DEPARTMENT OF ADMINISTRATIVE SERVICES

2018 Connecticut State Fire Safety Code

DIVISION OF CONSTRUCTION SERVICES Office of the State Fire Marshal

> 450 Columbus Boulevard Hartford, CT 06103

MELODY A. CURREY Commissioner

WILLIAM ABBOTT State Fire Marshal



Legislative Resubmission

June 21, 2018

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CONNECTICUT STATE FIRE SAFETY CODE

Part I—Administrative

Sec. 100 Title and Applicability

Sec. 100.1 The Connecticut State Fire Safety Code and the adopted standards, as amended, shall be known as the Connecticut State Fire Safety Code, hereinafter referred to as "the code" or "this code".

Sec. 100.2 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.

Sec. 100.3 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.

Sec. 100.4 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.

Sec. 100.5 The provisions of the code shall only apply to detached private dwellings occupied by one or two families and townhouses with respect to smoke alarms and carbon monoxide detectors as specified in the State Building Code and subject to the specific inspection criteria for smoke detection and warning equipment of section 29-305 of the Connecticut General Statutes.

Sec. 100.6 Buildings designed, constructed and occupied in accordance with the provisions of the 2015 International Residential Code portion of the State Building Code, including tents and membrane structures, shall be deemed single-family dwellings for the application of this code and section 29-305 of the Connecticut General Statutes.

Sec. 100.7 The Connecticut State Fire Safety Code shall not apply to portable grandstand and bleachers providing seating for fewer than 100 persons located outside of a building.

Sec. 100.8 The Connecticut State Fire Safety Code shall not apply to any federal agency performing construction or operating on federally owned land or on leased land totally under the control of the federal government.

Sec. 100.9 Public service companies. This code shall not apply to the installation, alteration or repair of generation, transmission, distribution, metering or other related equipment that is under the ownership and control of public service companies as defined by section 16-1 of the Connecticut General Statutes.

Sec. 100.10 The Connecticut State Fire Safety Code shall be administered as provided in chapter 541 of the Connecticut General Statutes.

Sec. 100.11 When a requirement differs between this code and the Connecticut State Fire Prevention Code relating to an operational or maintenance feature, the Connecticut State Fire Prevention Code shall prevail.

Sec. 102 Adopted Standard

Sec. 102.1 Part III – New construction, renovation, or change of use and new buildings. The following standard is hereby adopted as amended herein as Part III of the Connecticut State Fire Safety Code:

International Fire Code[®] of the International Code Council, Inc., 2015 edition except as amended, altered or deleted and by the addition of certain provisions as indicated in this code.

The International Fire Code is available from the International Code Council, Inc., 4051 W. Flossmoor Road, Country Club Hills, IL 60478-5795.

Sec. 102.2 Existing buildings/occupancies. The following standard is hereby adopted as amended herein as Part IV of the Connecticut State Fire Safety Code, except as amended, altered or deleted and by the addition of certain provisions as indicated in this code:

NFPA 101, Life Safety Code[®], 2015 edition, with annexes promulgated by the National Fire Protection Association.

NFPA standards are available from the National Fire Protection Association, One Batterymarch Park, Quincy, Massachusetts 02269-9101; 1-800-344-3555; <u>www.nfpa.org</u>.

102.3 Connecticut Amendment conventions. The model codes adopted in 102.1 and 102.2 are amended to meet the needs of the State of Connecticut as identified by the following conventions:

- (a) A section or subsection in the Connecticut Amendments preceded by "Amd" indicates the substitution of this provision.
- (b) A section or subsection in the Connecticut Amendments preceded by "Del" indicates the deletion of this provision.
- (c) A section or subsection in the Connecticut Amendments preceded by "Add" indicates the addition of this provision.

Sec. 103 Authority Having Jurisdiction

- (a) For the purposes of the standards adopted by reference by this code, the authority having jurisdiction shall mean the State Fire Marshal regarding the proper administration, application, interpretation and modification of the requirements contained within the Connecticut State Fire Safety Code.
- (b) The local fire marshal shall make the initial determination concerning compliance with the Connecticut State Fire Safety Code, except as expressly provided in the wording of a section or in subsection (c) of this section. A decision of a local fire marshal may be appealed to the Codes and Standards Committee as provided in subsection (d) of this section.

- (c) The State Fire Marshal shall make the determination concerning compliance with the Connecticut State Fire Safety Code on state-owned property.
- (d) A decision of the local fire marshal or State Fire Marshal may be appealed to the Codes and Standards Committee in accordance with section 29-309 of the Connecticut General Statutes.

Sec. 104 Plan Submittal and Review

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 and this code.

Sec. 105 Building Permit Approval

The local fire marshal shall provide to the local building official certification in writing prior to the issuance of a building permit that the construction documents for any building, structure or use subject to the requirements of this code are in substantial compliance with the requirements of this code. Because of the 30-day time limit imposed by section 29-263 of the Connecticut General Statutes, the fire marshal shall notify the building official of the degree of compliance within that time period.

Sec. 106 Variations or exemptions

In accordance with section 29-296 of the Connecticut General Statutes, the State Fire Marshal may modify the requirements of the Connecticut State Fire Safety Code where the State Fire Marshal deems that strict compliance would entail practical difficulty or unnecessary hardship, or is otherwise adjudged unwarranted, provided any such variation or exemption or approved equivalent or alternative compliance shall, in the opinion of the State Fire Marshal, secure the public safety.

Sec. 107 Inspections

- (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 the Connecticut State Fire Safety Code within their jurisdictions.
- (b) 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, specifications and this code.
- (c) The minimum requirements for the frequency of inspections as prescribed in section 29-305 of the Connecticut General Statutes shall be as follows: Note; the definitions for the classification of the occupancies is found in Part III Section 202 of this code.
 - 1. Annual inspections for the occupancy classifications all R Residential, A-1, A-2, E, H-1, I-1, M selling consumer fireworks (1.4G), H-3 containing consumer fireworks (1.4G).
 - 2. Inspections every two years for the occupancy classifications A-3, H-2, I-2, I-3, I-4, B-Medical, B-College.

- 3. Inspections every three years for occupancy classifications B, H-3, M, S-1, A-4, A-5.
- 4. Inspections every four years for the occupancy classifications F-1, F-2, H-4, H-5, S-2, U.

Sec. 108 Acceptance of Building Official Reports

The State Fire Marshal or local fire marshal may accept the reports of the building official concerning a code compliance review or inspection in lieu of conducting the review or inspection himself or herself.

Sec. 109 Certificate of Occupancy Approval

The local fire marshal shall provide to the local building official certification in writing that prior to the occupancy of any building, structure or use subject to the requirements of this code, such building, structure or use is in substantial compliance with the requirements of this code.

Sec. 110 Application

- (a) Part I and Part II of this code shall apply to all occupancies and uses located within a building or structure.
- (b) For building permit applications made on or after the effective date of this code, Part III of this code shall apply to:
 - (1) The design and construction of new buildings, structures or portions thereof,
 - (2) Buildings, structures or portions thereof undergoing repairs, alterations and additions,
 - (3) Buildings, structures or portions thereof undergoing a change of occupancy or use as specified in "Changes of Occupancy or Use" in Part I of this code, and
 - (4) For existing occupancies subject to an abatement order for violations of Part IV of this code, only new fire protection systems, and electrical and mechanical system work.
- (c) Part III of this code shall be applicable to buildings, structures or portions thereof for which application for a building permit was made on or after December 31, 2005.
 - (1) For those buildings, structures, or portions thereof which are under the purview of an edition of the Connecticut State Fire Safety Code promulgated on or after December 31, 2005 whose requirements are different than those of this code, the requirements of the previous edition of the code shall prevail unless one of the provisions is Section 110 of this code.
- (d) Part IV of this code shall only apply to occupancies and uses located within buildings and structures or portions thereof that existed prior to December 31, 2005.

Sec. 111 Changes of Occupancy or Use

In any building, structure or portion thereof, whether or not a physical alteration is needed, a change made in the use or occupancy that would place the building or structure in a different division of the same group or occupancy or in a different group of occupancies shall not be permitted unless the structure, building or portion thereof conforms with the requirements of this code that apply to new construction for the proposed new use. A change of tenants or ownership shall not be construed to be a change of occupancy classification where the nature of use and assigned occupancy classification remain the same.

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Part II—General

Sec. 201 Application

This Part shall apply to all occupancies and uses located within a building or structure.

When a requirement differs between this code and a referenced code or standard, the requirement of this code shall apply. Where the extent of the reference of a referenced code or standard includes subject matter that is within the scope of this code, the provisions of this code, as applicable, shall take precedence over the provisions in the referenced code or standard.

Sec. 202 Referenced Publications

The documents or portions thereof listed in Chapter 80 of the International Fire Code[®] and Chapter 2 of NFPA 101[®], Life Safety Code, as referenced within those codes, except as amended in Section 202.1, shall be considered part of the requirements of those codes to the extent called for by those codes.

(Add) Sec. 202.1 Amended International Fire Code and NFPA 101 Life Safety Code ref	erenced
publications	

NFPA	tional Fire Protection Association atterymarch Park Box 9101 incy, MA 02269-9101	
Standard reference		
number	Title	
(Add) NFPA 2	Hydrogen Technologies Code, 2011 edition	
(Amd) NFPA 30	Flammable and Combustible Liquids Code; 2018 edition	
(Amd) NFPA 30A	Code for Motor Fuel Dispensing Facilities and Repair Garages, 2018 edition. Standard for Acetylene Cylinder Charging Plants, 2012 edition	
(Amd) NFPA 51A		
(Add) NFPA 54	National Fuel Gas Code, 2015 edition	
(Add) NFPA 56	Fire and Explosion Prevention During Cleaning and Purging Flammable Gas Piping Systems, 2014 edition	
(Amd) NFPA 70®	National Electrical Code®, 2017 edition as amended by the State Building Code	
(Amd) NFPA 99	Health Care Facilities Code, 2015 edition	
(Amd) NFPA 409	Standard on Aircraft Hangars, 2011 edition	
(Amd) NFPA 505	Fire Safety Standard for Powered Industrial Trucks Including Type Designations, Areas of Use, Conversions, Maintenance and Operations, 2013 edition	
(Amd) NFPA 720	Standard for the Installation of Carbon Monoxide (CO) Detection and Warning Equipment, 2015 edition	
(Amd) NFPA 1124	Code for the Manufacture, Transportation, Storage, and Retail Sales of Fireworks and Pyrotechnic Articles, 2006 edition	

<i></i>	
(Amd) NFPA 2001	Standard on Clean Agent Fire Extinguishing Systems, 2015 edition
	Standard on Lildan Adont Fird Extinduishind Systems 2005 odition
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UL	Underwriters Laboratories LLC 333 Pfingsten Road Northbrook, IL. 60062	
Standard reference		
number	Title	
(Add) UL 2034-08	Single and Multiple Station Carbon Monoxide Alarms with revisions	
	through February 2009	
(Add) UL 2075-2013	Standard for Gas and Vapor Detectors and Sensors	

Part III—New Construction, Renovations, or Change of Use and New Buildings

Amendments to the 2015 International Fire Code

CHAPTER 1 ADMINISTRATION

(Del) **101.1 Scope and general provisions.** Delete section.

(Add) **101.1 Application.** This Part shall apply to all buildings or structures, or portions thereof, constructed on or after December 31, 2005, renovated, altered or undergoing a change of occupancy.

Where the provisions of Part III conflict with the building and fire safety codes that applied at the time of construction, the provisions for the codes that applied at the time of construction shall apply.

(Add) **101.1.1 Gas.** The International Fuel Gas Code[®] is not adopted by the State of Connecticut. Any references to the International Fuel Gas Code within the body of this code shall be considered references to requirements of NFPA 54, National Fuel Gas Code, NFPA 2, Hydrogen Technologies Code, and NFPA 58, Liquefied Petroleum Gas Code.

(Add) **101.1.2 Electrical.** Any references within the body of this code to the International Electrical Code shall be considered references to the 2017 NFPA 70, National Electrical Code[®], portion of the State Building Code.

(Add) **101.1.3 Alternative Compliance.** Any building, structure, or portion thereof, evaluated and determined to be in compliance with the 2015 International Existing Building Code portion of the State Building Code, shall be deemed in compliance with Part III of the Connecticut State Fire Safety Code. Those portions of an existing building or structure not affected by alteration, addition or change of occupancy shall comply with Part IV of this code.

(Del) 102.1 Construction and design provisions. Delete section.

(Del) 102.2 Administrative, operational and maintenance provisions. Delete section.

- (Del) 102.4 Application of building code. Delete section.
- (Del) 102.5 Application of residential code. Delete section.
- (Del) 102.6 Historical buildings. Delete section.

(Amd) 102.7 Referenced codes and standards. The codes and standards referenced in this

code shall be those that are listed in Chapter 80 and Part II of this code, and such codes and standards shall be considered part of the requirements of this code to the prescribed extent of each such reference.

- (Del) 102.8 Subjects not regulated by this code. Delete section.
- (Del) 102.9 Matters not provided for. Delete section.
- (Del) SECTION 103 DEPARTMENT OF FIRE PREVENTION. Delete section.
- (Del) 104.1 General. Delete section.
- (Del) 104.2 Applications and permits. Delete section.
- (Del) 104.3 Right of entry. Delete section.
- (Del) 104.4 Identification. Delete section.
- (Del) 104.5 Notices and orders. Delete section.
- (Del) 104.6 Official records. Delete section.
- (Del) 104.7.2 Technical assistance. Delete section.
- (Del) 104.8 Modifications. Delete section.
- (Del) 104.10 Fire investigations. Delete section.
- (Del) 104.11 Authority at fires and other emergencies. Delete section.
- (Del) SECTION 105 PERMITS. Delete section.
- (Del) SECTION 106 INSPECTIONS. Delete section.
- (Del) SECTION 107 MAINTENANCE. Delete section.
- (Del) SECTION 108 BOARD OF APPEALS. Delete section.
- (Del) SECTION 109 VIOLATIONS. Delete section.
- (Del) SECTION 110 UNSAFE BUILDINGS. Delete section.
- (Del) SECTION 111 STOP WORK ORDERS. Delete section.

CHAPTER 2 DEFINITIONS

(Amd) 202 General definitions.

(Add) **APPROVED AGENCY.** An established and recognized agency regularly engaged in conducting tests or furnishing inspection services, when such agency has been approved. Officials licensed in accordance with the provisions of section 29-262 of the Connecticut General Statutes, and employed by the jurisdiction in which the building or structure is being constructed, shall be considered an approved agency for the portions of this code also regulated by the Connecticut State Building Code.

(Add) **GROUP R-1 BED AND BREAKFAST ESTABLISHMENT.** A building that does not qualify as a one- or two-family dwelling unit in accordance with Section 101.2 of the State Building Code and contains only the owner's dwelling unit and guest rooms without permanent provisions for cooking with a total building occupant load of not more than 16 persons.

(Add) **BULK MERCHANDISING RETAIL BUILDING.** A building exceeding 12,000 square feet (1,115 m²) in area in which the sales area includes the storage of combustible materials on pallets, in solid piles, or in racks in excess of 12 feet (3,658 mm) in storage height.

(Amd) **FIREWORKS.** Any composition or device for the purpose of producing a visible or an audible effect for entertainment purposes by combustion, *deflagration* or *detonation* that meets the definition of 1.4G fireworks or 1.3G fireworks. See also section 29-356 of the Connecticut General Statutes.

Fireworks, 1.4G. Small fireworks devices containing restricted amounts of pyrotechnic composition designed primarily to produce visible or audible effects by combustion. Such 1.4G fireworks which comply with the construction, chemical composition and labeling regulations of the DOTn for Fireworks, UN 0336, and the U.S. Consumer Product Safety Commission as set forth in CPSC 16 CFR Parts 1500 and 1507, are not *explosive materials* for the purposes of this code.

Fireworks, 1.3G. Large fireworks devices, which are *explosive materials*, intended for use in fireworks displays and designed to produce audible or visible effects by combustion, *deflagration* or *detonation*. Such 1.3G fireworks include, but are not limited to, firecrackers containing more than 130 milligrams (2 grains) of explosive composition, aerial shells containing more than 40 grams of pyrotechnic composition and other display pieces which exceed the limits for classification as 1.4G fireworks. Such 1.3G fireworks are also described as Fireworks, UN 0335 by the DOTn.

(Amd) **FIRE CODE OFFICIAL.** The local fire marshal or State Fire Marshal charged with the enforcement of this code, or his or her duly authorized representative.

(Amd) **FOSTER CARE FACILITIES.** Facilities that provide care to more than three children, 3 years of age or younger.

(Add) **GUEST ROOM.** A space in a Group R-1 structure providing sleeping accommodations in one room, or in a series of closely associated rooms.

(Add) **HOTEL.** A building containing six or more guest rooms, intended or designed to be used, or which are used, rented or hired out to be occupied or which are occupied for sleeping purposes by guests.

(Amd) **LODGING HOUSE.** A building that does not qualify as a one- or two-family dwelling unit in accordance with Section 101.2 and that contains only: The owner's dwelling unit and guest rooms without permanent provisions for cooking, with a total building occupant load of not more than 16 persons (see Section 310.3.1).

(Add) **NIGHT CLUB.** A place that is open at night, has music, dancing, or a show, and may serve alcoholic drinks and food.

OCCUPANCY CLASSIFICATION:

(Amd) **Group E, day care facilities.** This group includes buildings and structures or portions thereof occupied by more than six children 3 years of age or older who receive educational, supervision or personal care services for fewer than 24 hours per day.

(Del) Five of fewer children. Delete

(Del) Five or fewer children in a dwelling unit. Delete

(Add) **Group E, day care facilities, six or fewer children.** A facility having six or fewer children receiving such day care shall be classified as part of the primary occupancy.

(Add) **Group E, day care facilities, six or fewer children in a dwelling unit.** As defined in subdivision (3) of subsection (a) of section 19a-77 of the Connecticut General Statutes, a family child care home shall be classified as Group R-3 or shall comply with the 2015 International Residential Code portion of the State Building Code in accordance with Section 101.2.

Note the following two (2) Amendments: Residential Group R-4, Four to 16 persons receiving care; and Residential Group R-3 Three or fewer persons receiving care are located under the **Institutional Group I-1** heading.

(Amd) **Residential Group R-4, Four to 16 persons receiving care.** A facility housing not fewer than four and not more than 16 persons receiving custodial care shall be classified as R-4.

