### Combustible Waste and Refuse

(Del) **19.1.8 Vehicles or Conveyances Used to Transport Combustible Waste or Refuse.** Delete section.

(Amd) **19.2.1.4 Rubbish within Dumpsters.** Dumpsters and containers with an individual capacity of 1.5 yd<sup>3</sup> (1.15 m<sup>3</sup>) or more shall not be stored in buildings or placed within 10 ft (3 m) of combustible walls, openings, or combustible roof eave lines unless meeting either section 19.2.1.4.1 or 19.2.1.4.2.

## Chapter 20

### Occupancy Fire Safety

(Amd) **20.1 Assembly Occupancies including Assembly Groups A-1, A-2, A-3, A-4 and A-5.**

(Amd) **20.1.1 Application.** New and existing assembly occupancies shall comply with section 20.1 and the CSFSC.

(Amd) **20.1.2.2** Foamed plastics (*see definition of cellular or foamed plastic in the CSFSC*) shall be permitted to be used only with specific approval of the AHJ.

(Amd) **20.1.3.1\* General.** Special amusement buildings, regardless of occupant load, shall meet the requirements for assembly occupancies in addition to the requirements of the CSFSC, unless the special amusement building is a multilevel play structure that is not more than 120 in. (3050 mm) in height and has aggregate horizontal projections not exceeding 160 ft<sup>2</sup> (15 m<sup>2</sup>).

(Amd) **20.1.3.6 Illumination.** Actuation of the automatic sprinkler system, or any other suppression system, or actuation of a smoke detection system having an

approved verification or cross-zoning operation capability shall provide the following:

- (1) Cause illumination in the means of egress to increase to the level required by the CSFSC.
- (2) Stop any conflicting or confusing sounds and visuals.

(Amd) **20.1.3.7.1** Exit marking shall be in accordance with the CSFSC.

(Amd) **20.1.3.7.2** Floor proximity exit signs shall be provided in accordance with the CSFSC.

(Amd) **20.1.3.8 Interior Finish.** Interior wall and ceiling finish materials complying with the CSFSC shall be Class A throughout.

(Amd) **20.1.4.1.3** Food preparation facilities shall be protected in accordance with the CSFSC and shall not be required to have openings protected between food preparation areas and dining areas.

(Amd) **20.1.4.2 Open Flame Devices and Pyrotechnics.** No open flame devices or pyrotechnic devices shall be used in any assembly occupancy, unless otherwise permitted by the following:

- (1) Pyrotechnic special effect devices shall be permitted to be used on stages before proximate audiences for ceremonial or religious purposes, as part of a demonstration in exhibits, or as part of a performance, provided that both of the following criteria are met:
  - (a) Precautions satisfactory to the AHJ are taken to prevent ignition of any combustible material.
  - (b) Use of the pyrotechnic device complies with NFPA 1126, *Standard for the Use of Pyrotechnics before a Proximate Audience*.
- (2) Flame effects before an audience shall be permitted in accordance with NFPA 160, *Standard for Flame Effects Before an Audience*.
- (3) Open flame devices shall be permitted to be used in the following situations, provided that precautions satisfactory to the AHJ are taken to prevent ignition of any combustible material or injury to occupants:
  - (a) For ceremonial or religious purposes.
  - (b) On stages and platforms where part of a performance.
  - (c) Where candles on tables are securely supported on substantial non-combustible bases and the candle flame is protected.
- (4) This requirement shall not apply to heat-producing equipment complying with the CSFSC.
- (5) This requirement shall not apply to food service operations in accordance with the CSFSC.
- (6) Gas lights shall be permitted to be used, subject to the approval of the AHJ, provided that precautions are taken to prevent ignition of any combustible materials.

(Del) **20.1.4.3.5** Delete section.

(Add) **20.1.4.3.8 Stage standpipe system.** When the AHJ determines that material such as scenery, props and temporary fixtures are present on a stage equipped with hose connections create an extraordinary fire load, a fire watch equipped with fire hoses attached to the hose outlets on the stage for first aid firefighting shall be provided whenever an audience is present.

(Amd) **20.1.4.4.3 Materials Not on Display.** Combustible materials not on display, including combustible packing crates used to ship exhibitors' supplies and products, shall be stored in a room having an enclosure consisting of a smoke barrier having a fire resistance rating of 1 hour and protected by an automatic extinguishing system, or outside the building.

(Amd) **20.1.4.4.4** Exhibit booths shall be constructed of the following:

- (1) Noncombustible or limited-combustible materials.
- (2) Wood exceeding 1/4 in. (6.3 mm) nominal thickness or wood not exceeding 1/4 in. (6.3 mm) nominal thickness that is pressure-treated, fire-retardant wood meeting the requirements of NFPA 703, *Standard for Fire Retardant Impregnated Wood and Fire Retardant Coatings for Building Materials*.
- (3) Flame-retardant materials complying with NFPA 701, *Standard Methods of Fire Tests for Flame Propagation of Textiles and Films*.
- (4) Textile wall coverings, such as carpet and similar products used as wall or ceiling finishes, complying with the provisions of the CSFSC.
- (5) Plastics limited to those that comply with section 12.3.3 and the CSFSC.
- (6) Foamed plastics and materials containing foamed plastics having a heat release rate for any single fuel package that does not exceed 100 kW where tested in accordance with UL 1975, *Standard for Fire Tests for Foamed Plastics Used for Decorative Purposes*.
- (7) Cardboard, honeycombed paper, and other combustible materials having a heat release rate for any single fuel package that does not exceed 150 kW where tested in accordance with UL 1975, *Standard for Fire Tests for Foamed Plastics Used for Decorative Purposes*.