(Amd) **Residential Group R-3 Three or fewer persons receiving care**. A facility with three or fewer persons receiving custodial care shall be classified as Group R-3 or shall comply with the 2015 International Residential Code portion of the State Building Code.

(Amd) **Institutional Group I-2.** Institutional Group I-2 occupancy shall include buildings and structures used for medical care on a 24-hour basis for more than three persons who are incapable of self-preservation. This group shall include, but not be limited to, the following:

Foster care facilities Detoxification facilities Hospitals Nursing homes Psychiatric hospitals

(Del) Five or fewer persons receiving medical care. Delete

(Add) **Institutional Group I-2, Three or fewer persons receiving care.** A facility with three or fewer persons receiving medical care shall be classified as Group R-3 or shall comply with the 2015 International Residential Code portion of the State Building Code.

(Add) **Institutional Group I-2**, **Alternative compliance for small I-2 homes.** See Section 407.13 for alternative compliance provisions for Group I-2 homes serving four to six persons who are incapable of self-preservation.

(Amd) **Institutional Group I-3.** Institutional Group I-3 occupancy shall include buildings and structures that are inhabited by more than three persons who are under restraint or security. A Group I-3 facility is occupied by persons who are generally incapable of self-preservation due to security measures not under the occupants' control. This group shall include, but not be limited to, the following:

Correctional centers Detention centers Jails Prerelease centers Prisons Reformatories

Buildings of Group I-3 shall be classified as one of the five following occupancy conditions:

Condition 1. This occupancy condition shall include buildings in which free movement is allowed from sleeping areas, and other spaces where access or occupancy is permitted, to the exterior via *means of egress* without restraint. A Condition 1 facility is permitted to be constructed as Group R.

Condition 2. This occupancy condition shall include buildings in which free movement is allowed from sleeping areas and any other occupied *smoke compartment* to one or more other *smoke compartments*. Egress to the exterior is impeded by locked *exits*.

Condition 3. This occupancy condition shall include buildings in which free movement is allowed within individual *smoke compartments*, such as within a residential unit comprised of individual *sleeping units* and group activity spaces, where egress is impeded by remote-controlled release of *means of egress* from such a *smoke compartment* to another *smoke compartment*.

Condition 4. This occupancy condition shall include buildings in which free movement is restricted from an occupied space. Remote-controlled release is provided to permit movement from *sleeping units*, activity spaces and other occupied areas within the *smoke compartment* to other *smoke compartments*.

Condition 5. This occupancy condition shall include buildings in which free movement is restricted from an occupied space. Staff-controlled manual release is provided to permit movement from *sleeping units*, activity spaces and other occupied areas within the *smoke compartment* to other *smoke compartments*

(Amd) **Institutional Group I-4**, **day care facilities.** Institutional Group I-4 occupancy shall include buildings and structures occupied by more than six persons of any age who receive custodial care for fewer than 24 hours per day by persons other than parents or guardians or relatives by blood, marriage or adoption, and in a place other than the home of the person cared for. This group shall include, but not be limited to, the following:

Adult day care Child day care

(Amd) **Institutional Group I-4, Classification as Group E.** A child day care facility that provides care for more than six but no more than 100 children 3 years or less of age, where the rooms in which the children are cared for are located on the level of exit discharge serving such rooms and each of these child care rooms has an exit door directly to the exterior, shall be classified as Group E.

(Del) Five of fewer occupants receiving care. Delete

(Del) Five of fewer occupants receiving care in a dwelling unit. Delete

(Add) **Institutional Group I-4 day care facilities**, **six or fewer persons receiving care.** A facility having six or fewer persons receiving custodial care shall be classified as part of the primary occupancy.

(Add) **Institutional Group I-4 day care facilities, six or fewer children of any age receiving care in a dwelling unit.** As defined in subdivision (3) of subsection (a) of section 19a-77 of the Connecticut General Statutes, a family child care home shall be classified as Group R-3 or shall comply with the 2015 International Residential Code portion of the State Building Code.

(Amd) **Residential Group R-1.** Residential occupancies containing sleeping units in which the occupants are primarily transient in nature, including:

Bed and breakfast establishments Boarding houses with more than six occupants Congregate living facilities with more than six occupants Hotels Motels (Add) **Residential Group R-1 bed and breakfast establishments.** A building that the owner occupies or that is adjacent to a building that the owner occupies as his/her primary place of residence, has a total building occupant load of not more than 16 persons including the owner-occupants, and has no provisions for cooking or warming food in the guest rooms. A Group R-1 bed and breakfast establishment shall not be permitted within a mixed use building.

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

Apartment houses Boarding houses with more than six occupants Congregate living facilities with more than six occupants Convents Dormitories Fraternities and sororities Hotels Live/work units Monasteries Motels Vacation timeshare properties

(Amd) **Residential Group R-3.** Residential Group R-3 occupancies where the occupants are primarily permanent in nature and not classified as Group R-1, R-2, R-4 or I, including:

Buildings that do not contain more than two dwelling units, with not more than six (6) lodgers or boarders per dwelling unit.

Boarding houses with six or fewer occupants where personal care services are not provided.

Care facilities in accordance with Section 308.3.4, 308.4.2, or 308.6.4 of the 2015 International Building Code portion of the State Building Code.

Congregate living facilities with six or fewer occupants where personal care services are not provided.

(Amd) **Residential Group R-4.** Residential Group R-4 occupancy shall include buildings, structures or portions thereof for more than 3 but not more than 16 occupants, excluding staff, who reside on a 24-hour basis in a supervised residential environment and receive custodial care. Buildings of Group R-4 shall be classified as one of the occupancy conditions specified in Section 310.6.1 or 310.6.2 of the 2015 International Building Code portion of the State Building Code. The persons receiving care are capable of self-preservation. This group shall include, but not be limited to, the following:

Alcohol and drug centers Assisted living facilities Congregate care facilities Group homes Halfway houses Residential board and care custodial care facilities Social rehabilitation facilities

Group R-4 occupancies shall meet the requirements for construction as defined for Group R-3, except as otherwise provided for in the State Building Code.

(Add) PLANS AND SPECIFICATIONS. See Construction Documents.

(Add) **PLATFORM.** A raised area within a building used for worship, the presentation of music, plays or other entertainment; the head table for special guests; the raised area for lecturers and speakers; boxing and wrestling rings; theatre-in-the round stages; and similar purposes wherein there are no overhead hanging curtains, drops, scenery or stage effects other than lighting and sound. A temporary platform is one installed for not more than 30 days.

Exception: Curtains suspended from overhead but which open and close in a horizontal manner shall be permitted at platforms.

(Add) **SPRINLKLERS AND FOUNTAINS.** See sections 29-356 and 29-357 of the Connecticut General Statutes.

- (1) "Sparklers" means a wire or stick coated with pyrotechnic composition that produces a shower of sparks upon ignition.
- (2) "Fountain" means any cardboard or heavy paper cone or cylindrical tube containing pyrotechnic mixture that upon ignition produces a shower of colored sparks or smoke. "Fountain" includes, but is not limited to, (A) a spike fountain, which provides a spike for insertion into the ground, (B) a base fountain which has a wooden or plastic base for placing on the ground, or (C) a handle fountain which is a handheld device with a wooden or cardboard handle.

(Amd) **SPECIAL AMUSEMENT BUILDING.** A special amusement building is any temporary or permanent building or portion thereof that is occupied for amusement, entertainment or education purposes and that contains a device or system that conveys passengers or provides a walkway along, around or over a course in any direction so arranged that the means of egress path is not readily apparent due to visual or audio distractions or is intentionally confounded or is not readily available because of the nature of the attraction or mode of conveyance through the building or structure.

Exception: Children's play structures that do not exceed 10 feet in height and do not have an aggregate horizontal projection in excess of 300 square feet.

C H A P T E R 3 GENERAL PRECAUTIONS AGAINST FIRE

(Del) Section 301.2 Permits. Delete section.

(Del) Section 303 Asphalt Kettles. Delete section.

(Del) Section 304 Combustible Waste Materials. Delete section.

(Del) Section 305 Ignition Sources. Delete section.

(Del) Section 306 Motion Picture Projection Rooms. Delete section.

(Del) Section 307 Outdoor Burning, Recreational Fires and Portable Outdoor Fireplaces. Delete section.

(Del) Section 308 Open Flames. Delete section.

(Del) Section 309 Powered Industrial Trucks. Delete section.

(Del) Section 310 Smoking. Delete section.

(Del) Section 311 Vacant Premises. Delete section.

(Del) Section 313 Fueled Equipment. Delete section.

(Del) Section 314 Indoor Displays. Delete section.

(Del) Section 315 General Storage. Delete section.

(Del) Section 318 Laundry Carts. Delete section.

(Del) **CHAPTER 4 EMERGENCY PLANNING AND PREPAREDNESS**. Delete Chapter 4 in its entirety and replace with the following:

C H A P T E R 4 SPECIAL DETAILED REQUIREMENTS BASED UPON USE AND OCCUPANCY

(Amd) **401.1 Detailed use and occupancy requirements.** In addition to the occupancy and construction requirements in this code, the provisions of Chapter 4 of the 2015 International Building Code as amended in this Chapter shall apply to the special uses and occupancies described within. The definitions referenced in this section shall be those in this code and Chapter 2 of the 2015 International Building Code portion of the State Building Code.

(Del) 402.1.1 Open space. Delete section.

(Del) 402.1.2 Open mall building perimeter line. Delete section.

(Del) 402.4 Construction. Delete section.

- (Amd) **403.1 Applicability.** High-rise buildings shall comply with Sections 403.2 through 403.6. **Exception:** The provisions of Sections 403.2 through 403.6, inclusive, shall not apply to the following buildings and structures:
 - 1. Airport traffic control towers in accordance with Section 412.3.
 - 2. Open parking garages in accordance with Section 406.5.
 - 3. Buildings with a Group A-5 occupancy as defined in Section 202 of this code.
 - 4. Special industrial occupancies in accordance with Section 503.1.1 of the 2015 International Building Code portion of the State Building Code.
 - 5. Buildings with a Group H-1, H-2 or H-3 occupancy in accordance with Section 415.

(Del) 403.2 Construction. Delete section.

(Amd) **403.3.3 Secondary water supply.** An automatic secondary on-site water supply having a capacity not less than the hydraulically calculated sprinkler demand, including the hose stream requirement, shall be provided for high-rise buildings assigned to Seismic Design Category D, E or F as determined by Section 1613 of the 2015 International Building Code portion of the State Building Code, as applicable. An additional fire pump shall not be required for the secondary water supply unless needed to provide the minimum design intake pressure at the suction side of the fire pump supplying the automatic sprinkler system. The secondary water supply shall have a duration of not less than 30 minutes.

(Amd) **403.4.6 Fire command.** A fire command center complying with Section 508 shall be provided in a location approved by the fire department.

(Amd) **403.4.8 Standby power.** A standby power system complying with Section 604 shall be provided for standby power loads as specified in Section 403.4.8.3. Where elevators are provided in a high-rise building for accessible means of egress, fire service access or occupant self-evacuation, such elevators shall also comply with Section 1009.4 or Sections 3007 or 3008 of the 2015 International Building Code portion of the State Building Code, as applicable.

(Add) **403.4.9 Emergency power.** An emergency power system complying with Section 604 shall be provided for emergency loads as specified in Section 403.4.8.4.

(Amd) **403.6 Elevators.** Elevator installation and operation in high-rise buildings shall comply with Chapter 30 of the 2015 International Building Code portion of the State Building Code and Sections 403.6.1 and 403.6.2.

(Add) **404.1.2 Exception.** The provisions of Section 404 shall not apply to vertical openings in Group R-1 bed and breakfast establishments.

(Del) 405.2 Construction requirements. Delete section.

(Amd) **405.8 Standby power.** A standby power system complying with Section 604 shall be provided for standby power loads as specified in Section 405.8.1.

(Amd) **405.8.1 Standby power loads.** The following loads are classified as standby power loads:

- 1. Smoke control system.
- 2. Ventilation and automatic fire detection equipment for smoke-proof enclosures.
- 3. Fire pumps.

(Add) **405.10 Emergency power.** An emergency power system complying with Section 604 shall be provided for standby power loads as specified in Section 405.8.2.

(Amd) **406.3.4.1 Separation.** Separations shall comply with the following:

- 1. The private garage shall be separated from the dwelling unit and its attic area by means of Type X gypsum board, not less than 5/8-inch (15.9 mm) in thickness, applied to the garage side. Garages beneath habitable rooms shall be separated from all habitable rooms above by not less than a 5/8-inch (15.9 mm) Type X gypsum board or equivalent and 5/8-inch (15.9 mm) Type X gypsum board applied to structures supporting the separation from habitable rooms above the garage. Door openings between a private garage and the dwelling unit shall be equipped with either solid wood doors or solid or honeycomb core steel doors not less than 1³/₈ inches (34.9 mm) in thickness, or doors in compliance with Section 716.5.3 of the 2015 International Building Code portion of the State Building Code with a fire protection rating of not less than 20 minutes. Openings from a private garage directly into a room used for sleeping purposes shall not be permitted. Doors shall be self-closing and self-latching.
- 2. Ducts in a private garage and ducts penetrating the walls or ceilings separating the dwelling unit, including its attic area, from the garage shall be constructed of sheet steel of not less than 0.019 inches (0.48 mm) in thickness and shall have no openings into the garage.
- 3. A separation is not required between a Group R-3 and U carport, provided the carport is entirely open on two or more sides and there are no enclosed areas above.
- (Del) 406.4.6 Mixed occupancy separation. Delete section.
- (Del) 406.5.1 Construction. Delete section.
- (Del) 406.5.3 Uses. Delete section.
- (Del) 406.5.4 Area and height. Delete section.
- (Del) 406.5.5 Area and height increases. Delete section.
- (Del) 406.5.6 Fire separation distance. Delete section.
- (Del) 406.6.1 Heights and areas. Delete section.
- (Del) 406.7.1 Vehicle fueling pad. Delete section.
- (Del) 406.8.1 Mixed uses. Delete section.

(Amd) **407.3.1 Corridor doors.** Corridor doors, other than those in a wall required to be rated by Section 704.4 or for the enclosure of a vertical opening or an exit, shall not have a required fire protection rating and shall not be required to be equipped with self-closing or automatic-closing devices, but shall provide an effective barrier to limit the transfer of smoke and shall be equipped with positive latching. Roller latches are not permitted. Other doors shall conform to Section 716.5 of the 2015 International Building Code portion of the State Building Code.

(Add) **407.11 Laboratories.** In addition to other requirements of this code, laboratories employing quantities of flammable, combustible or hazardous materials that exceed exempt amounts shall be protected in accordance with NFPA 99.

(Add) **407.12 Medical gas systems.** Medical gas systems shall comply with Chapter 12 of the 2015 International Plumbing Code portion of the State Building Code and Section 5306 of this code.

(Add) **407.13 Small I-2 homes.** Group I-2 homes that serve four to six persons who are incapable of self-preservation that comply with the alternative provisions of Section 407.13 shall be considered to be code compliant for the systems itemized. Other applicable provisions of the code shall also apply.

(Add) **407.13.1 Height, area and construction type.** Height and area shall comply with the State Building Code except as provided in Section 407.13.1.1.

(Add) **407.13.1.1 Type VB construction.** Type VB construction is permitted for a one story building not more than 4500 square feet in area where the unoccupied attic space is protected by automatic sprinklers or provided with heat detection in the attic connected to the building fire alarm system.

(Add) **407.13.2 Size of doors.** The minimum width of all door openings shall provide a clear width of 34 inches (864 mm). Clear openings of doorways with swinging doors shall be measured between the face of the door and the stop, with the door open 90 degrees (1.57 rad).

(Add) **407.13.2.1 Door latches.** Every door latch to closets, storage areas, and other similar spaces or such areas shall be such that the clients can open the door from inside the space or area.

(Add) **407.13.2.2 Client sleeping room and bathroom doors.** Client sleeping room and bathroom door locks shall be designed to allow the opening of the locked door from the outside by an opening device readily accessible by staff in an emergency.

(Add) **407.13.3 Exterior ramps**. Exterior ramps in accordance with Section 1027 shall be permitted for small I-2 homes.

(Add) **407.13.4 Means of escape.** In addition to the means of egress requirements of Chapter 10, all client sleeping rooms shall have a means of escape in accordance with Section 1030.

(Add) **407.13.5 Sleeping room walls.** All client sleeping room walls separating the sleeping rooms from the hallways and other habitable or occupiable spaces of the building shall be constructed as smoke partitions in accordance with Section 710 of the 2015 International Building Code portion of the State Building Code.

(Add) **407.13.6 Separation of sleeping area.** One door directly to the exterior at the level of exit discharge from the hallway or client sleeping room where the sleeping area and its hallway are separated from other habitable spaces such as living areas and kitchens by a smoke partition in accordance with Section 710 of the 2015 International Building Code portion of the State Building Code and the doorway to the sleeping area hallway from such spaces has a minimum 20-minute fire protection rating and is self-closing or automatic-closing.

(Add) **407.13.7 Automatic fire sprinkler system.** Buildings shall be equipped with a NFPA 13R sprinkler system or a NFPA 13D sprinkler system with a 30-minute water supply. All storage, habitable and occupiable rooms as well as kitchens and closets shall be sprinklered. Sprinkler valves shall be electrically supervised and connected to the building fire alarm system.

Exception: Attached unheated garages used only for storage provided it is separated from the remainder of the structure by 1-hour fire resistive construction with any openings protected by 45-minute opening protectives. The garage shall also be provided with heat detection connected to the building fire alarm system.

(Add) **407.13.8 Fire alarm and detection systems.** Fire alarm and detection systems shall be installed in accordance with Section 907.2.6.

(Add) **407.13.8.1 Detection.** Smoke detection shall be provided in all sleeping rooms and common spaces except kitchens and bathrooms. Heat detection shall be provided as specified in Section 407.13.

(Add) **407.13.8.2 Carbon monoxide detectors.** Carbon monoxide detectors shall be provided in accordance with Section 915.

(Add) **407.13.9 Attic space access.** An opening not less than 36 inches by 36 inches (914 mm by 914 mm) shall be provided to any attic area having a clear height of over 30 inches (762 mm). Clear headroom of not less than 30 inches (762 mm) shall be provided at the attic space at or above the opening.

Exception: In conversions of a single family home, a rough framed opening of 30 inches by 22 inches (762 mm by 559 mm) shall be permitted from a hallway or other readily accessible location.