(Amd) **20.1.4.4.7** The following shall be protected by automatic fire extinguishing systems:

- (1) Single-level exhibit booths exceeding 300 ft<sup>2</sup> (28 m<sup>2</sup>) and covered with a ceiling.
- (2) Each level of multilevel exhibit booths, including the uppermost level where the uppermost level is covered with a ceiling.
- (A) The requirements of section 20.1.4.4.7 shall not apply where otherwise permitted by the following:
  - (i) Ceilings that are constructed of open grate design or listed dropout ceilings in accordance with NFPA 13, *Standard for the Installation of Sprinkler Systems*, shall not be considered ceilings within the context of 20.1.4.4.7.
  - (ii) Vehicles, boats, and similar exhibition products having over 100 ft<sup>2</sup> (9.3 m<sup>2</sup>) of roofed area shall be provided with smoke detectors acceptable to the AHJ.
  - (iii) The requirement of section 20.1.4.4.7(2) shall not apply where fire protection of the multilevel exhibit booths is consistent with the criteria developed through a life safety evaluation of the exhibition hall in accordance with the CSFSC, subject to the approval of the AHJ.
- (B) A single exhibit or group of exhibits with ceilings that do not require sprinklers shall be separated by a distance of not less than 120 in. (3050 mm) where the aggregate ceiling exceeds 300 ft<sup>2</sup> (28 m<sup>2</sup>).
- (C) The water supply and piping for the sprinkler system shall be permitted to be of an approved, temporary means that is provided by a domestic water supply, a standpipe system or a sprinkler system.

(Amd) **20.1.4.4.4.9** Cooking and food-warming devices in exhibit booths shall comply with the CSFSC and the following:

- (1) Gas-fired devices shall comply with the following:
  - (a) Natural gas-fired devices shall comply with the CSFSC.
  - (b) The requirement of section 20.1.4.4.4.9(1)(a) shall not apply to compressed natural gas where permitted by the AHJ.
  - (c) The use of LP-Gas cylinders shall be prohibited.
  - (d) Nonrefillable LP-Gas cylinders shall be approved for use where permitted by the AHJ.
- (2) The devices shall be isolated from the public by not less than 48 in. (1220 mm) or by a barrier between the devices and the public.
- (3) Multi-well cooking equipment using combustible oils or solids shall comply with the CSFSC.
- (4) Single-well cooking equipment using combustible oils or solids shall meet the following criteria:
  - (a) They shall have lids available for immediate use.
  - (b) They shall be limited to 288 in.<sup>2</sup> (0.2 m<sup>2</sup>) of cooking surface.
  - (c) They shall be placed on noncombustible surface materials.
  - (d) They shall be separated from each other by a horizontal distance of not less than 24 in. (610 mm).
  - (e) The requirement of section 20.1.4.4.4.9(4)(d) shall not apply to multiple single-well cooking equipment where the aggregate cooking surface area does not exceed 288 in.<sup>2</sup> (0.2 m<sup>2</sup>).
  - (f) They shall be kept at a horizontal distance of not less than 24 in. (610 mm) from any combustible material.
- (5) A portable fire extinguisher in accordance with the CSFSC shall be provided within the booth for each device, or an approved automatic extinguishing system shall be provided.

(Amd) **20.1.4.6.3\*** In the following assembly occupancies, an audible announcement shall be made, or a projected image shall be shown, prior to the start of each program that notifies occupants of the location of the exits to be used in case of a fire or other emergency:

- (1) Theaters.
- (2) Motion picture theaters.
- (3) Auditoriums.
- (4) Other similar assembly occupancies with occupant loads exceeding 100 where there are noncontinuous programs.

(Amd) **20.1.4.7.1** The requirements of section 20.1.4.7 shall apply where smoking is prohibited by any provision of the Connecticut General Statutes.

(Amd) **20.1.4.8.1.1** Seats in assembly occupancies accommodating more than 200 persons shall be securely fastened to the floor, except where fastened together in groups of not less than three and as permitted by section 20.1.4.8.2.

(Amd) **20.1.4.8.1.2** Groups of seats exceeding 14 in balconies and galleries separated from other groups by railings, guards, partial height walls, or similar barriers shall be securely fastened to the floor except in existing places of religious worship.

(Amd) **20.1.4.8.2.3** Detailed seating plans including the occupant load shall be submitted for approval by the AHJ. Deviations from the approved plans shall be

allowed provided the occupant load limit for the occupancy is not exceeded and the aisles and exit accessways remain unobstructed.

(Amd) **20.1.4.10 Projection Room.** Film or video projectors or spotlights utilizing light sources that produce particulate matter, or toxic gases or light sources that produce hazardous radiation, without protective shielding, shall be located within a projection room complying with the CSFSC.

(Amd) **20.2 Educational Occupancies including Education Group E.**

(Amd) **20.2.1 Application.** New and existing educational occupancies shall comply with the CSFSC.

(Add) **20.2.1.1 Permits.** Permits, if required, shall comply with section 1.12.19.

(Amd) **20.2.3.1.2** Emergency egress and relocation drills shall be conducted as follows:

- (1) Not less than one emergency egress and relocation drill shall be conducted every month the facility is in session, unless both of the following criteria are met:
  - (a) In climates where the weather is severe, the monthly emergency egress and relocation drills shall be permitted to be deferred.
  - (b) The required number of emergency egress and relocation drills shall be conducted, and not less than four shall be conducted before the drills are deferred.
- (2) All occupants of the occupancy shall participate in the drill.
- (3) One additional emergency egress and relocation drill, other than for educational occupancies that are open on a year-round basis, shall be required not later than 30 days after opening.
- (4) A written report shall be kept by the school administrator describing the date and time of the drill, person in charge of the drill, and time of recall.

(Add) **20.2.3.1.4** Emergency evacuation drills shall be conducted at different hours of the day or evening, during the change of classes, when the school is at assembly, during the recess or gymnastic periods, or during other times to avoid distinction between drills and actual fires.

(Add) **20.2.3.1.5** Outdoor assembly areas shall be designated and shall be located a safe distance from the building being evacuated so as to avoid interference with fire department operations. The assembly areas shall be arranged to keep each class separate to provide accountability.

(Amd) **20.2.3.3.1** Draperies, curtains and other similar furnishings and decorations in educational occupancies shall be in accordance with the provisions of NFPA 701, *Standard Methods of Fire Tests for Flame Propagation of Textiles and Films*.

(Add) **20.2.4 Room Locations.**

(Add) **20.2.4.1** Rooms normally occupied by preschool, kindergarten or first-grade students shall be located on a level of exit discharge, unless otherwise permitted by section 20.2.4.3.

(Add) **20.2.4.2** Rooms normally occupied by second-grade students shall not be located more than one story above a level of exit discharge, unless otherwise permitted by section 20.2.4.3.

(Add) **20.2.4.3** Rooms or areas located on floor levels other than as specified in sections 20.2.4.1 and 20.2.4.2 shall be permitted to be used where provided with independent means of egress dedicated for use by the preschool, kindergarten, first-grade or second-grade students.

(Amd) **20.3 Day-Care Occupancies, including those considered Institutional Group I-4.**

(Amd) **20.3.1 Application.** New and existing day-care occupancies shall comply with section 20.3 and the CSFSC.

(Add) **20.3.1.5 Permits.** Permits, if required, shall comply with section 1.12.19.

(Amd) **20.3.3 Additional Requirements.**

(Del) **20.3.3.1 Classification.** Delete section.

(Amd) **20.3.3.2.1\* Emergency Plans.** Emergency plans shall be provided.

(Add) **20.3.3.2.1.1** Emergency plans shall include the following:

- (1) Procedures for reporting of emergencies.
- (2) Occupant and staff response to emergencies.
- (3) Design and conduct of fire drills.
- (4) Type and coverage of building fire protection systems.
- (5) Other items required by the AHJ.

(Add) **20.3.3.2.1.2** Required emergency plans shall be submitted to the AHJ for review.

(Add) **20.3.3.2.1.3** Emergency plans shall be reviewed and updated as required by the AHJ.

(Amd) **20.3.3.2.2.2** Emergency egress and relocation drills shall be conducted as follows:

- (1) Not less than one emergency egress and relocation drill shall be conducted every month the facility is in session, unless both of the following criteria are met:
  - (a) In climates where the weather is severe, the monthly emergency egress and relocation drills shall be permitted to be deferred.
  - (b) The required number of emergency egress and relocation drills shall be conducted, and not less than four shall be conducted before the drills are deferred.
- (2) All occupants of the occupancy shall participate in the drill.
- (3) One additional emergency egress and relocation drill, other than for educational occupancies that are open on a year-round basis, shall be required not later than 30 days after opening.

(Amd) **20.4 Health Care Occupancies, including Institutional Group I-2.**

(Amd) **20.4.1 Application.** New and existing health care occupancies shall comply with section 20.4 and the CSFSC.

(Add) **20.4.1.1 Permits.** Permits, if required, shall comply with section 1.12.19.

(Amd) **20.4.2.1.4** The provisions of sections 10.6, 10.9 and 20.4.2.1.2 through 20.4.2.2.3 shall apply.

(Amd) **20.4.2.5.1\*** Draperies, curtains, and other loosely hanging fabrics and films serving as furnishings or decorations in health care occupancies shall be in accordance with the provisions of section 20.4.2.5.2 and the following also shall apply:

- (1) Such curtains shall include cubical curtains.
- (2) Such curtains shall not include curtains at showers.

(Amd) **20.4.2.5.3** Newly introduced upholstered furniture within health care occupancies shall meet the criteria specified in the CSFSC.

(Amd) **20.4.2.5.5** Newly introduced mattresses within health care occupancies shall meet the criteria specified in the CSFSC.

(Add) **20.4.2.7 Alcohol-Based Hand-Rub Solutions.** Alcohol-based hand-rub dispensers shall be protected as required for flammable and combustible liquids unless all of the following conditions are met:

- (1) Where dispensers are installed in exit access corridors, the corridor shall have a minimum width of 1830 mm (72 in.), except that projections of maximum 152 mm (6 in.) from the corridor wall above handrail height shall be permitted for dispensing units.
- (2) The maximum individual dispenser fluid capacity shall be:
  - (a) 1.2 L (0.32 gal) for dispensers in rooms, corridors and areas open to corridors.
  - (b) 2.0 L (0.53 gal) for dispensers in suites of rooms.
- (3) The dispensers shall have a minimum horizontal spacing of 1220 mm (48 in.) from each other.
- (4) Not more than an aggregate 37.8 L (10 gal) of alcohol-based hand-rub solution shall be in use in a single smoke compartment outside of a storage cabinet.
- (5) Storage of quantities greater than 18.9 L (5 gal) in a single smoke compartment shall meet the requirements of the Connecticut Flammable and Combustible Liquids Code.
- (6) The dispensers shall not be installed over or directly adjacent to an ignition source.
- (7) In locations with carpeted floor coverings, dispensers installed directly over carpeted surfaces shall be permitted only in sprinklered smoke compartments.

(Amd) **20.5 Residential Board and Care Occupancies, including Residential Group R-4 and Institutional Group I-1.**

(Amd) **20.5.1 Application.** New and existing residential board and care occupancies shall comply with section 20.5 and the CSFSC.

(Add) **20.5.1.1 Permits.** Permits, if required, shall comply with section 1.12.19.

(Amd) **20.5.2.3.6** If the board and care facility has an evacuation capability classification of impractical, those residents who cannot meaningfully assist in their own evacuation or who have special health problems shall not be required to actively participate in the drill. Section 20.4.2 shall apply in such instances.

(Amd) **20.5.2.5.1** New draperies, curtains and other similar loosely hanging furnishings and decorations in board and care facilities shall be in accordance with the provisions of section 10.20.1 of this code.