(Add) **407.13.10 Standby power.** Standby power shall be provided for small I-2 homes in accordance with Section 604.1.

(Del) 410.3.1 Stage construction. Delete section.

(Del) 410.3.1.1 Stage height and area. Delete section.

(Del) 410.3.2 Technical production areas, galleries, gridirons and catwalks. Delete section.

(Del) 410.3.6 Scenery. Delete section.

(Del) 410.4 Platform construction. Delete section.

(Del) 412.3.1 Construction type. Delete section.

(Add) **412.3.9 Standby power.** A standby power system that conforms to Section 604 shall be provided in airport control towers more than 65 feet (19,812 mm) in height. Power shall be provided to the following equipment:

- 1. Pressurization equipment, mechanical equipment and lighting.
- 2. Elevator operating equipment.
- 3. Fire alarm and smoke detection systems.

(Del) 412.3.8 Accessibility. Delete section.

(Del) 412.4.1 Exterior Walls. Delete section.

(Del) 412.4.2 Basements. Delete section.

(Del) 412.4.3 Floor surface. Delete section.

(Amd) **414.1.3 Information Requirements** A report shall be submitted to the *fire code official* identifying the maximum expected quantities of hazardous materials to be stored, used in a *closed system* and used in an *open system*, and subdivided to separately address hazardous material classification categories based on Tables 5003.1.1 (1) and 5003.1.1 (2) of Part III of this code. The methods of protection from such hazards, including but not limited to *control areas*, fire protection systems and Group H occupancies shall be indicated in the report and on the *construction documents*. The opinion and report shall be prepared by a qualified person, firm or corporation *approved* by the *fire code official* and provided without charge to the enforcing agency. For buildings and structures with an occupancy in Group H, separate floor plans shall be submitted identifying the locations of anticipated contents and processes so as to reflect the nature of each occupied portion of every building and structure.

(Amd) **416.1 General.** The provisions of this section shall apply to the construction, installation and use of buildings and structures, or parts thereof, for the application of flammable finishes. Such construction and equipment shall comply with Chapter 24 of this code.

(Amd) **416.4 Spray booths.** Spray booths shall be designed and constructed in accordance with Chapter 24 of this code.

(Amd) **419.1 General.** A live/work unit shall comply with Sections 419.1 to 419.9, inclusive.

Exception: Dwelling or sleeping units that include an office that is less than 10 percent of the area of the dwelling unit may be classified as dwelling units with accessory occupancies.

(Amd) **419.2 Occupancies.** Live/work units shall be classified as a Group R-2 occupancy. Separation requirements found in Section 420 shall not apply within the live/work unit where the live/work unit is in compliance with Section 419. Nonresidential units which would otherwise be classified as either a Group H or S occupancy shall not be permitted in a live/work unit.

Exception: Storage shall be permitted in the live/work unit provided the aggregate area of storage in the nonresidential portion of the live/work unit shall be limited to 10 percent of the space dedicated to the nonresidential activities.

(Del) 419.6 Structural. Delete section.

(Del) 419.7 Accessibility. Delete section.

(Del) 419.8 Ventilation. Delete section.

(Del) 419.9 Plumbing facilities. Delete section.

(Amd) **421.1 General.** Where required by Section 2309.3.1.2, hydrogen cutoff rooms shall be designed and constructed in accordance with Sections 421.1 through 421.8 of the 2015 International Building Code portion of the State Building Code.

(Amd) **421.4 Design and construction.** Hydrogen cutoff rooms shall be classified with respect to occupancy in accordance with Section 302.1 of the 2015 International Building Code portion of the State Building Code, and separated from other areas of the building by not less than 1-hour fire barriers constructed in accordance with Section 707 of the 2015 International Building Code portion of the State Building Code or horizontal assemblies constructed in accordance with Section 711 of such code, or both.

(Amd) **421.7 Explosion control.** Explosion control shall be provided in accordance with Section 414.5.1.

(Amd) **421.8 Standby power.** Mechanical ventilation and gas detection systems shall be connected to a standby power in accordance with Section 604.

(Add) **422.6 Laboratories.** In addition to other requirements of this code, laboratories employing quantities of flammable, combustible or hazardous materials that exceed exempt amounts shall be protected in accordance with NFPA 99.

(Add) **422.7 Medical gas systems.** Medical gas systems shall comply with Chapter 12 of the 2015 International Plumbing Code portion of the State Building Code and Section 5306 of this code.

(Del) 424.5 Area limits. Delete section.

(Add) SECTION 427 – GROUP E

(Add) **427.1 Proximity to the level of exit discharge.** Proximity to the level of exit discharge shall be provided in accordance with Sections 427.1.1 and 427.1.2. For the purpose of this section, 'normally occupied' shall include such spaces as libraries, cafeterias, gymnasiums and multipurpose rooms. This does not include administrative offices, healthcare rooms or special one-on-one rooms.

(Add) **427.1.1 Preschool, kindergarten and first grade.** Rooms normally occupied by preschool, kindergarten or first-grade students shall be located on a level of exit discharge.

Exception: Rooms located on levels other than a level of exit discharge shall be permitted to be normally occupied by preschool, kindergarten or first-grade students where such rooms are provided with an independent stairway or ramp directly from the room dedicated for use by the preschool, kindergarten or first-grade students.

(Add) **427.1.2 Second grade.** Rooms normally occupied by second-grade students shall be located not more than one story above a level of exit discharge.

Exception: Rooms located on levels other than one story above a level of exit discharge shall be permitted to be normally occupied by second-grade students where such rooms are provided with an independent stairway or ramp from the room dedicated for use by the second-grade students.

(Add) **427.2 Subdivision of building spaces.** Group E occupancies shall be subdivided into compartments by smoke barriers complying with Section 709 of the 2015 International Building Code portion of the State Building Code where one or both of the following conditions exist:

1. The maximum area of a compartment, including the aggregate area of all floors having a common atmosphere, exceeds 30,000 square feet (2787 m²).

2. The length or width of the occupancy exceeds 300 feet (91 m).

Exceptions:

1. Where all spaces normally subject to student occupancy have not less than one door opening directly to the outside or to an exterior or exit access balcony or corridor in accordance with Section 1019.

2. Buildings protected throughout by an approved, supervised automatic fire sprinkler in accordance with Section 903.3.1.1.

(Add) **427.2.1 Area of smoke compartments**. The area of any smoke compartment required by Section 427.2 shall not exceed 30,000 square feet (2787 m²) with no dimension exceeding 300 feet (91 m).

(Add) **427.3 Carbon monoxide detectors.** Pursuant to section 29-292 of the Connecticut General Statutes, carbon monoxide detection shall be provided as required by Section 915.

(Add) SECTION 428 MEZZANINES AND EQUIPMENT PLATFORMS.

(Add) **428.1 General.** Mezzanines shall comply with Section 428.2. Equipment platforms shall comply with Section 428.3.

(Add) **428.2 Mezzanines.** A mezzanine or mezzanines in compliance Section 428.2 shall be considered a portion of the story below. Such mezzanines shall not contribute to either the building area or number of stories as regulated by Section 503.1 of the 2015 International Building Code portion of the State Building Code. The area of the mezzanine shall be included in determining the fire area. The clear height above and below the mezzanine floor construction shall not be less than 7 feet.

(Add) **428.2.1 Area limitation.** The aggregate area of a mezzanine or mezzanines within a room shall not exceed one-third of the floor area of that room or space in which they are located. The enclosed portion of a room shall not be included in a determination of the floor area of the room in which the mezzanine is located. In determining the allowable mezzanine area, the area of the mezzanine shall not be included in the floor area of the room.

Where a room contains both a mezzanine and an equipment platform, the aggregate area of the two raised floor levels shall not be greater than two-thirds of the floor area of that room or space in which they are located.

Exceptions:

- 1. The aggregate area of mezzanines in buildings and structures of Type I or II construction for special industrial occupancies in accordance with Section 503.1.1 of the 2015 International Building Code portion of the State Building Code shall be not greater than two-thirds of the floor area of the room.
- 2. The aggregate area of mezzanines in buildings and structures of Type I or II construction shall be not greater than one-half of the floor area of the room in buildings and structures equipped throughout with an approved automatic sprinkler system in accordance with Section 903.3.1.1 and an approved emergency voice/alarm communication system in accordance with Section 907.5.2.2.

(Add) **428.2.2 Means of egress.** The means of egress for mezzanines shall comply with the applicable provisions of Chapter 10.

(Add) **428.2.3 Openness.** A mezzanine shall be open and unobstructed to the room in which such mezzanine is located except for walls not more than 42 inches (1,067 mm) in height, columns and posts.

Exceptions:

- 1. Mezzanines or portions thereof are not required to be open to the room in which the mezzanines are located, provided that the occupant load of the aggregate area of the enclosed space is not greater than 10.
- 2. A mezzanine having two or more exits or access to exits is not required to be open to the room in which the mezzanine is located.
- 3. Mezzanines or portions thereof are not required to be open to the room in which the mezzanines are located, provided that the aggregate floor area of the enclosed space is not greater than 10 percent of the mezzanine area.
- 4. In industrial facilities, mezzanines used for control equipment are permitted to be glazed on all sides.
- 5. In occupancies, other than Groups H and I, that are no more than two stories above grade plane and equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1, a mezzanine having two or more means of egress shall not be required to be open to the room in which the mezzanine is located.

(Add) **428.3 Equipment platforms.** Equipment platforms in buildings shall not be considered as a portion of the floor below. Such equipment platforms shall not contribute to either the building area or the number of stories as regulated by Section 503.1 of the 2015 International Building Code portion of the State Building Code. The area of the equipment platform shall not be included in determining the fire area in accordance with Section 903. Equipment platforms shall not be a part of any mezzanine and such platforms and the walkways, stairs, alternating tread devices and ladders providing access to an equipment platform shall not serve as a part of the means of egress from the building.

(Add) **428.3.1 Area limitation.** The aggregate area of all equipment platforms within a room shall not be greater than two-thirds of the area of the room in which they are located. Where an equipment platform is located in the same room as a mezzanine, the area of the mezzanine shall be determined by Section 428.2.1 and the combined aggregate area of the equipment platform and mezzanines shall not be greater than two-thirds of the floor area of the room in which they are located.

(Add) **428.3.2 Automatic sprinkler system.** Where located in a building that is required to be protected by an automatic sprinkler system, equipment platforms shall be fully protected by sprinklers above and below the platform, where required by the standards referenced in Section 903.3.

(Add) 428.3.3 Guards. Equipment platforms shall have guards where required by Section 1015.2.

(Add) SECTION 429 GROUP R-1 BED AND BREAKFAST ESTABLISHMENTS.

(Add) **429.1 Kitchens in Group R-1 bed and breakfast establishments.** Kitchens in Group R-1 bed and breakfast establishments shall be separated by ½-hour rated fire separation assemblies.

Exceptions:

- 1. When the kitchen is protected by a limited area sprinkler system.
- 2. When the kitchen is equipped with a listed residential range top extinguisher unit or an approved commercial kitchen hood with a listed, approved automatic fire suppression system.
- 3. The structural members supporting the rated assemblies shall not be required to be fire-resistance rated.

(Add) SECTION 430 INCIDENTAL USES.

(Add) **430.1 General.** Incidental uses located within single occupancy or mixed occupancy buildings shall comply with the provisions of this section. Incidental uses are ancillary functions associated with a given occupancy that generally pose a greater level of risk to that occupancy and are limited to those uses listed in Table 430.

Exception: Incidental uses within and serving a dwelling unit are not required to comply with this section.

(Add) **430.2 Occupancy classification.** Incidental uses shall not be individually classified in accordance with Section 302.1 of the 2015 International Building Code portion of the State Building Code. Incidental uses shall be included in the building occupancies within which they are located.

(Add) **430.3 Area limitations.** Incidental uses shall not occupy more than 10 percent of the building area of the story in which they are located.

(Add) **430.4 Separation and protection.** The incidental uses listed in Table 430 shall be separated from the remainder of the building or equipped with an automatic sprinkler system, or both, in accordance with the provisions of that table.

(Add) **430.4.1 Separation.** Where Table 430 specifies a fire-resistance-rated separation, the incidental uses shall be separated from the remainder of the building by a fire barrier constructed in accordance with Section 707 of the 2015 International Building Code portion of the State Building Code or a horizontal assembly constructed in accordance with Section 711 of the 2015 International Building Code portion of the State Building Code, or both. Construction supporting one hour fire barriers of horizontal assemblies used for incidental use separation in buildings of type IIB, IIIB and VB construction is not required to be fire resistance rated unless required by another section of this code or the State Building Code.

(Add) **430.4.2 Protection.** Where Table 430 permits an automatic fire-extinguishing system without a fire barrier, the incidental uses shall be separated from the remainder of the building by construction capable of resisting the passage of smoke. The walls shall extend from the top of the foundation or floor assembly below to the underside of the ceiling that is a component of a fire-resistance-rated floor assembly or roof assembly above or to the underside of the floor or roof sheathing, deck or slab above. Doors shall be self- or automatic-closing upon detection of smoke in accordance with Section 716.5.9.3 of the 2015 International Building Code portion of the State Building Code. Doors shall not have air transfer openings and shall not be undercut in excess of the clearance permitted in accordance with NFPA 80. Walls surrounding the incidental use shall not have air transfer openings unless provided with smoke dampers in accordance with Section 710.7 of the 2015 International Building Code.

(Add) **430.4.2.1 Protection limitation.** Where an automatic sprinkler system is provided in accordance with Table 430, only the space occupied by the incidental use need be equipped with such a system.

(Add) Table 430 Incidental Uses

ROOM OR AREA	SEPARATION AND/OR PROTECTION	
Furnace room where any piece of equipment	1 hour or provide automatic sprinkler system	
is over 400,000 Btu per hour input		
Rooms with any boiler over 15 psi and 10	1 hour or provide automatic sprinkler system	
horsepower		
Refrigerant machinery room	1 hour or provide automatic sprinkler system	
Hydrogen fuel gas rooms, not classified as	1-hour in Group B, F, M, S and U	
Group H	occupancies; 2-hours in Group A, E, I and R	
	occupancies	
Incinerator rooms	2 hours and automatic sprinkler system	
Paint shops, not classified as Group H,	2 hours; or 1 hour and provide automatic	
located in occupancies other than Group F	sprinkler system	
In Group E occupancies, laboratories and	1 hour or provide automatic sprinkler	
vocational shops not classified as Group H	system	
In Group I-2 occupancies, laboratories not	1 hour and provide automatic sprinkler system	
classified as Group H		
In ambulatory care facilities, laboratories not	1 hour or provide automatic sprinkler system	
classified as group H		
Laundry rooms over 100 square feet	1 hour or provide automatic sprinkler system	
In Groups I-2, laundry rooms over 100 square	1 hour	
feet		
Group I-3 cells and Group I-2 patient rooms	1 hour	
equipped with padded surfaces	4 h	
In Group I-2, physical plant maintenance	1 hour	
shops	4 have	
In ambulatory care facilities or group I-2	1 hour	
occupancies, waste and linen collection rooms with containers that have an aggregate		
volume of 10 cubic feet or greater		
In other than ambulatory care facilities and	1 hour or provide automatic sprinkler system	
group I-2 occupancies, waste and linen		
collection rooms over 100 square feet		
In ambulatory care facilities or group I-2	1 hour	
occupancies, storage rooms greater than 100		
square feet		
Stationary lead-acid battery systems having a	1 hour in Group B, F, M, S and U occupancies;	
liquid electrolyte capacity of more than 50	2 hours in Group A, E, I and R occupancies	
gallons for flooded lead-acid, nickel cadmium		
or VRLA, or more than 1,000 pounds for		
lithium-ion and lithium metal polymer used for		
facility standby power, emergency power or		
uninterruptable power supplies		
Storage rooms over 100 square feet	1 hour or provide automatic sprinkler system	
or SI: 1 square foot = $0.0929m_2$ 1 pound per square inch(psi) = 6.9 kPa 1 British thermal up		

For SI: 1 square foot = $0.0929m_2$, 1 pound per square inch(psi) = 6.9 kPa, 1 British thermal unit (Btu)=0.293 watts, 1 horsepower = 746 watts, 1 gallon = 3.785 L, 1 cubic foot = 0.0283 meters cubed

CHAPTER 5 FIRE SERVICE FEATURES

(Del) 501.2 Permits. Delete section.

(Del) SECTION 505 PREMISES IDENTIFICATION. Delete section.

(Del) SECTION 506 KEY BOXES. Delete section.

(Del) SECTION 507 FIRE PROTECTION WATER SUPPLIES. Delete section.

C H A P T E R 6 BUILDING SERVICES AND SYSTEMS

(Add) **601.3 Gas.** The International Fuel Gas Code is not adopted by the State of Connecticut. Any references to the International Fuel Gas Code within the body of this code shall be considered references to requirements of NFPA 54, National Fuel Gas Code, and NFPA 2, Hydrogen Technologies Code. These requirements apply to gas piping systems extending from the point of delivery to the inlet connections of appliances, the installation and operation of residential and commercial gas appliances and related accessories as covered by this code.

(Add) **604.2.17 Electric fire pumps.** Buildings provided with standby electrical power for the purpose of continuing operations or occupancy shall provide standby power in accordance with Article 701 of the 2017 NFPA 70, National Electrical Code, portion of the State Building Code for any electric fire pump installed to provide an adequate water supply or minimum operating pressure to a required automatic sprinkler system.

(Del) SECTION 607 ELEVATOR OPERATION, MAINTENANCE AND FIRE SERVICE KEYS. Delete Section

(Add) SECTION 607 ELEVATOR OPERATION, MAINTENANCE AND FIRE SERVICE KEYS

(Add) **607.1 State Elevator Code.** All elevators, dumbwaiters, material lifts, vertical and inclined platform lifts, inclined stairway chairlifts, limited-use/limited application elevators and escalators, including existing systems, shall comply with the regulations of the Department of Administrative Services adopted pursuant to chapter 538 of the Connecticut General Statutes as enforced by the State Elevator Inspector.

(Amd) **608.4 Room design and construction.** Enclosure of stationary battery systems shall comply with Table 509 of the 2015 International Building Code portion of the State Building Code. Battery systems may be in the same room with the equipment they support.