(Amd) **20.5.2.5.2.1** New upholstered furniture shall be tested in accordance with the provisions of sections 10.20.2(1) and 10.20.3 of this code.

(Amd) **20.5.2.5.2.3\*** New mattresses within board and care facilities shall comply with section 20.5.2.5.2.3(A) or 20.5.2.5.2.3(B).

(A) New upholstered furniture shall be tested in accordance with the provisions of sections 10.20.2(3) and 10.20.4 of this code.

(B) Mattresses belonging to residents in sleeping rooms shall not be required to be tested, provided that a smoke alarm is installed in such rooms; battery-powered single-station smoke alarms shall be permitted in such rooms.

(Amd) **20.6 Ambulatory Health Care Centers, including Business Group B Medical Occupancies.**

(Amd) **20.6.1 Application.** New and existing ambulatory health care centers shall comply with section 20.6 and the CSFSC.

(Add) **20.6.1.1 Permits.** Permits, if required, shall comply with section 1.12.19.

(Amd) **20.6.2.1.1.1** All employees shall be periodically instructed and kept informed with respect to their duties under a plan developed in accordance with sections 20.4.2.1 and 20.4.2.2.

(Amd) **20.6.2.1.1.2** A copy of the plan required by section 20.6.2.1.1.1 shall be readily available at all times in the telephone operator's position or at the security center.

(Amd) **20.6.2.5.1\*** Draperies, curtains and other loosely hanging fabrics and films serving as furnishings or decorations in ambulatory health care occupancies shall be in accordance with the provisions of section 10.20.1 of this code, and the following also shall apply:

(1) Such curtains shall include cubicle curtains.

(2) Such curtains shall not include curtains at showers.

(Amd) **20.6.2.5.3** Newly introduced upholstered furniture shall meet the criteria specified when tested in accordance with the methods cited in sections 10.20.2(2) and 10.20.3 of this code.

(Amd) **20.6.2.5.4** Newly introduced mattresses shall meet the criteria specified when tested in accordance with the methods cited in sections 10.20.2(3) and 10.20.4 of this code.

(Add) **20.6.2.7 Alcohol-Based Hand-Rub Solutions.** Alcohol-based hand-rub dispensers shall be protected as required for flammable and combustible liquids unless all of the following conditions are met:

(1) Where dispensers are installed in exit access corridors, the corridor shall have a minimum width of 1830 mm (72 in.) except that projections of maximum 152 mm (6 in.) from the corridor wall above handrail height shall be permitted for dispensing units.

(2) The maximum individual dispenser fluid capacity shall be:

(a) 1.2 L (0.32 gal) for dispensers in rooms, corridors and areas open to corridors.

(b) 2.0 L (0.53 gal) for dispensers in suites of rooms.

(3) The dispensers shall have a minimum horizontal spacing of 1220 mm (48 in.) from each other.

(4) Not more than an aggregate 37.8 L (10 gal) of alcohol-based hand-rub solution shall be in use in a single smoke compartment outside of a storage cabinet.

- (5) Storage of quantities greater than 18.9 L (5 gal) in a single smoke compartment shall meet the requirements of the Connecticut Flammable and Combustible Liquids Code.
- (6) The dispensers shall not be installed over or directly adjacent to an ignition source.
- (7) In locations with carpeted floor coverings, dispensers installed directly over carpeted surfaces shall be permitted only in sprinklered smoke compartments.

**(Amd) 20.7 Detention and Correctional Occupancies, including Institutional Group I-3.**

**(Amd) 20.7.1 Application.** New and existing detention and correctional occupancies shall comply with section 20.7 and the CSFSC.

**(Amd) 20.7.2.1.1** Detention and correctional facilities, or those portions of facilities having such occupancy, shall be provided with 24-hour staffing, and the following requirements also shall apply:

- (1) Staff shall be within three floors or a 300 ft (91 m) horizontal distance of the access door of each resident housing area.
- (2) In addition, for Use Condition III, Use Condition IV and Use Condition V, the arrangement shall be such that the staff involved starts the release of locks necessary for emergency evacuation or rescue and initiates other necessary emergency actions within 2 minutes of alarm.
- (3) The following shall apply to areas in which all locks are unlocked remotely in compliance with the CSFSC:
  - (a) Staff shall not be required to be within three floors or 300 ft (91 m) of the access door.
  - (b) The 10-lock, manual key exemption of the CSFSC shall not be permitted to be used in conjunction with this alternative requirement.

**(Amd) 20.7.2.4.3** Newly introduced upholstered furniture within detention and correctional occupancies shall be tested in accordance with the provisions of sections 10.20.2(2) and 10.20.3 of this code.

**(Amd) 20.7.2.4.4\*** Newly introduced mattresses within detention and correctional occupancies shall be tested in accordance with the provisions of sections 10.20.2(3) and 10.20.4 of this code.

**(Amd) 20.8 Hotels, including Residential Group R-1 and Bed and Breakfast Establishments.**

**(Amd) 20.8.1 Application.** New and existing hotels and bed and breakfast establishments shall comply with section 20.8 and the CSFSC.

**(Add) 20.8.1.1 Permits.** Permits, if required, shall comply with section 1.12.19.

**(Amd) 20.8.2.3 Extinguisher Training.** Designated employees of hotel or motel occupancies shall be periodically instructed in the use of portable fire extinguishers.

**(Amd) 20.8.2.4.1\*** A floor diagram reflecting the actual floor arrangement, exit and escape locations and room identification shall be posted in a location and manner acceptable to the AHJ on, or immediately adjacent to, every guest room door in hotels and bed and breakfast establishments.

(Amd) **20.9 Apartment Buildings and Dormitories, including Residential Group R-2.**

(Amd) **20.9.1 Application.** New and existing apartment buildings and dormitories shall comply with section 20.9 and the CSFSC.

(Add) **20.9.2.1.1 Drills in Dormitories.** Emergency egress and relocation drills shall be regularly conducted in accordance with section 10.6.

(Add) **20.9.2.1.2\*** A floor diagram reflecting the actual floor arrangement, exit and escape locations and room identification shall be posted in a location and manner acceptable to the AHJ on, or immediately adjacent to, every guest room door in every resident room in dormitories.

(Add) **20.10.3 Emergency Instructions for Residents or Guests.** A floor diagram reflecting the actual floor arrangement, exit and escape locations, and room identification shall be posted in a location and manner acceptable to the AHJ on, or immediately adjacent to, every resident residential room.

(Del) **20.11 One- and Two-Family Dwellings and Manufacturing Housing.** Delete section.

(Amd) **20.12 Mercantile Occupancies, including Mercantile Group M.**

(Amd) **20.12.1 Application.** New and existing mercantile occupancies shall comply with section 20.12 and the CSFSC.

(Add) **20.12.1.1 Permits.** Permits, if required, shall comply with section 1.12.19.

(Add) **20.12.2.3 Covered Mall Buildings.** Covered mall buildings shall comply with the provisions of sections 20.12.2.3.1 through 20.12.2.3.3.

(Add) **20.12.2.3.1 Lease Plan.** A lease plan shall be prepared for each covered mall building and shall include the following information:

- (1) Each occupancy, including the identification of any tenants.
- (2) Exits from each tenant space.
- (3) Fire protection features, including the following:
  - (a) Fire department connections.
  - (b) Fire command center.
  - (c) Smoke management system controls.
  - (d) Elevators and elevator controls.
  - (e) Hose valves outlets.
  - (f) Sprinkler and standpipe control valves.
  - (g) Automatic fire-extinguishing system areas.
  - (h) Automatic fire detector zones.
  - (i) Fire barriers.

(Add) **20.12.2.3.1.1 Approval.** The lease plan shall be submitted to the fire code official for approval, and shall be maintained on site for immediate reference by responding fire service personnel.

(Add) **20.12.2.3.1.2 Revisions.** The lease plans shall be revised annually or as often as necessary to keep them current, whichever is earlier.

(Add) **20.12.2.3.2 Tenant Identification.** Each occupied tenant space, except anchor stores, provided with a secondary exit to the exterior or exit corridor shall be

provided with tenant identification by business name or address. Letters and numbers shall be posted on the corridor side of the door, be plainly legible and shall contrast with their background.

(Add) **20.12.2.3.3 Maintenance.** Vacant tenant spaces shall be:

- (1) Kept free from the storage of any materials.
- (2) Separated from the remainder of the building by partitions of at least 12.7 mm thick (0.5 in.) gypsum board or an approved equivalent to the underside of the ceiling of the adjoining tenant spaces.
- (3) Without doors or other access openings other than one door that shall be kept key locked in the closed position except during that time when opened for inspection.
- (4) Kept free from combustible waste and be broom-swept clean.

(Add) **20.12.2.4 Storage and Display of Consumer Fireworks.** The display and storage of consumer fireworks at retail establishments shall be in accordance with the provisions of the 2006 edition of NFPA 1124, *Code for the Manufacture, Transportation, Storage, and Retail Sales of Fireworks and Pyrotechnic Articles*, except as modified in sections 20.12.2.4.1 through 20.12.2.4.3.

(Add) **20.12.2.4.1** Consumer fireworks shall be under the visual supervision of a store employee or other responsible party while the store is open to the public.

(Add) **20.12.2.4.2** Consumer fireworks shall not be displayed or stored within 1.5 m (5 ft) of any entrance or exit of any enclosed building or structure.

(Add) **20.12.2.4.3** The provisions of NFPA 1124 are amended for use in Connecticut as follows:

(Amd) **7.5.3 Storage Rooms.** Storage rooms containing consumer fireworks, regardless of size, in a new or existing permanent store shall be protected with an automatic sprinkler system installed in accordance with NFPA 13, *Standard for the Installation of Sprinkler Systems*, or separated from the retail sales area by a fire barrier having a fire resistance rating of not less than 1 hour. The quantity of fireworks permitted in storage shall not exceed 3,600 cubic feet, including packaging. Such storage shall be segregated into areas of 1,200 cubic feet or less, separated by a minimum of 4 feet of clear space.

(Amd) **20.13 Business Occupancies, including Business Group B.**

(Amd) **20.13.1 Application.** New and existing business occupancies shall comply with section 20.13 and the CSFSC.

(Add) **20.13.1.1 Permits.** Permits, if required, shall comply with section 1.12.19.

(Amd) **20.14 Industrial Occupancies, including Factory Industrial Groups F-1 and F-2.**

(Amd) **20.14.1 Application.** New and existing industrial occupancies shall comply with section 20.14 and the CSFSC.

(Add) **20.14.1.1 Permits.** Permits, if required, shall comply with section 1.12.19.

(Add) **20.14.2 Group H-5 Occupancies.** Group H-5 occupancies shall comply with the requirements of sections 20.14.2.1 through 20.14.2.4 and the CSFSC.

(Add) **20.14.2.1 Plans and Diagrams.** Plans and diagrams shall be maintained in approved locations indicating the approximate plan for each area, the amount and type of hazardous production materials (HPM) stored, handled and used, locations of shutoff valves for HPM supply piping, emergency telephone locations and locations of exits.

(Add) **20.14.2.2 Plan Updating.** The plans and diagrams required by section 20.14.2.1 shall be maintained up to date and the fire code official and fire department shall be informed of all major changes.

(Add) **20.14.2.3 Emergency Response Team.** Responsible persons shall be designated as the on-site emergency response team and trained to be liaison personnel for the fire department. These persons shall aid the fire department in preplanning emergency responses, identifying locations where HPM is stored, handled and used, and be familiar with the chemical nature of such material. An adequate number of personnel for each work shift shall be designated.