C H A P T E R 7 FIRE AND SMOKE PROTECTION FREATURES

(Amd) **701.1 Scope.** The provisions of this chapter shall govern maintenance of the materials, systems and assemblies used for structural fire resistance and fire-resistance-rated construction separation of adjacent spaces to safeguard against the spread of fire and smoke within a building and the spread of fire to or from buildings. In addition to the fire and smoke protection features of this code, the provisions of Chapter 7, *Fire and Smoke Protection Features*, of the State Building Code shall also apply.

C H A P T E R 8 INTERIOR FINISH, DECORATIVE MATERIALS AND FURNISHINGS

(ADD) SECTION 809 ACOUSTICAL CEILING SYSTEMS

(Add) **809.1 Acoustical ceiling systems.** The quality, design, fabrication and erection of metal suspension systems for acoustical tile and lay-in panel ceilings in buildings or structures shall conform to generally accepted engineering practice, the provisions of this chapter and other applicable requirements of this code.

(Add) **809.1.1 Materials and installation.** Acoustical materials complying with the *interior finish* requirements of Section 803 shall be installed in accordance with the manufacturer's recommendations and applicable provisions for applying *interior finish*.

(Add) **809.1.1.1 Suspended acoustical ceilings.** Suspended acoustical ceiling systems shall be installed in accordance with the provisions of ASTM C 635 and ASTM C 636.

(Add) **809.1.1.2 Fire-resistance-rated construction.** Acoustical ceiling systems that are part of fire-resistance rated construction shall be installed in the same manner used when the assembly was tested and shall comply with the provisions of Chapter 7 of the 2015 International Building Code portion of the State Building Code.

C H A P T E R 9 FIRE PROTECTION SYSTEMS

(Del) 901.3 Permits. Delete Section.

(Amd) **901.5 Installation acceptance tests.** Fire detection and alarm systems, fire-extinguishing systems, fire hydrant systems, fire standpipe systems, fire pump systems, private fire service mains and all other *fire protection systems* and appurtenances thereto shall be subject to acceptance tests as contained in the installation standards and as *approved* by the *fire code official*. Testing shall be in the presence of the *fire code official* or his or her representative at the expense of the owner or owner's representative.

(Del) 901.6 Inspection, testing and maintenance. Delete section.

(Del) 901.7 Systems out of service. Delete section.

(Del) 901.8 Removal or tampering with equipment. Delete section.

(Del) 901.9 Termination of monitoring service. Delete section.

(Amd) **903.1.1 Alternative protection.** In any occupancy where the character of fuel for fire is such that extinguishment or control of fire is accomplished by a type of alternative automatic extinguishing system complying with Section 904, such alternative system shall be permitted in lieu of an automatic sprinkler system and shall be installed in accordance with the applicable standard and *approved* by the *fire code official*.

(Amd) **903.2.1.2 Group A-2.** An *automatic sprinkler system* shall be provided for *fire areas* containing Group A-2 occupancies and intervening floors of the building where one of the following conditions exist:

1. The *fire area* exceeds 5,000 square feet (464.5 m²).

Exception: Existing restaurants in existing non-sprinklered buildings that were designated Use Group A-3 under a previous edition of the State Building Code that undergo addition, alteration or change of occupancy that results in an increase in the restaurant's fire area provided the proposed fire area does not exceed 12,000 square feet.

- 2. The *fire area* has an *occupant load* of 300 or more or where the occupant load exceeds 100 or more in the following assembly occupancies:
 - a. Dance halls
 - b. Discotheques
 - c. Nightclubs
 - d. Assembly occupancies with festival seating.
- 3. The *fire area* is located on a floor other than a *level of exit discharge* serving such occupancies.

(Add) **903.2.3.1. Statutory requirements.** An automatic sprinkler system shall be installed in Group E occupancies pursuant to Section 29-315 of the Connecticut General Statutes.

(Amd) **903.2.7 Group M.** An *automatic sprinkler system* shall be provided throughout buildings containing a Group M occupancy where one of the following conditions exists:

- 1. A Group M *fire area* exceeds 12,000 square feet (1,115 m²).
- 2. A Group M *fire area* is located more than three stories above grade plane.
- 3. The combined area of all Group M *fire areas* on all floors, including any mezzanines, exceeds 24,000 square feet (2,230 m²).
- 4. A Group M occupancy used for the display and sale of upholstered furniture or mattresses exceeds 5,000 square feet (464 m²).
- Throughout stories below the *level of exit discharge* where such stories have an area exceeding 2,500 square feet (232 m²) and are used for the sale, storage or handling of combustible goods or merchandise.

(Amd) **903.2.8 Group R.** An *automatic sprinkler system* installed in accordance with Section 903.3 shall be provided throughout all newly constructed buildings with a Group R *fire area* or in existing buildings that have a Group R *fire area* newly introduced by change of occupancy, occupancy group designation or by an addition.

Exceptions:

1. Group R-1 bed and breakfast establishments.

2. Existing buildings four stories or less in height undergoing a change of occupancy from a one- or two-family building or Group R-3 to Group R-2 containing not more than four *dwelling units* that does not involve an increase in height or area and where each *dwelling unit* has either:

2.1 An exit door directly to the exterior at a level of exit discharge,

2.2 Direct access to an exterior stair serving a maximum of two *dwelling units* on the same story, or

2.3 Direct access to an interior stair serving only that *dwelling unit* and separated from all other portions of the building with 1-hour fire-resistance-rated fire barriers.

3. Existing buildings converted prior to June 15, 1994 from a one- or two-family building or Group R-3 to Group R-2 containing not more than four *dwelling units*.

4. Horizontal additions containing a newly introduced Group R occupancy that are added to existing buildings shall have an *automatic sprinkler system* installed in the addition only if the addition is completely separated from the existing building by fire barriers with a minimum one-hour fire-resistance rating.

5. In a building with a maximum of two *dwelling units* where:

5.1 Each *dwelling unit* has a direct independent exit to grade.

5.2 The exit(s) and *dwelling unit(s)* are separated from any non-residential occupancy by a minimum 1-hour fire-resistive-rated separation.

5.3 The non-residential occupancy is protected by an automatic fire detection and alarm system with notification in the *dwelling unit(s)*.

(Amd) **903.2.8.4 Care facilities.** An *automatic sprinkler system* installed in accordance with Section 903.3.1.3 shall be permitted in Group R-4 care facilities with 16 or fewer residents when all of the following conditions are met:

- 1. The facility is not in a building containing mixed occupancies,
- 2. The building in which the facility is located is limited to two stories above grade plane and 40 feet in height,
- 3. The automatic sprinkler system is provided with a minimum 30-minute water supply,
- 4. All habitable, enclosed usable areas and closets shall be sprinklered,
- 5. Facilities with more than eight residents shall be treated as two-family dwellings with regard to water supply.
- 6. The sprinkler system is provided with valve supervision by one of the following methods:

6.1. A single listed control valve that shuts off both domestic and sprinkler system water supply and a separate valve that shuts off the domestic system only.

6.2. Electrical supervision connected to the facility's fire alarm system.

6.3. Valve closure that causes the sounding of an audible alarm audible throughout the premises.

(Add) **903.2.11.7 Additional statutory requirements.** Pursuant to section 29-315 of the Connecticut General Statutes, automatic fire extinguishing systems shall be installed in any building or structure to be built more than four stories and used for human occupancy and in other occupancies as required by the State Fire Marshal in the interest of safety because of special occupancy hazards.

(Amd) **903.3.1.1.1 Exempt locations.** Automatic sprinklers shall not be required in the following rooms or areas where such rooms or areas are protected with an *approved* automatic fire detection system in accordance with Section 907.2 that will respond to visible or invisible particles of combustion. Sprinklers shall not be omitted from any room merely because it is damp, of fire-resistance-rated construction or contains electrical equipment.

- 1. Generator and transformer rooms separated from the remainder of the building by walls, and floor/ceiling or roof/ceiling assemblies having a *fire-resistance-rating* of not less than 2 hours.
- 2. Fire service access elevator machine rooms and machinery spaces.
- **3.** Machine rooms, machinery spaces, control rooms and control spaces associated with occupant evacuation elevators designed in accordance with Section 3008 of the 2015 International Building Code portion of the State Building Code.

(Add) **903.3.1.1.3 Vertical openings.** Closely spaced sprinklers and draft stops are not required around floor openings permitted to be unenclosed by this code unless the closely spaced sprinklers and draft stops are being utilized in lieu of an enclosure as specified by Section 712.1.3.1 of the 2015 International Building Code portion of the State Building Code.

(Add) **903.3.5.3 Water authority approval.** Unless served by a private well of sufficient capacity or other approved source, domestic service shall be permitted to provide the water supply for the automatic sprinkler system only upon written approval of the water authority supplying such domestic service.

(Del) 903.5 Testing and maintenance. Delete Section.

(Add) **905.2.1 Piping design.** The riser piping, supply piping and the water service piping shall be sized to maintain a residual pressure of at least 100 pounds per square inch (psi) at the topmost outlet of each riser while flowing the minimum quantities of water specified based upon a pressure of 150 psi available at the fire department connection.

Exception: In buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 or Section 903.3.1.2 and where the highest floor level is not more than 75 feet above the lowest level of fire department vehicle access, Class I standpipes shall have an automatic or manual-wet supply.

(Del) **SECTION 906 PORTABLE FIRE EXTINGUISHERS.** Delete in its entirety and replace with the following:

(Add) SECTION 906 PORTABLE FIRE EXTINGUISHERS.

(Add) **906.1 Where required.** Portable fire extinguishers shall be provided in occupancies and locations as required by this code, its referenced standards and the Connecticut State Fire Prevention Code.

(Add) **906.1.2 Group R-1 bed and breakfast establishments.** In Group R-1 bed and breakfast establishments, portable fire extinguishers shall be required in kitchens. All portable fire extinguishers shall be selected, installed and maintained in accordance with NFPA 10. A listed residential range top extinguisher unit or an approved commercial kitchen hood with a listed, approved automatic fire suppression system may be installed in lieu of the installation of a portable fire extinguisher in the kitchen.

(Add) **906.2 General requirements.** Portable fire extinguishers shall be selected, installed and maintained in accordance with the Connecticut State Fire Prevention Code.

(Amd) **907.1.1 Construction documents.** *Construction documents* for fire alarm systems shall be of sufficient clarity to indicate the location, nature and extent of the work proposed and show in detail that it will conform to the provisions of this code and the 2015 International Building Code portion of the State Building Code as determined by the *fire code official*.

(Del) 907.2.7.1 Occupant notification. Delete section.

(Amd) **907.2.8.2 Automatic smoke detection system.** An automatic smoke detection system that activates the occupant notification system in accordance with Section 907.5 shall be installed throughout all interior *corridors* serving *sleeping units*.

Exceptions:

- 1. In buildings that do not have interior *corridors* serving *sleeping units* and where each *sleeping unit* has a means of egress door opening directly to an exit or to an exterior exit access that leads directly to an exit.
- 2. In Group R-1 bed and breakfast establishments (see Section 907.2.11.1.1)

(Amd) **907.2.9.1 Manual fire alarm system.** A manual fire alarm system that activates the occupant notification system in accordance with Section 907.5 shall be installed in Group R-2 occupancies where:

- 1. Any *dwelling unit* or *sleeping unit* is located three or more stories above the lowest *level* of *exit discharge*;
- 2. Any dwelling unit or sleeping unit is located more than one story below the highest level of exit discharge of exits serving the dwelling unit or sleeping unit, or
- 3. The building contains more than 11 dwelling units or sleeping units.

Exceptions:

1. In buildings not over two stories in height where all *dwelling units* or *sleeping units* and contiguous attic and crawl spaces are separated from each other and public or

common areas by at least 1-hour fire partitions and each *dwelling unit* or *sleeping unit* has an exit directly to a *public way*, exit court or yard.

- 2. In buildings equipped throughout with an *automatic sprinkler system* in accordance with Section 903.3.1.1 or 903.3.1.2 and the occupant notification appliances will automatically activate throughout the notification zones upon a sprinkler water flow.
- 3. In buildings that do not have interior *corridors* serving *dwelling units* or *sleeping units* and are protected by an *approved automatic sprinkler system* installed in accordance with Section 903.3.1.1 or 903.3.1.2, provided dwelling units or sleeping units either have a means of egress door opening directly to an exterior *exit access* that leads directly to the *exits* or are served by open-ended *corridors* designed in accordance with Section 1027.6, Exception 3.

(Add) **907.2.11.1.1 Group R-1 bed and breakfast establishments.** An approved household fire warning system in accordance with the requirements of NFPA 72, consisting of a control unit with smoke detectors, a manual fire alarm box on each floor and occupant notification shall be installed in all Group R-1 bed and breakfast establishments. A heat detector shall be installed in the kitchen.

(Add) **907.2.11.2.1 Group R-4.** In Group R-4 occupancies, single- or multiple-station smoke alarms shall be installed in living rooms, dens, day rooms and similar spaces in addition to the locations required by Section 907.2.11.2.

(Add) **907.2.11.2.2 Alterations and additions.** When alterations or additions requiring a permit occur in Group R-2, R-3 and R-4 occupancies, or when one or more sleeping rooms are added or created in existing dwelling units, the entire dwelling unit shall be provided with smoke detectors located as required for new dwellings. Such smoke detectors within existing spaces may be battery operated and are not required to be dual-powered or interconnected unless other remodeling considerations require removal of wall and ceiling coverings which would facilitate concealed interconnected wiring.

(Add) **907.2.11.2.3 Group I-4 and Group E day care facilities.** Single- or multiple-station smoke detectors shall be installed and maintained in all day care facilities in the following locations:

- 1. In each story in front of doors to the stairways;
- 2. In the corridors of all floors occupied by the day care occupancy; and
- 3. In lounges, recreation areas and sleeping rooms in the day care occupancy.

Exception: Day care facilities housed in one room.

(Amd) **907.2.11.6 Power source.** Pursuant to section 29-292 of the Connecticut General Statutes, in new construction required smoke alarms shall receive their primary power from the building wiring and shall be equipped with a battery backup. Smoke alarms with integral strobes that are not equipped with battery backup shall be connected to an emergency electrical system. Smoke alarms shall emit a signal when the batteries are low. Wiring shall be permanent and without disconnecting switch other than as required for overcurrent protection.
(Amd) **907.6.6.1 Automatic telephone-dialing devices.** Automatic telephone-dialing devices used to transmit an emergency alarm shall comply with the requirements of subsection (c) of section 28-25b of the Connecticut General Statutes.

(Del) 907.6.6.2 Termination of monitoring service. Delete section

(Del) 907.8 Inspection, testing and maintenance. Delete section

(Add) **913.5.5 Electric fire pumps.** Buildings provided with standby electrical power for the purpose of continuing operations or occupancy shall provide standby power in accordance with Article 701 of the 2017 NFPA 70, National Electrical Code, portion of the State Building Code for any electric fire pump installed to provide an adequate water supply or minimum operating pressure to a required automatic sprinkler system. Such system shall be in accordance with Section 604.

(Amd) **915.1 General.** Carbon monoxide detectors shall be installed in new buildings and occupancies in accordance with Sections 915.1 to 915.6, inclusive. When alterations or additions requiring a permit occur in existing buildings, carbon monoxide detection shall be provided in accordance with Section 915.7.

(Amd) **915.1.1 Where required.** Carbon monoxide detection shall be provided in Group I-1, I-2, I-4 and R occupancies and in Group E occupancies in the locations specified in Section 915.2 where any of the conditions in Sections 915.1.2 to 915.1.6, inclusive, exist.

(Amd) **915.1.2 Fuel-burning appliances and fuel-burning fireplaces.** Carbon monoxide detection shall be provided in *dwelling units* and *sleeping units* that contain a fuel-burning appliance or fuel-burning fireplace.

(Amd) **915.1.3 Forced-air furnaces.** Carbon monoxide detection shall be provided in *dwelling units* and *sleeping units* served by a fuel-burning, forced-air furnace.

Exception: Carbon monoxide detection shall not be required in *dwelling units* and *sleeping units* where carbon monoxide detection is provided in the first room or area served by each main duct leaving the furnace, and the carbon monoxide alarm signals are automatically transmitted to an approved location.

(Amd) **915.1.4 Fuel-burning appliances outside of dwelling units and sleeping units.** Carbon monoxide detection shall be provided in *dwelling units* and *sleeping units* located in buildings that contain fuel-burning appliances or fuel-burning fireplaces.

Exceptions:

1. Carbon Monoxide detection shall not be required in *dwelling units* and *sleeping units* without communicating openings between the fuel-burning appliance or fuel-burning fireplace and the *dwelling unit* or *sleeping unit*.

2. Carbon monoxide detection shall not be required in *dwelling units* and *sleeping units* where a carbon monoxide detection is provided in one of the flowing locations:

2.1. In an approved location between the fuel-burning appliance or fuel-burning fireplace and the *dwelling unit* or *sleeping unit*.

2.2. On the ceiling of the room containing the fuel-burning appliance or fuel-burning fireplace.

(Amd) **915.1.5 Private garages.** Carbon monoxide detection shall be provided in *dwelling units* and *sleeping units* in buildings with attached private garages.

Exceptions:

1. Where there are no communicating openings between the private garage and the *dwelling unit* or *sleeping unit*.

2. In *dwelling units* and *sleeping units* located more than one story above or below a private garage.

3. Where the private garage connects to the building through an open-ended corridor.

4. Where carbon monoxide detection is provided in an approved location between openings to a private garage and *dwelling units* or *sleeping units*.

(Amd) **915.2.3 Group E occupancies.** Carbon monoxide detection system shall be provided in the locations specified in Section 915.2.3.1.

Exception: Group E rooms with cooking appliances, laboratories and maintenance spaces.

(Add) **915.2.3.1. Locations.** Carbon monoxide detectors shall be located as follows:

1. On the ceilings of rooms containing permanently installed fuel-burning heating equipment.

2. Centrally located within the first room or area served by the first air supply register by each main duct leaving a fuel-burning, forced-air furnace.

(Add) **915.2.3.2 Signage.** A sign shall be provided at all entrances to such rooms indicating that carbon monoxide detectors are located within the space.

(Add) **915.4.4 Interconnection of alarms.** Carbon monoxide alarms shall be interconnected in accordance with Section 9.6.4 of NFPA 720.

(Add) **915.5.4 Group E alarm notification.** Carbon monoxide detectors shall be connected to the building fire alarm signaling system as a separate zone or zones. Such alarms shall activate a supervisory signal at the main control unit and any remote annunciators. Such alarms shall not activate the building evacuation alarm.