(Add) **20.14.2.4 Emergency Drills.** Emergency drills of the on-site emergency response team shall be conducted on a regular basis but not less than once every three months. Records of drills conducted shall be maintained.

(Amd) **20.15 Storage Occupancies, including Storage Groups S-1 and S-2.**

(Amd) **20.15.1 Application.** New and existing storage occupancies shall comply with section 20.15 and the CSFSC.

(Amd) **20.15.1.1 Permits.** Permits, if required, shall comply with section 1.12.19.

(Amd) **20.16.1.1** New and existing special structures and high-rise buildings shall comply with the CSFSC.

(Add) **20.16.1.1.1 Permits.** Permits, if required, shall comply with section 1.12.19.

(Del) **20.17 Historical Buildings.** Delete section.

## Chapter 21

### Airports and Heliports

(Amd) **21.1 Hangars.** The protection of aircraft hangars from fire shall comply with this section; NFPA 409, *Standard on Aircraft Hangars*; NFPA 410, *Standard on Aircraft Maintenance*; and the CSFSC.

(Amd) **21.2.3.1\*** Airport terminal buildings shall be constructed in accordance with the CSFSC.

(Amd) **21.2.3.2\*** Interior finish shall be limited to that permitted in Class A places of assembly.

(Amd) **21.2.5\*** In addition to exit signage requirements specified in the CSFSC, doors serving as exits that discharge onto an airport ramp and are provided solely for the purposes of meeting emergency egress requirements from public areas shall be placarded "Emergency Exit Only" in letters at least 2 in. (50 mm) high.

(Amd) **21.2.6.3 Fire Alarm and Communications Systems.** A fire alarm and communications system shall be installed as required by the CSFSC.

## Chapter 22

### Automobile Wrecking Yards

(Del) **22.8 Burning Operations.** Delete section.

## Chapter 25

### Grandstands and Bleachers, Folding and

### Telescopic Seating, Tents, and Membrane Structures

(Amd) **25.1.1** The location, protection, and maintenance of grandstands and bleachers, folding and telescopic seating, tents and membrane structures shall meet the requirements of this chapter. Seating facilities located in the open air or within enclosed or semi-enclosed structures, such as tents, membrane structures and stadium complexes, shall comply with the CSFSC, the provisions of section 29-140 of the Connecticut General Statutes, the regulations adopted pursuant to section 29-140 and Chapter 25.

(Amd) **25.1.5.1** The applicable provisions of the CSFSC that pertain to fire hazards shall govern in tents and membrane structures.

(Amd) **25.1.5.5** The use of fireworks, sparklers, fountains or unauthorized open flames shall be prohibited in any tent or temporary membrane structure.

(Amd) **25.1.10.2.3** Heaters used inside a tent or temporary membrane structure shall be approved by the AHJ.

(Amd) **25.2.2.1** All tent fabric shall be flame resistant in accordance with the CSFSC.

(Add) **25.5.3.1.1** The requirements of section 25.5.3 do not apply to air-supported and air-inflated structures as defined in the Connecticut Mechanical Amusement Ride and Device Regulations, adopted under authority of section 29-136 of the Connecticut General Statutes.

(Amd) **25.5.1.1 Use of Membrane Roofs.** Membrane roofs shall be used in accordance with the following:

- (1) Membrane materials shall not be used where fire resistance ratings are required for walls or roofs.
- (2) Where every part of the roof, including the roof membrane, is not less than 240 in. (6100 mm) above any floor, balcony, or gallery, a noncombustible membrane shall be permitted to be used as the roof in any type of construction as permitted by the SBC.
- (3) With approval of the AHJ, membrane materials shall be permitted to be used where every part of the roof membrane is sufficiently above every significant fire potential such that the imposed temperature cannot exceed the capability of the membrane, including seams, to maintain its structural integrity.

(Amd) **25.5.1.5.1** All membrane structure fabric shall be flame resistant in accordance with the CSFSC.

(Del) **25.5.2.3** Delete section.

(Del) **25.5.2.4** Delete section.

(Del) **25.6.4.3** Delete section.

(Del) **25.6.4.4** Delete section.

(Del) **Chapter 26 Laboratories Using Chemicals.** Delete Chapter 26 in its entirety and replace with the following:

### **Chapter 26**

#### **Laboratories Using Chemicals**

(Add) **26.1** The handling or storage of chemicals in laboratory buildings, laboratory units and laboratory work areas shall comply with the requirements of the Connecticut Hazardous Chemicals Code.

(Del) **Chapter 27 Manufactured Home and Recreational Vehicle Sites.** Delete chapter.

### **Chapter 28**

#### **Marinas and Boatyards**

(Amd) **28.1.1** The operation of marinas, boatyards, yacht clubs, boat condominiums, docking facilities associated with residential condominiums, multiple-docking facilities at multiple-family residences, and all associated piers, docks and floats shall comply with NFPA 303, *Fire Protection Standard for Marinas and Boatyards*, and Section 28.1.

### **Chapter 29**

#### **Parking Garages**

(Amd) **29.1.1** The protection of new and existing parking garages as well as the control of hazards in open parking structures, enclosed parking structures and basement and underground parking structures shall comply with the CSFSC, NFPA 88A, *Standard for Parking Structures*, and this chapter.

(Del) **Chapter 30 Motor Fuel Dispensing and Repair Garages.** Delete Chapter 30 in its entirety and replace with the following:

### **Chapter 30**

#### **Motor Fuel Dispensing Facilities and Repair Garages**

(Add) **30.1 Motor Fuel Dispensing Facilities.** Motor fuel dispensing facilities shall comply with the provisions of the CSFSC, SBC and the Connecticut Flammable and Combustible Liquids Code.

(Add) **30.2 Repair Garages.** Repair garages shall comply with the provisions of the CSFSC, SBC and the Connecticut Flammable and Combustible Liquids Code.

(Del) **Chapter 42 Refueling.** Delete Chapter 42 in its entirety and replace with the following:

### **Chapter 42**

#### **Refueling**

(Add) **42.1 General.** The refueling of automotive vehicles, aircraft, and marine vessels shall comply with the provisions of the CSFSC, SBC and Connecticut Flammable and Combustible Liquids Code.

(Del) **Chapter 43 Spraying, Dipping, and Coating Using Flammable or Combustible Materials.** Delete Chapter 43 in its entirety and replace with the following:

### **Chapter 43**

#### **Spraying, Dipping, and Coating Using Flammable or Combustible Materials**

(Add) **43.1** Operations involving the spray application of flammable and combustible materials shall comply with the provisions of the CSFSC, SBC and Connecticut Flammable and Combustible Liquids Code.

### **Chapter 50**

#### **Commercial Cooking Equipment**

(Amd) **50.1.1\*** The operation, inspection and maintenance of commercial cooking equipment having a commercial kitchen exhaust hood as required elsewhere in this code shall comply with this chapter. This chapter shall not apply to Type II kitchen exhaust hoods as defined by the International Mechanical Code®.

(Del) **50.1.2** Delete section.

(Del) **50.1.3** Delete section.

(Del) **50.1.4\*** Delete section.

(Del) **50.2.1** Delete section.

(Del) **50.2.6** Delete section.

(Del) **50.2.9** Delete section.

(Del) **50.2.10\* Clearance.** Delete section.

(Del) **50.4.1** Delete section.

(Del) **50.4.2 Permits.** Delete section.

(Del) **50.4.3 General Requirements.** Delete section.

(Del) **50.4.4.3\*** Delete section.

(Del) **50.4.4.4** Delete section.

(Del) **50.4.4.5** Delete section.

(Del) **50.4.4.7** Delete section.

(Del) **50.4.4.8 Fixed Baffle Hoods with Water Wash.** Delete section.

(Del) **50.4.4.9** Delete section.

(Del) **50.4.4.10 Water Valve Supervision.** Delete section.

(Del) **50.4.5 Simultaneous Operation.** Delete section.

(Del) **50.4.6 Fuel Shutoff.** Delete section.

(Del) **50.4.7.2** Delete section.

(Del) **50.4.7.3** Delete section.

(Del) **50.4.7.4** Delete section.

(Del) **50.4.7.5** Delete section.

(Del) **50.4.7.6** Delete section.

(Del) **50.4.8 System Annunciation.** Delete section.

(Del) **50.4.9 System Supervision.** Delete section.

(Del) **50.4.10 Special Design and Application.** Delete section.

(Del) **50.4.11 Review and Certification.** Delete section.

(Del) **Chapter 60 Hazardous Materials.** Delete Chapter 60 in its entirety and replace with the following:

### **Chapter 60**

#### **Hazardous Materials**

(Amd) **60.1\*** Occupancies containing high hazard contents shall comply with the provisions of the CSFSC and the SBC.

(Del) **Chapter 61 Aerosol Products.** Delete Chapter 61 in its entirety and replace with the following:

### **Chapter 61**

#### **Aerosol Products**

(Add) **61.1 General.** The manufacture, storage, use, handling and display of aerosol products shall comply with the provisions of the CSFSC, SBC and Connecticut Flammable and Combustible Liquids Code.

(Del) **Chapter 62 Combustible Fibers.** Delete chapter.

(Del) **Chapter 63 Compressed Gases and Cryogenic Fluids.** Delete chapter.

(Del) **Chapter 64 Corrosive Solids and Liquids.** Delete chapter.

### **Chapter 65**

#### **Explosives, Fireworks, and Model Rocketry**

(Amd) **65.1.1** The storage, use, and handling of explosives, fireworks and model rocketry shall comply with the requirements of the Connecticut Explosives Code, the Connecticut Fireworks and Special Effects Code, the Connecticut Model Rocketry Code and this chapter.

(Amd) **65.1.2** Where the provisions of this chapter or NFPA standards referenced in this chapter conflict with the provisions of the Connecticut Explosives Code, the Connecticut Fireworks and Special Effects Code or the Connecticut Model Rocketry Code, the provisions of those codes shall apply.

(Amd) **65.2.1** The construction, handling, and use of fireworks intended solely for outdoor display as well as the general conduct and operation of the display shall comply with the requirements of the Connecticut Fireworks and Special Effects Code and NFPA 1123, *Code for Fireworks Display*.

(Amd) **65.2.2** All storage of display fireworks shall comply with the Connecticut Fireworks and Special Effects Code and NFPA 1124, *Code for the Manufacture, Transportation, Storage, and Retail Sales of Fireworks and Pyrotechnic Articles*.

(Amd) **65.5.1** The manufacture, transportation, or storage of fireworks shall comply with the Connecticut Fireworks and Special Effects Code and NFPA 1124, *Code for the Manufacture, Transportation, Storage, and Retail Sales of Fireworks and Pyrotechnic Articles*.

(Amd) **65.6 Model Rocketry.** The design, construction, limitations of propellant mass and power, and reliability of model rocket motors and model rocket motor reloading kits and their components produced commercially for sale to or use by the public for purposes of education, recreation, and sporting competition, shall comply with the Connecticut Model Rocketry Code and NFPA 1122, *Code for Model Rocketry*.

(Amd) **65.7.1** The manufacture of model rocket motors designed, sold, and used for the purpose of propelling recoverable aero models shall comply with the Connecticut Model Rocketry Code and NFPA 1125, *Code for the Manufacture of Model Rocket and High Power Rocket Motors*.

(Amd) **65.8.1** The design, construction, limitations of propellant mass and power, and reliability of all high-power rocket motors and motor components produced commercially for sale to or use by the certified user for education, recreation, and sporting competition shall comply with the Connecticut Model Rocketry Code and NFPA 1127, *Code for High Power Rocketry*.