(Amd) **915.6 Maintenance.** Carbon monoxide alarms and carbon monoxide detection systems shall be maintained in accordance with NFPA 720. Carbon monoxide alarms and carbon monoxide detectors that become inoperable, begin producing end-of-life signals or have reached the manufacturer's replacement date shall be replaced.

(Add) **915.7** Alterations and additions. When alterations or additions requiring a permit occur to buildings with Group R-3 and R-4 occupancies and to Group R-1 lodging houses, or when one or more sleeping rooms are added or created in such occupancies, the entire occupancy shall be provided with carbon monoxide detectors located as required for new construction. The carbon monoxide detectors shall have a power source in accordance with Section 915.4.1. When alterations or additions requiring a permit occur to buildings with Group I-1, I-2, I-4, R-1 other than lodging houses, R-2, and E, or when one or more sleeping rooms are added or created in such occupancies, only the work area shall be provided with carbon monoxide detectors located as required for new construction. The carbon monoxide detectors shall have a power source in accordance with Section 915.4.1. For the purpose of this section, work area is defined as: That portion or portions of a building consisting of all reconfigured spaces as indicated on the construction documents. Work area excludes other portions of the building where incidental work entailed by the intended work must be performed and portions of the building where work not initially intended by the owner is specifically required by this code.

Exceptions:

1. The carbon monoxide detectors may be battery operated or plug-in and are not required to be interconnected when other remodeling considerations do not require the removal of the appropriate wall or ceiling coverings to facilitate concealed interconnected wiring.

2. Alterations to the exterior surfaces of existing buildings including, but not limited to, reroofing, re-siding, window replacement and the construction of decks without roofs, are exempt from the requirements of this section.

3. Carbon monoxide detectors shall not be required in buildings not containing a fuelburning appliance, fireplace or attached garage.

CHAPTER 10 MEANS OF EGRESS

(Add) **1003.8 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) **1004.1.2 Areas without fixed seating.** The number of occupants shall be computed at the rate of one occupant per unit of area as prescribed in Table 1004.1.2. For areas without *fixed seating*, the *occupant load* shall not be less than the number determined by dividing the floor area under consideration by the *occupant load* factor assigned to the function of the space as set forth in Table 1004.1.2. Where an intended function is not listed in Table 1004.1.2, the *fire code official* shall establish a function based on a listed function that most nearly resembles the intended function.

(Amd) **1005.3.1 Stairways.** The capacity, in inches (mm), of the *means of egress stairways* shall be calculated by multiplying the *occupant load* served by such *stairway* by a *means of egress* capacity factor of 0.3 inch (7.6 mm) per occupant. Where *stairways* serve more than one story, only the *occupant load* of each story considered individually shall be used in calculating the required capacity of the *stairways* serving that story.

Exceptions:

1. Facilities with *smoke-protected assembly seating* shall be permitted to use the capacity factors in Table 1029.6.2 indicated for stepped *aisles* for *exit access* or *exit stairways* where the entire path for means of egress from the seating to the *exit discharge* is provided with a smoke control system complying with Section 909.

2. Facilities with outdoor *smoke-protected assembly seating* shall be permitted to the capacity factors in Section 1029.6.3 indicated for stepped *aisles* for *exit access* or *exit stairways* where the entire path for *means of egress* from the seating to the *exit discharge* is open to the outdoors.

(Amd) **1005.3.2 Other egress components.** The capacity, in inches (mm), of *means of egress* components other than *stairways* shall be calculated by multiplying the *occupant load* served by such component by a *means of egress* capacity factor of 0.2 inch (5.1 mm) per occupant.

Exceptions:

1. Facilities with *smoke-protected assembly seating* shall be permitted to use the capacity factors in Table 1029.6.2 indicated for level or ramped aisles for *means of egress* components other than stairways where the entire path for *means of egress* from the seating to the *exit discharge* is provided with a smoke control system complying with Section 909.

2. Facilities with outdoor *smoke-protected assembly seating* shall be permitted to the capacity factors in Section 1029.6.3 indicated for level or ramped aisles for *means of egress* components other than stairways where the entire path for *means of egress* from the seating to the *exit discharge* is open to the outdoors.

(Amd) **1006.1 General.** The number of *exits* or *exit access doorways* required within the *means of egress* system shall comply with the provisions of Section 1006.2 for spaces, including *mezzanines*, and Section 1006.3 for stories.

Exception: Buildings of Group R-1 bed and breakfast establishments shall only be required to have one exit.

(Amd) **1006.2.2.4 Day care means of egress.** Day care facilities, rooms or spaces where care is provided for more than 10 children who are 3 years of age or younger shall have access to not less than two *exits* or *exit access doorways*.

(Amd) **1006.3 Egress from stories or occupied roofs.** The *means of egress* system serving any story or occupied roof shall be provided with the number of *exits* or access to *exits* based on the aggregate *occupant load* served in accordance with this section. The path of egress travel to an *exit* shall not pass through more than one adjacent story. Each story above the second story of a building shall have not less than one *interior* or *exterior exit stairway*, or interior or *exterior exit ramp*. Where not more than three or more *exits* or access to *exits* are required, not less than 50 percent of the required *exits* shall be *interior* or *exterior exit stairways* or *ramps*.

Exceptions:

1. *Interior exit stairways* and *interior exit ramps* are not required in open parking garages where the *means of egress* serves only the open parking garage.

2. *Interior exit stairways* and *interior exit ramps* are not required in outdoor facilities where all portions if the *means of egress* are essentially open to the outside.

3. Group R-1 Bed and breakfast establishments.

(Amd) **1008.2 Illumination required.** The *means of egress*, including the exit discharge, shall be illuminated at all times the building space served by the means of egress is occupied.

Exceptions:

- 1. Occupancies in Group U.
- 2. Aisle accessways in Group A.
- 3. Within *dwelling units* and *sleeping units* in Groups R-1, R-2 and R-3.
- 4. Within *sleeping units* of Group I occupancies.
- 5. In Group R-1 bed and breakfast establishments when illumination of the means of egress is initiated upon initiation of a fire alarm.

(Add) **1008.2.3 Arrangement of illumination.** Required illumination shall be arranged so that the failure of any single lamp does not result in an illumination level of less than 0.2 foot-candle at the floor level.

(Add) **1008.3.1.1 Activation.** The emergency means of egress illumination system shall be arranged to provide the required illumination automatically in the event of any interruption of normal lighting due to any of the following:

- 1. Failure of a public utility or other outside electrical power supply.
- 2. Opening of a circuit breaker or fuse.
- 3. Manual acts including accidental opening of a switch controlling normal lighting facilities.

(Amd) **1008.3.3 Other areas**. In the event of power supply failure, an emergency electrical system shall automatically illuminate all of the following areas:

- 1. Electrical equipment rooms.
- 2. Fire command centers.
- 3. Fire pump rooms.
- 4. Generator rooms.
- 5. Public restrooms with an area greater than 300 square feet (27.87 m2).

6. Means of egress components, other than those within sleeping rooms, of Group R-1 Bed and breakfast establishments.

(Add) **1010.1.1.2 Bed and breakfast establishments.** Doors within and accessing Group R-1 bed and breakfast establishments shall have a minimum clear width of 28 inches (711 mm). Doors within and accessing bathrooms shall have a minimum clear width of 24 inches (610 mm).

(Amd) **1010.1.2.1 Direction of swing.** Doors shall swing in the direction of egress travel where serving a room or area containing an occupant load of 50 or more persons, an exit enclosure (unless the door serves an individual living unit that opens directly into an exit enclosure) or a Group H occupancy.

(Amd) **1010.1.9.5.1 Closet and bathroom doors.** In Group R-4 occupancies, Group I-2 child care facilities, and Group I-4 day care facilities, closet doors that latch in the closed position shall be openable from inside the closet, and bathroom doors that latch in the closed position shall be capable of being unlocked from the ingress side.

(Amd) **1011.5.2 Riser height and tread depth.** *Stair* riser heights shall be 7 inches (178 mm) maximum and 4 inches (102 mm) minimum. The riser height shall be measured vertically between the *nosings* of adjacent treads. Rectangular tread depth shall be 11 inches (279 mm) minimum measured horizontally between the vertical planes of the foremost projection of adjacent treads and at right angle to the tread's *nosing*. *Winder* treads shall have a minimum tread depth of 11 inches (279 mm) between the vertical planes of the foremost projection of adjacent treads at the intersections with the walkline and a minimum tread depth of 10 inches (254 mm) within the clear width of the *stair*.

Exceptions:

- 1. Alternating tread devices in accordance with Section 1011.14.
- 2. Ships ladders in accordance with Section 1011.15.
- 3. Spiral stairways in accordance with Section 1011.10.
- 4. Aisle stairs in assembly seating areas where the stair pitch or slope is set, for sightline reasons, by the slope of the adjacent seating area in accordance with Section 1029.13.
- 5. In Group R-1 bed and breakfast; Group R-3 occupancies; within *dwelling units* in Group R-2 occupancies; and in Group U occupancies that are accessory to Group R-3 occupancy, or accessory to individual dwelling units in Group R-2 occupancies; the maximum riser height shall be 8 inches (203 mm) and the minimum tread depth shall be 9 inches (229 mm); the minimum winder tread depth at the walkline shall be 10 inches (254 mm); and the minimum winder tread depth shall be 6 inches (152 mm). A nosing not less than. ³/₄ inch (19.1 mm) but not more than 1-1/4 inches (32 mm) shall be provided on stairways with solid risers where the tread depth is less than 11 inches (279 mm).
- 6. The riser height and tread depth of existing stairways in buildings undergoing addition, alteration, repair, relocation or change of occupancy that involve the existing stairways shall be permitted to remain, provided the greatest riser height within any flight of stairs shall not exceed the smallest by 3/8 inch and the greatest tread depth within any flight of stairs shall not exceed the smallest by 3/8 inch.

- 7. Any stairway replacing an existing stairway within a space where the pitch or slope cannot be reduced because of existing construction shall not be required to comply with the maximum riser height and minimum tread depth requirements.
- In Group I-3 facilities, stairways providing access to guard towers, observation stations and control rooms, not more than 250 square feet (23 m²) in area, shall be permitted to have a maximum riser height of 8 inches (203 mm) and a minimum tread depth of 9 inches (229 mm).

(Amd) **1011.5.3 Winders.** *Winder* treads are not permitted in *means of egress* stairways except within a *dwelling unit* and within existing detached one- and two-family dwellings undergoing a change of occupancy to Group R-1 bed and breakfast establishments.

Exceptions:

- 1. Curved stairways in accordance with Section 1011.9.
- 2. Spiral stairways in accordance with Section 1011.10.

(Amd) **1011.7.2 Outdoor conditions.** Outdoor *stairways* and outdoor approaches to *stairways* shall be designed so that water will not accumulate on walking surfaces. In other than occupancies in Group R-3, and occupancies in Group U that are accessory to an occupancy in Group R-3, treads, platforms and landings that are part of exterior stairways in climates subject to snow and ice shall be protected to prevent the accumulation of same.

(Amd) **1011.11 Handrails.** *Stairways* shall have *handrails* on each side and shall comply with Section 1014. Where glass is used to provide the *handrail*, the *handrail* shall also comply with Section 2407 of the 2015 International Building Code portion of the State Building Code.

Exceptions:

- 1. *Stairways* within *dwelling units*, Group R-1 bed and breakfast establishments and *spiral stairways* are permitted to have a handrail on one side only.
- 2. Decks, patios and walkways that have a single change in elevation where the landing depth on each side of the change in elevation is greater than what is required for a landing do not require *handrails*.
- 3. In Group R-3 occupancies, a change in elevation consisting of a single riser at an entrance or egress door do not require *handrails*.
- 4. Changes in room floor elevations of three or fewer risers within *dwelling units* and *sleeping units* in Group R-1 bed and breakfast establishments and Groups R-2 and R-3 occupancies do not require *handrails*.

(Add) **1013.1.1 Accessible exits.** Where exit signs are required by Section 1013.1 of this code, accessible exit doors at the level of exit discharge that lead directly to accessible paths of exit discharge shall additionally be marked by the International Symbol of Accessibility. Such symbol shall be not less than 6 inches (152 mm) high and shall be incorporated into the required exit sign or shall be located directly adjacent to it. Such symbol shall meet the requirements of Section 1013.

(Amd) **1013.2 Floor-level exit signs.** Where exit signs are required from a room or space in Group R-1 occupancies, Group I-2 occupancies and Group R-2 occupancies by Section 1013.1, additional low-level exit signs shall be provided at doors within exit access corridors serving guest rooms in Group R-1 occupancies, patient and client sleeping areas of Group I-2 occupancies and sleeping areas and dwelling units in Group R-2 occupancies and shall comply with Section 1013.5.

The bottom of the sign shall be not less than 10 inches (254 mm) nor more than 12 inches (305 mm) above the floor level. The sign shall be flush mounted to the door or wall on the same plane as the door. Where mounted on the wall, the edge of the sign shall be within 4 inches (102 mm) of the door frame on the latch side.

Exception: Group R-1 bed and breakfast establishments.

(Amd) **1014.9 Intermediate handrails.** *Stairways* shall have intermediate *handrails* located in such a manner that all portions of the stairway width exceeding 75 inches (1,905 mm) required for egress capacity are within 30 inches (762 mm) of a *handrail*. On monumental *stairs*, *handrails* shall be located along the most direct path of egress travel.

(Amd) **1015.3 Height.** Required *guards* shall not be less than 42 inches (1,067 mm) high, measured vertically as follows:

- 1. From the adjacent walking surfaces including adjacent fixed seating;
- 2. On *stairs*, from the line connecting the leading edges of the tread *nosings*; and
- 3. On *ramps*, from the ramp surface at the *guard*.

Exceptions:

- 1. For occupancies in Group R-3 not more than three stories above grade in height, and within individual dwelling units in occupancies in Group R-2 not more than three stories above grade in height with separate *means of egress*, required *guards* shall not be less than 36 inches (914 mm) in height measured vertically above the adjacent walking surfaces or adjacent *fixed seating*.
- 2. For occupancies in Group R-3, within individual *dwelling units* in occupancies in Group R-2, *guards* on the open sides of stairs shall have a height not less than 34 inches (864 mm) measured vertically from the leading edges of the treads.
- 3. For occupancies in Group R-1 bed and breakfast establishments, Group R-3, and within individual *dwelling units* in occupancies in Group R-2, where the top of the guard also serves as a handrail on the open sides of stairs, the top of the *guard* shall not be less than 34 inches (864 mm) and not more than 38 inches (965 mm) measured vertically from a line connecting the leading edges of the treads.
- 4. For occupancies in Group R-1 bed and breakfast establishments, level *guards* shall be not less than 36 inches high, measured vertically above the adjacent walking surface.
- 5. The height in assembly seating areas shall be in accordance with Section 1029.16.
- 6. Along *alternating tread devices* and ship ladders, *guards* whose top rail also serves as a *handrail* shall have a height not less than 30 inches (762 mm) measured vertically from the leading edge of the device tread *nosing*.

(Amd) Table 1017.2 Exit Access Travel Distance.

Amend final row as follows:

I-2, I-3, I-4	Not Permittede	200c

Add new footnote as follows:

e. For Group I-4 day care facilities that satisfy Section 903.2.6, Exception 2, a maximum travel distance of 150-feet shall be permitted.

(Amd) **1019.3 Occupancies other than Groups I-2 and I-3**. In other than Group I-2 and I-3 occupancies, floor openings containing *exit access stairways* or *ramps* that do not comply with one of the conditions listed in this section shall be enclosed with a shaft enclosure constructed in accordance with Section 713 of the 2015 International Building Code portion of the State Building Code.

1. In buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1 with other than Group H or I occupancies, an *exit access stairway* serving an occupant load of less than 10 not more than one story above the level of exit discharge.

2. In Group R-1, R-2 or R-3 occupancies, *exit access stairways* and *ramps* connecting four stories or less serving and contained within a single residential dwelling unit or sleeping unit or live/work unit.

3. *Exit access stairways* serving and contained within a Group R-3 congregate residence or a Group R-4 facility are not required to be enclosed.

4. *Exit access stairways* connecting the first and second floors of bed and breakfast establishments. Stairways connecting the second and third floors in such occupancies shall be enclosed with fire separation assemblies having a fire-resistance rating of not less than 1 hour. Stairways connecting the basement and the first floor occupancies shall be enclosed with fire partitions having a fire-resistance rating of not less than 1/2 .hour with 20-minute fire-resistance rated door assemblies. Fire-resistance assemblies at stairways in Group R-1 bed and breakfast establishments shall not be required to be supported by fire-resistance rated construction.

5. *Exit access stairways* and *ramps* within an atrium complying with the provisions of Section 404.

6. *Exit access stairways* and *ramps* in open parking garages that serve only the parking garage.

7. *Exit access stairways* and *ramps* serving open-air seating complying with the exit access travel distance requirements of Section 1029.7.

8. *Exit access stairways* and *ramps* serving the balcony, gallery or press box and the main assembly floor in occupancies such as theaters, *places of religious worship*, auditoriums and sport facilities.

9. Stairways serving outdoor facilities where all portions of the means of egress are essentially open to the outside.

10. *Exit access stairways* serving mezzanines complying with the provisions of Section 428.

(Add) **1020.1.1 Group R-1 bed and breakfast establishments.** A fire-resistance rating is not required for corridors in Group R-1 bed and breakfast establishments. Doors leading from guest rooms into corridors or hallways in Group R-1 bed and breakfast establishments shall be equipped with self-closing devices.

(Add) **1022.3 Group M occupancies.** In mercantile occupancies other than bulk merchandising retail buildings, if the only means of customer entrance is through one exterior wall of a building, one-half of the required egress width from the street floor shall be located in such wall.

(Amd) **1023.5 Penetrations.** Penetrations into or through *interior exit stairways* and *ramps* are prohibited except for equipment and ductwork necessary for independent ventilation or pressurization, sprinkler piping, standpipes, electrical raceway for fire department communication and security systems and electrical raceway serving the *interior exit stairway* and *ramp* and terminating at a steel box not exceeding 16 square inches (0.010 m²). Such penetrations shall be protected in accordance with Section 714 of the 2015 International Building Code portion of the State Building Code. There shall be no penetrations or communicating openings, whether protected or not, between adjacent *interior exit stairways* and *ramps*.

Exception: Membrane penetrations shall be permitted on the outside of the *interior exit stairway* and *ramp*. Such penetrations shall be protected in accordance with Section 714.3.2 of the 2015 International Building Code portion of the State Building Code.

(Amd) **1024.6 Penetrations.** Penetrations into or through an *exit passageway* are prohibited except for equipment and ductwork necessary for independent ventilation or pressurization, sprinkler piping, standpipes, electrical raceway for fire department communication and security systems and electrical raceway serving the *exit passageway* and terminating at a steel box not exceeding 16 square inches (0.010 m²). Such penetrations shall be protected in accordance with Section 714 of the 2015 International Building Code portion of the State Building Code. There shall be no penetrations or communicating openings, whether protected or not, between adjacent *exit passageways*.

Exception: Membrane penetrations shall be permitted on the outside of the *exit passageway*. Such penetrations shall be protected in accordance with Section 714.3.2 of the 2015 International Building Code portion of the State Building Code.

(Add) **1025.6 Statutory requirements for exit access corridors.** Pursuant to section 29-256d of the Connecticut General Statutes, in addition to means of egress illumination required by Section 1008, approved luminous egress path marking systems or devices shall be required in exit access corridors in the following newly constructed occupancies:

- 1. Group A occupancies with a total occupant load greater than 300.
- 2. Group B medical occupancies.
- 3. Group E occupancies.
- 4. Group I-1 occupancies.

- 5. Group I-2 occupancies.
- 6. Group R-1 hotels and motels.
- 7. Group R-2 dormitories.

Exceptions:

- 1. Group E occupancies where each classroom has at least one door directly to the exterior and rooms for assembly purposes have at least one-half of the required means of egress doors opening directly to the exterior. Exterior doors specified in this exception are required to be at ground level.
- 2. In corridors or hallways located within Group R-1 and R-2 sleeping units or dwelling units.
- 3. In existing buildings of any occupancy including those undergoing repair, addition, alteration or change of occupancy. In the case of an addition to an existing building, this exception also applies to the new construction.

(Add) **1025.6.1 Size and location.** Luminous egress path marking systems or devices shall be sized and located in exit access corridors as prescribed by Section 1025.2.4. In exit access corridors exceeding 120 inches (3,048 mm), the marking shall be provided on both sides of the corridor.

(Add) **1025.6.2 Device or system requirements**. Luminous egress path marking systems or devices shall be listed and labeled and installed in accordance with the manufacturer's installation requirements. Self-luminous and photoluminescent egress path markings shall comply with Sections 1025.4 and 1025.5. Such systems shall not incorporate arrows, chevrons, signs or alternating lighting patterns designed or intended to lead an occupant to any one specific exit in preference over another exit.

Exception: Systems incorporating arrows, chevrons, signs or alternating lighting patterns designed or intended to lead an occupant in any one specific direction shall be permitted in dead end corridors.

(Add) **1025.6.3 Illumination.** Luminous egress path marking systems or devices shall be continuously illuminated or shall illuminate within 10 seconds of a power failure. Illumination shall be maintained for a period of not less than 90 minutes following loss of power to the corridor within which the system or device is located.

(Add) **1028.3.1 Remoteness.** Where two or more doors leading to exit discharge are required, a minimum of two such doors shall be placed a distance apart equal to not less than one-third of the length of the maximum overall diagonal dimension of the building served, measured in a straight line between doors. Additional doors leading to *exit discharge* shall be arranged a reasonable distance apart so that if one becomes blocked, the others will be available.

(Amd) **1029.2** Assembly main exit. Pursuant to Section 29-381a of the Connecticut General Statutes, in a building, room or space used for assembly purposes that is provided with a single main entrance/exit, the main exit shall be of sufficient width to accommodate not less than two-thirds of the occupant load, but such width shall not be less than the total required width of all means of egress leading to the exit. This applies to Group A occupancies that are newly

constructed, have an increase in the number of occupants by addition or alteration or are created by change of occupancy. Where the building is classified as a Group A occupancy, the main exit shall front on at least one street or an unoccupied space of not less than 10 feet (3,048 mm) in width that adjoins a street or public way. In a building, room or space used for assembly purposes where there is no well-defined main entrance/exit or where multiple main entrance/exits are provided, exits shall be permitted to be distributed around the perimeter of the building provided the total width of egress is not less than 100 percent of the required width.

(Amd) **1030.1 General.** In addition to the *means of egress* required by this chapter, *emergency escape and rescue openings* shall be provided in the following occupancies:

- 1) Group R-2 occupancies located in stories with only one exit or access to only one exit as permitted by Tables 1006.3.2(1) and 1006.3.2(2).
- 2) Group R-3 and R-4 occupancies.

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

Exceptions:

- 1) Basements with a ceiling height of less than 80 inches (2032mm) shall not be required to have *emergency escape and rescue openings*.
- 2) *Emergency escape and rescue openings* are not required from basements or sleeping rooms that have an exit door or exit access door that opens directly into a *public way* or to a *yard*, *court* or exterior exit balcony that opens to a *public way*.
- 3) Basements without *habitable spaces* and having not more than 200 square feet (18.6 m²) in floor area shall not be required to have *emergency escape and rescue openings*.
- 4) Within individual dwelling and sleeping units in Group R-2 and R-3, where the building is equipped throughout with an automatic sprinkler system installed in accordance with Sections 903.3.1.1, 903.3.1.2, or 901.3.1.3, sleeping rooms in basements shall not be required to have *emergency escape and rescue openings* provided that the basement has one of the following:
 - 4.1 One means of egress and one emergency escape and rescue opening.
 - 4.2 Two means of egress.

(Add) **1030.1.1 Operational constraints and opening control devices**. *Emergency escape and rescue openings* shall be operational from inside the room without the use of keys or tools. Window-opening control devices complying with ASTM F2090 shall be permitted for use on windows serving as required *emergency escape and rescue openings*.

(Add) **1030.1.2 Group E occupancies.** In Group E occupancies, *emergency escape and rescue openings* shall be provided in every room or space greater than 250 square feet used for classroom or educational purposes or normally subject to student occupancy.

Exceptions:

- 1. Buildings protected throughout by an approved automatic sprinkler system in accordance with Section 903.3.1.1.
- 2. Rooms or spaces that have a door leading directly to the outside of the building.

(Add) **1030.1.3 Group I-4 occupancies.** In Group I-4 occupancies, *emergency escape and rescue openings* shall be provided in every room or space greater than 250 square feet normally subject to client occupancy.

Exceptions:

- 1. Buildings protected throughout by an approved automatic sprinkler system in accordance with Section 903.3.1.1.
- 2. Rooms or spaces that have a door leading directly to the outside of the building.

(Amd) **1030.2.1 Minimum dimensions.** The minimum net clear opening height dimension shall be 24 inches (610 mm). The minimum net clear opening width dimension shall be 20 inches (508 mm). The net clear opening dimensions shall be the result of normal operation of the opening.

Exception: In existing buildings undergoing a change of occupancy to Group R-1 bed and breakfast establishments, the net clear opening dimensions may be obtained by removal of the sash without the use of a key or tool provided the instructions for the removal of the sash are clearly posted on the inside of the guest room door.

(Amd) **1030.3 Maximum height from floor.** *Emergency escape and rescue openings* shall have the bottom of the clear opening not greater than 44 inches (1,118 mm) measured from the floor.

Exception: In an existing building undergoing a change of use, the 44 inch (1,118 mm) maximum height may be measured vertically above a fixed, permanent platform, step or steps whose minimum width shall equal or exceed the operable width of the opening and shall be centered on such opening. Any stairs or steps shall comply with Section 1011.5.

C H A P T E R 1 1 CONSTRUCTION REQUIREMENTS FOR EXISTING BUILDING

(Del) Delete chapter.

CHAPTERS 12 through 19 RESERVED

C H A P T E R 20 AVIATION FACILITIES

(Amd) **2001.1 Scope**. Airports, heliports, helistops and aircraft hangers shall be in accordance with this chapter and Section 412.

(Del) 2001.2 Regulations not covered. Delete section.

(Del) 2001.3 Permits. Delete section.

(Amd) **2003.2 Smoking**. The prohibition of smoking and posting of "No Smoking" signs shall comply with the Connecticut State Fire Prevention Code .

(Del) 2003.3 Housekeeping. Delete section.

(Del) 2003.6 Combustible Storage. Delete section.

(Amd) **2003.7 Hazardous material storage**. Hazardous materials storage shall be in accordance with the Connecticut State Fire Prevention Code.

(Del) SECTION 2004 Aircraft Maintenance. Delete section.

(Del) SECTION 2005 Portable Fire Extinguishers. Delete section.

(Add) **SECTION 2005 PORTABLE FIRE EXTINGUISHERS**. Portable fire extinguishers suitable for flammable or combustible liquid and electrical- type fires shall be provided in accordance with Section 906 at fuel-dispensing stations.

(Del) **2006.3 Construction of aircraft-fueling vehicles and accessories.** Delete section.

(Del) **2006.4 Operation, maintenance and use of aircraft-fueling vehicles.** Delete section.

(Del) 2006.5 Fueling and defueling. Delete section.

(Del) 2006.6 Emergency fuel shutoff. Delete section.

(Del) 2006.7 Protection of hoses. Delete section.

(Del) 2006.8 Loading and unloading. Delete section.

(Del) 2006.9 Passengers. Delete section.

(Del) 2006.10 Sources of ignition. Delete section.

(Del) 2006.11 Fuel spill prevention and procedures. Delete section.

- (Del) 2006.12 Aircraft engines and heaters. Delete section.
- (Del) 2006.13 Vehicle and equipment restrictions. Delete section.
- (Del) 2006.14 Electrical Equipment. Delete section.
- (Del) 2006.15 Open flames. Delete section.
- (Del) 2006.16 Lightning procedures. Delete section.
- (Del) 2006.17.1 Position of aircraft. Delete section.
- (Del) 2006.17.2 Fire equipment access. Delete section.
- (Del) 2006.18 Defueling operations. Delete section.

(Del) 2006.19 Maintenance of aircraft-fueling hose. Delete section.

(Del) 2006.21 Radar equipment. Delete section.

(Amd) **2007.7 Portable fire extinguishers.** Portable fire extinguishers in accordance with Section 906 shall be provided for each permanent takeoff and landing area and for the aircraft parking areas.

CHAPTER 21 DRY CLEANING

(Amd) **2101.1 Scope.** Dry cleaning plants shall comply with the requirements of this chapter and Section 415.9.3. Their operations shall be in accordance with the Connecticut State Fire Prevention Code.

(Del) 2101.2 Permits. Delete section.

(Del) 2105.1.4 Prohibited use of solvent. Delete section.

(Del) 2105.1.5 Equipment maintenance and housekeeping. Delete section.

(Del) 2105.2.1 Inspection of materials. Delete section.

(Del) 2105.2.2 Material transfer. Delete section.

(Del) SECTION 2106 SPOTTING AND PRETREATING. Delete section.

(Amd) **2107.2.1 Fire-fighting access.** Type II dry cleaning plants shall be located so that access is provided and maintained from one side for fire-fighting and control purposes in accordance with the Connecticut State Fire Prevention Code.

(Amd) **2108.4 Portable fire extinguishers.** Portable fire extinguishers shall be provided in accordance with Section 906. A minimum of two, 2-A; 10-B:C portable fire extinguishers shall be provided near the doors inside dry cleaning rooms containing Type II, Type III-A and Type III-B dry cleaning systems.

C H A P T E R 22 COMBUSTIBLE DUST-PRODUCING OPERATIONS

(Amd) **2201.1 Scope**. The equipment and operations involving dust explosion hazards shall comply with the provisions of the Connecticut State Fire Prevention Code and Section 415.8.

(Del) 2201.2 Permits. Delete section.

(Amd) **2203.2 Housekeeping**. Housekeeping shall comply with the provisions of the Connecticut State Fire Prevention Code.

C H A P T E R 2 3 MOTOR FUEL-DISPENSING FACILITES AND REPAIR GARAGES

(Amd) **2301.2 Cleaning and purging of flammable gas piping systems.** The cleaning and purging of any flammable gas piping system shall be in accordance with NFPA 56, *Fire and Explosion Prevention during Cleaning and Purging of Flammable Gas Piping Systems.* This includes purging into or out of service.

(Amd) **2304.1** Dispensing operations of motor fuels shall comply with the Connecticut State Fire Prevention Code.

(Del) 2304.2 Attended self-service motor fuel-dispensing facilities. Delete section.

(Del) 2304.3 Unattended self-service motor fuel-dispensing facilities. Delete section.

(Del) 2304.4 Dispensing into portable containers. Delete section.

(Amd) **2305.1 Tank filling operations for Class I, II or III liquids.** The operational requirements for the filling of tanks shall comply with the Connecticut State Fire Prevention Code.

(Del) 2305.2 Equipment maintenance and inspection. Delete section.

(Del) 2305.3 Spill control. Delete section.

(Del) 2305.4 Sources of ignition. Delete section.

(Del) 2305.5 Fire extinguishers. Delete section.

(Del) 2305.6 Warning signs. Delete section.

(Del) 2305.7 Control of brush and debris. Delete section.

(Amd) **2306.2.1.1 Inventory control for underground tanks.** Daily inventory control records shall be maintained and reconciled in accordance with the Connecticut State Fire Prevention Code.

(Amd) **2306.8.6 Maintenance and inspection.** Equipment shall be maintained and inspected in accordance with the Connecticut State Fire Prevention Code.

(Amd) **2307.3 Attendants.** The qualifications of attendants for public or private facilities shall be in accordance with the Connecticut State Fire Prevention Code.

(Add) **2307.6.5 Emergency shutoff control.** The system shall be provided with an emergency shut-off switch located within 10 feet (3048 mm) of, but not less than 20 feet (6,096 mm) from, dispensers.

(Del) 2307.8 Overfilling. Delete section.

(Amd) **2308.8 Discharge of CNG from motor vehicle fuel storage containers.** The discharge of CNG from motor vehicle fuel cylinders shall be in accordance with the Connecticut State Fire Prevention Code.

(Amd) **2309.3.1.2.1 Maintenance.** Gaseous hydrogen systems and detection devices shall be maintained in accordance with the manufacturer's instructions and the Connecticut State Fire Prevention Code.

(Amd) **2309.3.1.2.4 Housekeeping.** The housekeeping within hydrogen cutoff rooms shall be in accordance with the Connecticut State Fire Prevention Code.

(Amd) **2310.3.2 Supervision.** Marine motor fuel-dispensing facilities shall be supervised by attendants in accordance with the Connecticut State Fire Prevention Code.

(Amd) **2310.5 Fire safety precautions.** Precautions for fire safety at marine motor fueldispensing facilities shall be in accordance with the Connecticut State Fire Prevention Code.

(Amd) **2311.3.2 Smoking.** Smoking in repair garages shall be in accordance with the Connecticut State Fire Prevention Code.

(Amd) **2311.5 Preparation of vehicles for repair.** The preparation of vehicles powered by gaseous fuels shall be in accordance with the Connecticut State Fire Prevention Code.

CHAPTER 24 FLAMMABLE FINISHES

(Del) 2401.3 Permits. Delete section.

(Amd) **2403.2.6 Smoking prohibited.** The control of smoking shall be in accordance with the Connecticut State Fire Prevention Code.

(Amd) **2403.4 Operations and maintenance.** The operations and maintenance of the application of flammable finishes shall be in accordance with the Connecticut State Fire Prevention Code.

(Amd) **2406.5 Operation and maintenance.** The operation and maintenance of powder coating areas shall be in accordance with the Connecticut State Fire Prevention Code.

(Amd) **2407.5.1 Maintenance.** The maintenance of insulators, drip plates, screens and grounding and bonding means shall be in accordance with the Connecticut State Fire Prevention Code.

(Amd) **2408.4 Housekeeping, maintenance and storage of hazardous materials.** The housekeeping, maintenance, storage and use of hazardous materials shall be in accordance with the Connecticut State Fire Prevention Code.

(Amd) **2408.5 Sources of ignition.** The use of nonsparking tools in areas where organic peroxides are stored, mixed or applied shall be in accordance with the Connecticut State Fire Prevention Code.

(Amd) **SECTION 2410 SCOPE.** The requirements for the floor surfacing and finishing operations shall be in accordance with the Connecticut State Fire Prevention Code.

(Del) 2410.2 Mechanical system operation. Delete section.

(Del) 2410.3 Business operation. Delete section.

(Del) 2410.4 Ignition sources. Delete section.

(Del) 2410.5 Ventilation. Delete section.

CHAPTER 25 FRUIT AND CROP RIPENING

(Del) Delete chapter.

C H A P T E R 2 6 FUMIGATION AND INSECTICIDAL FOGGING

C H A P T E R 27 SEMICONDUCTOR FABRICATION FACILITIES

(Del) 2701.4 Existing buildings and existing fabrication areas. Delete section.

(Del) 2701.5 Permits. Delete section.

(Del) 2703.1.2 Staffing. Delete section.

C H A P T E R 28 LUMBERYARDS AND AGRO-INDUSTRIAL, SOLID BIOMASS AND WOODWORKING FACILITIES

(Del) 2801.2 Permits. Delete section.

(Del) 2803.1 Open yards. Delete section.

(Amd) **2803.3.1 Housekeeping.** Provisions for the systematic and thorough cleaning of the entire plant shall be in accordance with the Connecticut State Fire Prevention Code.

(Amd) **2803.3.2 Metal scrap.** Provisions for the separating and disposing of any scrap metal shall be in accordance with the Connecticut State Fire Prevention Code.

(Amd) **2803.5.3 Smoking.** Any regulation of smoking as a fire hazard shall be in accordance with the Connecticut State Fire Prevention Code.

(Amd) **2806.1 General.** Log storage areas shall comply with the Connecticut State Fire Prevention Code.

(Del) 2806.2 Cold decks. Delete section.

(Del) 2806.3 Pile stability. Delete section.

(Amd) **2807.1 General.** The storage of wood chips and hogged material shall comply with the Connecticut State Fire Prevention Code.

- (Del) 2807.2 Size of piles. Delete section.
- (Del) 2807.3 Pile fire protection. Delete section.
- (Del) 2807.4 Material-handling equipment. Delete section.
- (Del) 2807.5 Emergency plan. Delete section.

(Amd) **2808.1 General.** The storage and processing of materials associated with yard waste and recycling facilities shall comply with the Connecticut State Fire Prevention Code.