(Amd) **65.9.1** The manufacture, transportation, storage, sale, and use of explosive materials shall comply with the Connecticut Explosives Code, NFPA 495, *Explosive Materials Code*, and NFPA 498, *Standard for Safe Havens and Interchange Lots for Vehicles Transporting Explosives*.

(Amd) **65.10.1** The storage of ammonium nitrate in the form of crystals, flakes, grains, or prills including fertilizer grade, dynamite grade, nitrous oxide grade, technical grade and other mixtures containing 60 percent or more by weight of ammonium nitrate shall comply with the Connecticut Explosives Code and NFPA 490, *Code for the Storage of Ammonium Nitrate*.

(Amd) **65.11.1.5\*** Retail sales of consumer fireworks shall be limited to mercantile occupancies as defined in the CSFSC.

(Amd) **65.11.2.5 Noncomplying Fireworks.** The retail sales of fireworks that do not comply with the regulations of the U.S. Consumer Product Safety Commission as set forth in 16 CFR 1500 and 1507, the regulations of the U.S. Department of Transportation as set forth in Title 49 CFR 100 to 178 and sections 29-356 and 29-357 of the Connecticut General Statutes, including provisions concerning their related storage and display for sale, shall be prohibited.

(Amd) **65.11.2.6 Life Safety.** Any building or structure used for the retail sales of consumer fireworks, including their related storage, shall comply with the CSFSC, for mercantile occupancies, except as provided in this chapter.

(Amd) **65.11.4.4.2** Any other openings or penetrations in the fire barrier wall shall be protected in accordance with the CSFSC.

(Amd) **65.11.5.3.1** A fire alarm system shall be provided as required by the CSFSC.

(Amd) **65.11.8.1 General.** Means of egress in consumer fireworks retail sales facilities shall comply with the applicable requirements of the CSFSC, as modified by section 65.11.8.

(Amd) **65.11.8.1.1** Means of egress in stores and bulk merchandising retail buildings where the retail sales of consumer fireworks are conducted shall comply with the CSFSC, unless otherwise specified in section 65.11.8.

(Amd) **65.11.8.1.2\*** Means of egress in tents and membrane structures used for consumer fireworks retail sales shall comply with the CSFSC, and NFPA 102, *Standard for Grandstands, Folding and Telescopic Seating, Tents, and Membrane Structures*, as modified by section 65.11.8.

(Amd) **65.11.8.3.1** The minimum number of exits provided from the retail sales area shall be not less than three or as determined in accordance with the CSFSC, whichever number is greater.

(Amd) **65.11.8.6.4** For other than temporary consumer fireworks retail sales stands where the interior is not accessible to the public, every egress door that has a latching device shall be provided with panic hardware complying with the CSFSC.

(Amd) **65.11.9.1.1** Exits shall be marked by an approved exit sign in accordance with the CSFSC.

(Amd) **65.11.9.2.1** The means of egress, including the exit discharge, shall be illuminated whenever the facility is occupied in accordance with the CSFSC.

(Amd) **65.11.9.2.2** Emergency lighting shall be provided for consumer fireworks retail sales facilities and stores and shall comply with the CSFSC.

(Del) **Chapter 66 Flammable and Combustible Liquids.** Delete Chapter 66 in its entirety and replace with the following:

### **Chapter 66**

#### **Flammable and Combustible Liquids**

(Add) **66.1** The storage, use, and handling of flammable and combustible liquids, including waste liquids, shall comply with the provisions of the CSFSC, SBC and Connecticut Flammable and Combustible Liquids Code.

(Del) **Chapter 67 Flammable Solids.** Delete chapter.

(Del) **Chapter 68 Highly Toxic and Toxic Solids and Liquids.** Delete chapter.

(Del) **Chapter 69 Liquefied Petroleum Gases and Liquefied Natural Gases.** Delete Chapter 69 in its entirety and replace with the following:

### **Chapter 69**

#### **Liquefied Petroleum Gases and Liquefied Natural Gases**

(Add) **69.1** The storage, use, and handling of liquefied petroleum gases (LP-Gas) shall comply with the CSFSC, SBC and Connecticut Liquefied Petroleum Gas and Liquefied Natural Gas Code.

(Del) **Chapter 70 Oxidizers and Organic Peroxides.** Delete chapter.

(Del) **Chapter 71 Pyrophoric Solids and Liquids.** Delete chapter.

(Del) **Chapter 72 Unstable (Reactive) Solids and Liquids.** Delete chapter.

(Del) **Chapter 73 Water-Reactive Solids and Liquids.** Delete chapter.

(Adopted effective July 1, 2010)

**Sec. 29-291a-10. Enforcement by citations**

The following chapters or sections of this code may be enforced through the use of the citation process pursuant to section 29-291c of the Connecticut General Statutes.

**Chapter /Section**

**Subject Matter**

Section 1.12

Operating without a permit as prescribed by law

Section 10.15.9

Provisions for Naturally Cut (Christmas) Trees

Sections 10.8, 13.1.7

Failure to maintain or the shutting off of any

fire protection or fire warning system required

by the Connecticut State Fire Safety Code

Blocked, insufficient or impeded egress

Sections 14.4.1,

14.4.3, 14.4.3.1

Chapter 16

Safeguards During Building Construction,  
Alteration, and Demolition Operations

Section

20.1.4.8.3

Exceeding the established occupancy limit-  
assembly occupancies

Section 20.12.2.4

Storage and Display of Consumer Fireworks

Chapter 41

Hot Work Operations

Section 50.5

Procedures for Use and Maintenance of Com-  
mercial Cooking Equipment

Section 65.11.1.5

Retail Sales of Consumer Fireworks limited to  
mercantile occupancies

(Adopted effective July 1, 2010)