- (Del) 2808.2 Storage site. Delete section.
- (Del) 2808.3 Size of piles. Delete section.
- (Del) 2808.4 Pile separation. Delete section.
- (Del) 2808.5 Combustible waste. Delete section.
- (Del) 2808.6 Static pile protection. Delete section.
- (Del) 2808.7 Pile fire protection. Delete section.
- (Del) 2808.8 Fire extinguishers. Delete section.
- (Del) 2808.9 Material-handling equipment. Delete section.

(Del) 2808.10 Emergency plan. Delete section.

(Amd) **SECTION 2809 EXTERIOR STORAGE OF FINISHED LUMBER AND SOLID BIOFUEL PRODUCTS.** The exterior storage of finished lumber products shall comply with the Connecticut State Fire Prevention Code. (Del) Sections 2809.1 to 2809.5, inclusive. Delete sections.

C H A P T E R 2 9 MANUFACTURE OF ORGANIC COATINGS

(Del) 2901.2 Permits. Delete section.

(Amd) **2901.3 Maintenance.** Structures and their service equipment shall be maintained in accordance with the Connecticut State Fire Prevention Code.

(Amd) **2903.5 Portable fire extinguishers.** Portable fire extinguishers shall be provided in accordance with Section 906 and the Connecticut State Fire Prevention Code.

(Amd) **2903.7 Smoking.** Any regulation of smoking as a fire hazard shall be in accordance with the Connecticut State Fire Prevention Code.

(Del) 2903.8 Power equipment. Delete section.

(Amd) **2903.9 Tank Maintenance.** The cleaning of tanks and vessels that contain flammable or combustible liquids shall be in accordance with the Connecticut State Fire Prevention Code.

(Del) 2903.9.1 Repairs. Delete section.

(Del) 2903.9.2 Empty containers. Delete section.

(Amd) **SECTION 2908 RAW MATERIALS IN PROCESS AREA.** The amount of raw materials brought into the operating area shall comply with the Connecticut State Fire Prevention Code.

(Del) Sections 2908.1 and 2908.2. Delete sections.

(Amd) **2909.3.2 Safety.** Tank cars for flammable liquids shall be loaded and unloaded in accordance with the Connecticut State Fire Prevention Code.

(Amd) **2909.4.2 Spills.** The control of spills shall be in accordance with the Connecticut State Fire Prevention Code.

(Del) 2909.5.1 Size. Delete section.

CHAPTER 30 INDUSTRIAL OVENS

(Del) 3001.2 Permits. Delete section.

(Amd) **3007.3 Training.** The training of operators, maintenance and supervisory personnel shall be in accordance with the Connecticut State Fire Prevention Code.

(Amd) **3007.4 Equipment maintenance**. Equipment shall be maintained in accordance with the manufacturer's instructions and the Connecticut State Fire Prevention Code.

C H A P T E R 3 1 TENTS AND OTHER MEMBRANE STRUCTURES

(Amd) **3101.1 Scope.** Tent and membrane structures shall comply with this chapter. The provisions of Section 3103 are applicable only to temporary tents and membrane structures. The provisions of Section 3104 are applicable to temporary and permanent tents and membrane structures. Membrane structures covering water storage facilities, water clarifiers, water treatment plants, sewage treatment plants, greenhouses and similar facilities not used for human occupancy, are required to meet only the requirements of Section 3104.2.1.

(Amd) **3103.2 Approval required.** Tents and membrane structures having an area in excess of 400 square feet (37 m²) shall not be erected, operated or maintained for any purpose without obtaining approval from the fire official.

Exceptions:

- 1. Tents used exclusively for recreational camping purposes.
- 2. Tents open on all sides which comply with all of the following:
 - 2.1 Individual tents having a maximum size of 700 square feet (65 m²)
 - 2.2 The aggregate area of multiple tents placed side by side without a fire break clearance of 12 feet (3,658 mm), not exceeding 700 square feet (65 m²) total.
 - 2.3 Å minimum clearance of 12 feet (3,658 mm) to all other structures and tents.
- 3. Tents 900 square feet and smaller in total area when occupied by fewer than 50 persons, which have no heating appliances, no installed electrical service and are erected for fewer than 72 hours.

(Amd) **3103.4 Permits**. Permits, if required, shall be in accordance with the Connecticut State Fire Prevention Code.

(Amd) **3103.5 Use period.** Temporary, air-supported structures, air-inflated or tensioned membrane structures shall not be erected for a period of more than 180 consecutive calendar days out of any 365 consecutive calendar days on a single premise.

(Add) **3103.12.9** Tent stakes adjacent to any *means of egress* from any tent open to the public shall be railed off, capped, or covered so as not to present a hazard to the public.

(Add) **3104.2.1 Membrane and interior liner material.** Membranes and interior liners shall be either noncombustible as set forth in Section 703.5 of the International Building Code or meet the fire propagation performance criteria of NFPA 701 and the manufacturer's test protocol.

Exception: Plastic less than 20 mil (0.5 mm) in thickness used in greenhouses, where occupancy by the general public is not authorized, and for aquaculture pond covers is not required to meet the fire propagation performance criteria of NFPA 701.

(Amd) **3104.6 Smoking.** Smoking shall not be permitted in tents or membrane structures. Approved "No Smoking" signs shall be conspicuously posted.

(Amd) **3104.15.6 Outdoor cooking.** Outdoor cooking that produces sparks shall not be performed within 20 feet (6096 mm) of a tent or membrane structure.

(Amd) **3104.16.2.1 Containers 100 to 500 gallons.** Portable LP-gas containers with a capacity of 100 to 500 gallons shall have a minimum separation between the containers and structure not less than 10 feet (3048mm).

(Amd) **3104.19 Separation of generators.** Generators and other internal combustion power sources shall be separated from tents or membrane structures by not less than 20 feet (6096 mm) and shall be isolated from contact with the public by fencing, enclosure or other approved means.

Exception:

Generators 7.5KW or less shall be separated from tents or membrane structures by not less than 5 feet (1524 mm).

(Amd) **3105.3 Permits.** Permits, if required, shall be in accordance with the Connecticut State Fire Prevention Code.

C H A P T E R 3 2 HIGH-PILED COMBUSTIBLE STORAGE

(Del) 3201.2 Permits. Delete section.

(Amd) **3205.1 Rack structures.** The housekeeping and maintenance of high-piled combustible storage shall comply with the Connecticut State Fire Prevention Code.

(Del) 3205.2 Ignition sources. Delete section.

(Del) 3205.3 Smoking. Delete section.

(Del) 3205.4 Aisle maintenance. Delete section.

(Del) 3205.5 Pile dimension and height limitations. Delete section.

(Del) **3205.6 Designation of storage heights.** Delete section.

(Del) **CHAPTER 33 FIRE SAFETY DURING CONSTRUCTION AND DEMOLITION** Delete Chapter 33 in its entirety and replace with the following:

CHAPTER 33 FIRE SAFETY DURING CONSTRUCTION AND DEMOLITION

(Add) **3301.1 Fire Safety During Construction and Demolition.** Fire safety during construction and demolition shall be in accordance with the Connecticut State Fire Prevention Code.

(Add) **3301.2 Occupied buildings.** In buildings under construction and during the course of additions, renovations or alterations to existing buildings, occupied areas shall be separated from work areas on the same floor by a barrier having at least a one-hour fire resistance rating.

Exception: As approved by the fire code official.

C H A P T E R 3 4 TIRE REBUILDING AND TIRE STORAGE

(Del) 3401.2 Permit required. Delete section.

(Amd) **3403.3 Cleaning.** The buffing area shall be cleaned as required by the Connecticut State Fire Prevention Code.

(Amd) **3404.1 Open burning.** Precautions against fire shall be taken in accordance with the Connecticut State Fire Prevention Code.

(Del) 3404.2 Sources of heat. Delete section.

(Del) 3404.3 Smoking prohibited. Delete section.

(Del) 3404.4 Power lines. Delete section.

(Del) 3405.5 Fire safety plan. Delete section.

(Del) 3405.6 Telephone number. Delete section.

(Amd) **3405.1 Individual piles.** The outdoor storage of tires shall be in accordance with the Connecticut State Fire Prevention Code.

(Del) 3405.2 Separation of piles. Delete section.

(Del) 3405.3 Distance between piles of other stored products. Delete section.

(Del) 3405.4 Distance from lot lines and buildings. Delete section.

(Del) 3405.5 Fire breaks. Delete section.

(Del) 3405.6 Volume more than 150,000 cubic feet. Delete section.

(Del) 3405.7 Location of storage. Delete section.

(Amd) **3406.1 Required access.** Fire department access to tire storage yards shall be in accordance with the Connecticut State Fire Prevention Code.

(Del) 3406.2 Location. Delete section.

(Amd) **3407.1** Fencing surrounding a tire storage yard shall be in accordance with the Connecticut State Fire Prevention Code.

(Del) 3407.2 Construction. Delete section.

(Del) 3407.3 Locking. Delete section.

(Del) 3407.4 Unobstructed. Delete section.

(Amd) **3408.1** Water supply. Fire protection of tire storage yards shall be in accordance with the Connecticut State Fire Prevention Code.

(Del) 3408.2 Fire extinguishers. Delete section.

C H A P T E R 35 WELDING AND OTHER HOT WORK

(Del) 3501.2 Permits. Delete section.

CHAPTER 36 MARINAS

(Del) 3603.1 Combustible debris. Delete section.

(Del) 3603.2 Sources of ignition. Delete section.

(Del) 3603.3 Flammable or combustible liquid spills. Delete section.

CHAPTER 37 COMBUSTIBLE FIBERS

(Del) Delete Chapter.

C H A P T E R 50 HAZARDOUS MATERIALS – GENERAL PROVISIONS

(Amd) **5001.1.1 Additional requirements.** In addition to the requirements of this chapter, the Connecticut State Fire Prevention Code shall also apply to the storage, use and maintenance of systems relating to hazardous materials. This code addresses all construction related issues.

(Add) **5001.7 Cleaning and purging of flammable gas piping systems.** The cleaning and purging of any flammable gas piping system shall be in accordance with NFPA 56, Fire and Explosion Prevention during Cleaning and Purging of Flammable Gas Piping Systems. This includes purging into or out of service.

(Amd) **5003.2.9.2 Testing frequency.** The equipment, systems and devices listed in Section 5003.2.9.1 shall be tested in accordance with the Connecticut State Fire Prevention Code with written records of the tests conducted or maintenance performed provided to the fire code official in accordance with that code.

(Del) 5003.3 Release of hazardous materials. Delete section

CHAPTER 51 AEROSOLS

(Amd) **5101.2 Additional requirements.** In addition to the requirements of this chapter, the Connecticut State Fire Prevention Code shall also apply to the storage and display of aerosol products. This code addresses all construction related issues.

C H A P T E R 53 COMPRESSED GASES

(Amd) **5301.2 Cleaning and purging of flammable gas piping systems.** The cleaning and purging of any flammable gas piping system shall be in accordance with NFPA 56, Fire and Explosion Prevention during Cleaning and Purging of Flammable Gas Piping Systems. This includes purging into or out of service.

(Add) **5301.3 Additional requirements.** In addition to the requirements of this chapter, the Connecticut State Fire Prevention Code shall also apply to the storage, use and handling of compressed gases. This code addresses all construction related issues.

CHAPTER 55 CRYOGENIC MATERIALS

(Amd) **5501.2 Cleaning and purging of flammable gas piping systems.** The cleaning and purging of any flammable gas piping system shall be in accordance with NFPA 56, Fire and Explosion Prevention during Cleaning and Purging of Flammable Gas Piping Systems. This includes purging into or out of service.

(Add) **5501.3 Additional requirements.** In addition to the requirements of this chapter, the Connecticut State Fire Prevention Code shall also apply to the storage, use and handling of cryogenic materials. This code addresses all construction related issues.

CHAPTER 56 EXPLOSIVES AND FIREWORKS

(Amd) **5601.1.3 Additional requirements.** In addition to the requirements of this code, compliance with sections 29-343 to 29-370, inclusive, of the Connecticut General Statutes and the Department of Emergency Services and Public Protection's regulations pertaining to Explosives, Fireworks and Special Effects is required.

(Add) **5601.1.3.1** The provisions of NFPA 1124, the 2006 edition are amended for use in Connecticut as follows:

(Amd) **7.3.7 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.

- (Del) 5601.2 Permit required. Delete section.
- (Del) 5601.3 Prohibited explosives. Delete section.
- (Del) 5601.4 Qualifications. Delete section.
- (Del) 5601.5 Supervision. Delete section.
- (Del) 5601.6 Notification. Delete section.
- (Del) 5601.7 Seizure. Delete section.
- (Del) 5603 RECORD KEEPING AND REPORTING. Delete section.
- (Del) 5604.7 Operation. Delete section.
- (Del) 5604.8 Maintenance. Delete section.
- (Del) 5604.9 Inspection. Delete section.
- (Del) 5604.10 Disposal of explosive materials. Delete section.

(Del) 5605 MANUFACTURE, ASSEMBLY AND TESTING OF EXPLOSIVES, EXPLOSIVE MATERIAL AND FIREWORKS. Delete section.

- (Del) SECTION 5607 BLASTING. Delete section.
- (Del) SECTION 5608 FIREWORKS DISPLAY. Delete section.

CHAPTER 57 FLAMMABLE AND COMBUSTIBLE LIQUIDS

(Amd) **5701.4 Additional requirements.** In addition to the requirements of this chapter, the requirements of NFPA 30 shall also apply. The Connecticut State Fire Prevention Code shall also apply to the storage, use and handling of Flammable and Combustible Liquids. This code addresses all construction related issues.

(Del) 5703.6.3.1 Existing Piping. Delete section.

(Amd) **5706.2.7 Portable fire extinguishers.** Portable fire extinguishers with a minimum rating of 20-B:C and complying with Section 906 shall be provided.

(Del) **5706.3 Well drilling and operating.** Delete section.

(Amd) **5706.4.8 Sources of ignition.** Class I, II, or IIIA liquids shall not be used, drawn or dispensed where flammable vapors can reach a source of ignition. Smoking shall be prohibited except in designated locations. "No Smoking" signs complying with the Connecticut State Fire Prevention Code shall be conspicuously posted where a hazard from flammable vapors is normally present.

(Del) 5706.5 Bulk transfer and process transfer operations. Delete section.

(Del) 5706.6 Tank vehicles and vehicle operation. Delete section.

C H A P T E R 58 FLAMMABLE GASES AND FLAMMABLE CRYOGENIC FLUIDS

(Amd) **5801.2 Cleaning and purging of flammable gas piping systems.** The cleaning and purging of any flammable gas piping system shall be in accordance with NFPA 56, Fire and Explosion Prevention during Cleaning and Purging of Flammable Gas Piping Systems. This includes purging into or out of service.

(Add) **5801.3 Additional requirements.** In addition to the requirements of this chapter, the Connecticut State Fire Prevention Code shall also apply to the storage, use and handling of cryogenic materials. This code addresses all construction related issues.

(Amd) **5803.1.4.2 Signs.** No smoking signs shall be posted at all entrances to rooms and in areas containing flammable gases in accordance with Section 5003.7.1 and the Connecticut State Fire Prevention Code.

(Del) **5806.2 Limitations.** Delete section.

(Del) 5807.1.4 Service life and inspection of containers. Delete section.

(Amd) **5807.1.5 Marking and labeling.** Marking and labeling of cylinders, containers, tanks and systems shall be in accordance with Section 5303.4, Sections 5807.1.5.1 to 5807.1.5.4, inclusive, and the Connecticut State Fire Prevention Code.

(Del) 5807.1.8 Piping systems. Delete section.

(Del) **5807.1.9 Refilling of containers.** Delete section.

(Del) **5807.2 Portable containers or systems.** Delete section.

CHAPTER 59 FLAMMABLE SOLIDS

(Amd) **5901.1 Scope.** The storage and use of flammable solids shall be in accordance with this chapter and the Connecticut State Fire Prevention Code.

CHAPTER 60 HIGHLY TOXIC AND TOXIC MATERIALS

(Amd) **6001.2 Additional requirements.** In addition to the requirements of this chapter, the Connecticut State Fire Prevention Code shall also apply to the storage and use of highly toxic and toxic materials. This code addresses all construction related issues.

CHAPTER 61 LIQUEFIED PETROLEUM GASES

(Add) **6101.1.1 Additional requirements.** In addition to the requirements of this chapter, the Connecticut State Fire Prevention Code shall also apply to the storage, use and maintenance of LP-gas containers and LP-gas systems. This code addresses all construction related issues.

(Amd) **6101.2 Cleaning and purging of flammable gas piping systems.** The cleaning and purging of any flammable gas piping system shall be in accordance with NFPA 56, Fire and Explosion Prevention during Cleaning and Purging of Flammable Gas Piping Systems. This includes purging into or out of service.

(Del) 6106 Dispensing and overfilling. Delete section.

(Amd) **6107.2 Smoking and other sources of ignition.** "No Smoking" signs complying with the Connecticut State Fire Prevention Code shall be posted where required by the fire code official. Smoking within 25 feet (7620 mm) of a point of transfer, while filling operations are in progress at LP-gas containers or vehicles, shall be prohibited.

Control of other sources of ignition shall comply with Chapter 3 and NFPA 58.

(Amd) **6107.4 Protecting containers from vehicles.** Where exposed to vehicular damage due to proximity to alleys, driveways or parking areas, LP-gas containers, regulators and piping shall be protected in accordance with Section 312.

(Amd) **6108.2 Portable fire extinguishers.** Portable fire extinguishers complying with Section 906 shall be provided as specified in NFPA 58.

(Del) 6109 STORAGE OF PORTABLE LP-GAS CONTAINERS AWAITING USE OR RESALE. Delete section.

(Del) 6110 LP-GAS CONTAINERS NOT IN USE. Delete section.

(Del) 6111 PARKING AND GARAGING OF LP-GAS TANK VEHICLES. Delete section.

CHAPTER 62 ORGANIC PEROXIDES

(Amd) **6201.2 Additional requirements.** In addition to the requirements of this section, the Connecticut State Fire Prevention Code shall also apply to the storage and use of organic peroxides. This code addresses all construction related issues.

C H A P T E R 6 3 OXIDIZERS, OXIDIZING GASES AND OXIDIZING CRYOGENIC FLUIDS

(Amd) **6301.2 Additional requirements.** In addition to the requirements of this chapter, the Connecticut State Fire Prevention Code shall also apply to the storage and use of oxidizing materials. This code addresses all construction related issues.

CHAPTER 64 PYROPHORIC MATERIALS

(Amd) **6401.2 Additional requirements.** In addition to the requirements of this chapter, the Connecticut State Fire Prevention Code shall also apply to the storage and use of pyrophoric materials. This code addresses all construction related issues.

CHAPTER 65 PYROXLIN (CELLULOSE NITRATE) PLASTICS

(Amd) **6501.1 Scope.** This chapter shall apply to the storage and handling of plastic substances, materials or compounds with cellulose nitrate as a base, by whatever name known, in the form of blocks, sheets, tubes or fabricated shapes.

Cellulose nitrate motion picture film shall comply with the requirements of Section 409 and NFPA 40.

(Amd) **6501.2 Additional requirements.** In addition to the requirements of this chapter, the Connecticut State Fire Prevention Code shall also apply to the storage and use of these materials. This code addresses all construction related issues.

CHAPTER 66 UNSTABLE (REACTIVE) MATERIALS

(Amd) **6601.2 Additional requirements.** In addition to the requirements of this chapter, the Connecticut State Fire Prevention Code shall also apply to the storage and use of unstable (reactive) materials. This code addresses all construction related issues.

CHAPTER 67 WATER-REACTIVE SOLIDS AND LIQUIDS

(Amd) **6701.2 Additional requirements.** In addition to the requirements of this chapter, the Connecticut State Fire Prevention Code shall also apply to the storage and use of water-reactive solids and liquids. This code addresses all construction related issues.

A P P E N D I X A BOARD OF APPEALS

(Del) Delete Appendix.

A P P E N D I X B FIRE-FLOW REQUIREMENTS FOR BUILDINGS

(Del) Delete Appendix.

A P P E N D I X C FIRE HYDRANT LOCATIONS AND DISTRIBUTION

(Del) Delete Appendix.

A P P E N D I X D FIRE APPARATUS ACCESS ROADS

(Del) D107 One- or two-family dwelling residential developments. Delete section.

A P P E N D I X E HAZARD CATEGORIES

(Del) Delete Appendix.

A P P E N D I X F HAZARD RANKING

(Del) Delete Appendix.

A P P E N D I X G CRYOGENIC FLUIDS – WEIGHT AND VOLUME EQUIVALENTS

(Del) Delete Appendix.

APPENDIX H

HAZARDOUS MATERIALS MANAGEMENT PLAN (HMMP) AND HAZARDOUS MATERIALS INVENTORY STATEMENT (HMIS) INSTRUCTIONS

(Del) Delete Appendix.

A P P E N D I X I FIRE PROTECTION SYSTEMS – NONCOMPLIANT CONDITIONS

(Del) Delete Appendix.

A P P E N D I X J BUILDING INFORMATION SIGN

(Del) Delete Appendix.

A P P E N D I X K CONSTRUCTION REQUIREMENTS FOR EXISTING AMBULATORY CARE FACILITIES

(Del) Delete Appendix.

A P P E N D I X L REQUIREMENTS FOR FIRE FIGHTER AIR REPLENISHMENT SYSTEMS

(Del) Delete Appendix.

A P P E N D I X M HIGH-RISE BUILDINGS – RETROACTIVE AUTOMATIC SPRINKLER REQUIREMENT

(Del) Delete Appendix.

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PART IV—Existing Buildings/Occupancies

Amendements to the 2015 NFPA 101[®], Life Safety Code

CHAPTER 1*

ADMINISTRATION

(Del) **1.1.1** Delete section.

(Amd) **1.3.1 Application**. This Part shall only apply to an occupancy or use located within buildings or structures, or portions thereof that existed, or for which building permit was applied for, prior to December 31, 2005.

Part III of this code shall be applicable for buildings or structures, or portions thereof for which a building permit was applied for on or after December 31, 2005.

Part III of this code shall apply to all buildings or structures, or portions thereof, undergoing a change of occupancy classification or sub-classifications.

The design and construction of new structures shall comply with Part III of this code.

Repairs, alterations and additions to existing structures shall comply with Part III of this code.

For existing occupancies subject to an abatement order for violations of Part IV of this code, only new fire protection, electrical and mechanical system work shall be subject to the requirements of Part III.

CHAPTER 2 REFERENCED PUBLICATIONS

(Amd) **2.2 NFPA Publications.** National Fire Protection Association, 1 Batterymarch Park, Quincy, MA 02169-7471. The documents referenced in this section, as amended by Section 202 of Part II of this code, shall be considered part of the requirements of this code to the extent called for by this code.

CHAPTER 3 DEFINITIONS

(Amd) **3.3.36* Building.** Any structure used or intended for supporting or sheltering any use or occupancy. For application of this code, each portion of a building 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 separate buildings.
(Amd) **3.3.64* 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.

(Add) **3.3.66.4 One and Two Family Dwelling.** One and Two- family dwellings include buildings containing not more than two dwelling units in which each dwelling unit is occupied by members of a single family with not more than six (6) outsiders, if any, accommodated in rented rooms.

(Amd) **3.3.190.5 Detention and Correctional Occupancy**. An occupancy used to house four or more persons under varied degrees of restraint or security where such occupants are mostly incapable of self-preservation because of security measures not under the occupants' control.

(Amd) **3.3.242* Self-preservation (day-care occupancy).** The ability of a client to evacuate a day-care occupancy without direct intervention by a staff member. Clients under the age of 3 years shall be considered incapable of self-preservation.

(Add) 3.4 Connecticut Specific Definitions

(Add) **3.4.1 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,
- (2) Where the owner occupies the facility or an adjacent property as his or her primary place of residence,
- (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.

(Amd) **3.4.2 Consumer fireworks, 1.4G.** (Formerly known as Class C, Common Fireworks) Any small fireworks device designed primarily to produce visible effects by combustion that complies with the construction, chemical composition, and labeling as set forth in the U.S Consumer Products Safety Commission in 16 CFR Parts 1500 and 1507. Some small devices designed to produce audible effects are included, such as whistling devices, ground devices containing 0.8 gr (50 mg) or less of explosive composition (salute powder), and aerial devices containing 2 gr (130 mg) or less of explosive composition (salute powder) per explosive unit. See also sections 29-356 and 29-357 of the Connecticut General Statutes.

(Add) **3.4.3 Sparklers and fountains.** See sections 29-356 and 29-357 of the Connecticut General Statutes.

- (3) "Sparklers" means a wire or stick coated with pyrotechnic composition that produces a shower of sparks upon ignition.
- (4) "Fountain" means any cardboard or heavy paper cone or cylindrical tube containing pyrotechnic mixture that upon ignition produces a shower of colored sparks or smoke. "Fountain" includes, but is not limited to, (A) a spike fountain, which provides a spike for insertion into the ground, (B) a base fountain which has a wooden or plastic base for placing on the ground, or (C) a handle fountain which is a handheld device with a wooden or cardboard handle.

(Add) **3.4.4 In-home Group B occupancies**. Customary in-home business occupancies located within a single-family dwelling unit that provide professional services and 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 residential occupancy.

(Add) **3.4.5 In-home industrial occupancies, other than high hazard industrial occupancies**. Customary in-home industrial occupancies, located within a single-family dwelling premises, in which processing, assembling, mixing, packaging, finishing, decorating or repair operations are conducted and employ a maximum of one employee within the dwelling in addition to the residents of the dwelling premises, shall be classified as a single-family residential occupancy.

CHAPTER 4

GENERAL

(Del) 4.5 Fundamental Requirements. Delete section.

- (Del) 4.6.1.2 Delete section.
- (Del) 4.6.1.3 Delete section.
- (Del) 4.6.4 Historic Buildings. Delete section.
- (Del) 4.6.5* Modification of Requirements for Existing Buildings. Delete section.
- (Del) 4.6.7.1 Delete section.
- (Del) 4.6.7.2 Delete section.
- (Del) 4.6.10.2* Delete section.
- (Del) 4.7* Fire Drills. Delete section.
- (Del) 4.8 Emergency Action Plan. Delete section.

CHAPTER 5 PERFORMANCE-BASED OPTION

(Del) Delete chapter.

CHAPTER 6 CLASSIFICATION OF OCCUPANCY AND HAZARD OF CONTENTS

(Amd) **6.1.8.1.4*** **Definition–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.

(Add) **6.1.8.1.6 Definition—Bed and Breakfast or Bed and Breakfast establishment.** An existing 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;
- (2) Where the owner occupies the facility or an adjacent property as his or her primary place of residence;
- (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.

(Amd) **6.1.11.2 In-home Group B occupancies**. Customary in-home business occupancies located within a single-family dwelling unit that provide professional services and 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 residential occupancy.

(Amd) **6.1.12.2 In-home industrial occupancies, other than high hazard industrial occupancies**. Customary in-home industrial occupancies, located within a single-family dwelling premises, in which processing, assembling, mixing, packaging, finishing, decorating or repair operations are conducted and employ a maximum of one employee within the dwelling in addition to the residents of the dwelling premises, shall be classified as a single-family residential occupancy.

(Amd) **6.1.14.1.1** Multiple occupancies shall comply with the requirements of Sections 6.1.14.1 and 6.1.14.3

(Del) 6.1.14.4 Separated occupancies. Delete section.

CHAPTER 7 MEANS OF EGRESS

(Amd) **7.1.3.2.1** Where this Code requires an exit to be separated from other parts of the building, the separating construction shall meet the requirements of Section 8.2 and the following:

- (1) *The separation shall have a minimum 1-hour fire resistance rating where the exit connects three or fewer stories.
- (2) The separation specified in Section 7.1.3.2.1(1), other than an existing separation, shall be supported by construction having not less than a 1-hour fire resistance rating.
- (3) *The separation shall have a minimum 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 a minimum 1-hour fire resistance rating.
- (b) In existing buildings protected throughout by an approved, supervised automatic sprinkler system in accordance with Section 9.7, existing exit stair enclosures shall have a minimum 1-hour fire resistance rating.
- (c) The minimum 1-hour enclosures in accordance with Sections 29.2.2.1.2, and 31.2.2.1.2 shall be permitted as an alternative to the requirement of 7.1.3.2.1(3).
- (4) Reserved.
- (5) The minimum 2-hour fire resistance-rated separation required by Section 7.1.3.2.1(3) shall be constructed of an assembly of noncombustible or limited-combustible materials and shall be supported by construction having a minimum 2-hour fire resistance rating, unless otherwise permitted by Section 7.1.3.2.1(7).
- (6) *Structural elements, or portions thereof, that support exit components and either penetrate into a fire resistance-rated assembly or are installed within a fire resistance-rated wall assembly shall be protected, as a minimum, to the fire resistant rating required by Section 7.1.3.2.1(1) or (3).
- (7) In Type III, Type IV, and Type V construction, as defined in NFPA 220, Standard on Types of Building Construction (see Section 8.2.1.2), fire-retardant-treated wood enclosed in the non-combustible or limited-combustible materials shall be permitted.
- (8) Openings in the separation shall be protected by fire door assemblies equipped with door closers complying with Section 7.2.1.8.
- (9) *Openings in exit enclosures shall be limited to door assemblies from normally occupied spaces and corridors and door assemblies for egress from the enclosure, unless one of the following conditions exits:
 - (a) Openings in exit passageways in mall buildings as provided in Chapter 37 shall be permitted.
 - (b) In buildings of Type I and Type II construction, as defined in NFPA 220 Standard on Types of Building Construction (see Section 8.2.1.2), existing fire protection-rated door assemblies 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 Section 8.3.
 - (c) Existing openings to mechanical equipment spaces protected by approved existing fire protection rated door assemblies shall be permitted, provided 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 Section 9.7.

- (10) Penetrations into, and openings through, an exit enclosure assembly shall be limited to the following:
 - (a) Door assemblies permitted by Section 7.1.3.2.1(9)
 - (b) *Electrical conduit serving the exit enclosure
 - (c) Required exit door openings
 - (d) Ductwork 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 Section 8.3.5
 - (i) Penetrations for fire alarm circuits, where the circuits are installed in metal conduit and the penetrations are protected in accordance with Section 8.3.5
 - (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 shall be protected by a combination smoke and fire damper in accordance with Section 8.5.4.2.
 - iii. The smoke damper shall close upon shutdown of the associated heating, ventilation and cooling unit.
- (11) Penetrations or communicating openings shall be prohibited between adjacent exit enclosures.
- (12) Membrane penetrations, other than approved existing penetrations shall be permitted on the exit access side of the exit enclosure and shall be protected in accordance with Section 8.3.5.6.

(Add) **7.1.5.1.1** In existing buildings, projections from the ceiling are permitted but not less than 72 inches (1,830 mm) nominal above the finished floor where the projection is provided with padding and illumination by both normal and emergency sources.

(Add) **7.1.5.4** Door closers and stops shall not reduce the headroom to less than 78 inches (1,981 mm).

(Add) **7.1.9.1 Security devices**. 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.

(Add) **7.1.10.1.1 Clearance for inclined lifts on stairways** Where a platform or chair lift is installed on an exit stair in an existing building, the minimum clear width on the stair when the inclined lift is in the down or operating position shall be:

- (1) 18 inches (460 mm) when the stair serves fewer than 10 people
- (2) 22 inches (560 mm) where the stair serves fewer than 50 people

(3) As required by this code when the stair serves 50 or more people

(Amd) **7.2.1.3.3** Thresholds at doorways shall not exceed ½ inches (13 mm) in height or ¾ inches (19.1 mm) in height for sliding doors serving dwelling units.

(Amd) **7.2.1.6.2 Access-controlled egress door assemblies.** Where permitted in Chapter 11 to Chapter 42, inclusive, entrance doors to buildings and tenant spaces in the means of egress may be equipped with electrical lock hardware that prevents egress, provided the following criteria are met:

- (1) A sensor shall be provided on the egress side, arranged to unlock the door leaf in the direction of egress upon detection of an approaching occupant.
- (2) Door leaves shall automatically unlock in the direction of egress upon loss of power to the sensor or to the part of the access control system that locks the door leaves.
- (3) The doors shall be arranged to unlock in the direction of egress from a manual release device complying with all of the following criteria:
 - (a) A manual release device shall be located on the egress side 40 inches to 48 inches (1015 mm to 1,220 mm) vertically above the floor, within 60 inches (1,525 mm) of the secured door openings.
 - (b) The manual release device shall be readily accessible and clearly identified by a sign that reads as follows: "PUSH TO EXIT".
 - (c) When operated, the manual release device shall result in direct interruption of power to the lock – independent of the locking system electronics – and the lock shall remain unlocked for not less than 30 seconds.
- (4) Activation of the building fire-protective signaling system, if provided, shall automatically unlock the door leaves in the direction of egress, and the door leaves shall remain unlocked until the fire-protective signaling system has been manually reset.
- (5) Activation of the manual fire alarm boxes that activate the building fire protective signaling system specified in Section 7.2.1.6.2(4) shall not be required to unlock the door leaves.
- (6) Activation of the building automatic sprinkler or fire detection system, if provided, shall automatically unlock the door leaves in the direction of egress, and the door leaves shall remain unlocked until the fire-protective signaling system has been manually reset.
- (7) The egress side of access-controlled egress doors, other than existing access-controlled egress doors, shall be provided with emergency lighting in accordance with Section 7.9.

(Amd) **7.2.2.1.2** The requirements of Section 7.2.2.1.1 shall not apply to aisle steps as provided in Chapter 13.

(Add) **7.2.2.2.1.1.1** Existing stairs may remain in use if the minimum width clear of all obstructions, except projections not more than 4½ inches (114 mm) at or below handrail height on each side is 28 inches (710 mm) and the total occupant load of all floors served by the stair is fewer than 30 persons.

(Add) **7.2.2.1.1.2** Existing projections from the ceiling in existing stairs may conform to the requirements of 7.1.5.1.1.

(Add) **7.2.2.4.4** Existing stairs containing winders may also be continued in use provided all of the following are met:

- Such winders have a minimum depth of tread of 7½ inches (191 mm) at a point 12 inches (305 mm) from the narrowest edge.
- (2) The nosing of each winder tread shall be made readily visible by the application of a 2 inches wide stripe for the full width of the tread that is of a distinctive or contrasting color.
- (3) The area of the winder shall be provided with both normal illumination and emergency lighting in accordance with Section 7.8 and Section 7.9.
- (4) A handrail shall be provided for the full length of stair travel at the side of the stair having the widest tread portion.

(Amd) **7.2.2.3.6.1** Variation in excess of 3/8 inches (9.5 mm) in the depth of adjacent treads or in the height of adjacent risers shall be prohibited unless otherwise permitted in Section 7.2.2.3.6.3.

(Del) 7.2.2.4.4 Direction. Delete section

(Amd) **7.2.2.4.5.5*** Handrails shall be installed to provide a clearance of not less than 1½ inches (38 mm) between the handrail and the wall to which it is fastened.

(Del) 7.2.2.5.2* Exposures. Delete section.

(Amd) **7.2.2.6.3.1*** Outside stairs shall be separated from the interior of the building by construction with the fire resistance rating required for enclosed stairs with fixed or self-closing opening protectives, except as follows:

- (1) Outside stairs serving an exterior exit access balcony that has two remote outside stairways or ramps may be unprotected.
- (2) In existing buildings, existing outside stairs serving not in excess of four adjacent stories, including the story of exit discharge, may be unprotected where there is a remotely located second exit.
- (3) The fire resistance rating of a separation extending 120 inches (3,050 mm) from the stairs shall not be required to exceed 1 hour where openings have not less than a ³/₄-hour fire protection rating.
- (4) Outside stairs in existing buildings protected throughout by an approved, supervised automatic sprinkler system in accordance with Section 9.7 may be unprotected.

(Amd) **7.2.8.2.2** The requirements of Section 7.2.8.2 may be modified by the State Fire Marshal where automatic sprinkler protection is provided, in occupancies limited to low hazard contents or where other special conditions exist.

(Del) **7.2.12.3.2*** Delete section.

(Amd) Table 7.3.1.2 Occupant Load Factor	(Amd) Table 7.3.1.2 Occupant Load Factor				
Use	(ft²/person) ^a	(m²/person) ^a			
Assembly Use					
Concentrated use, w/out fixed seating	7 net	0.65 net			
Less concentrated use, w/out fixed seating	15 net	1.4 net			
Bench-type seating	1 person/18 linear in.	1 person/455 linear mm			
Fixed seating	Use number of fixed seats				
Waiting spaces	See 13.1.7.2.	See 13.1.7.2.			
Kitchens	200	9.3			
Exhibit gallery and Museum	30 net	2.8 net			
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			
Airport terminal areas					
Baggage Claim	20	1.9			
Baggage handling	300	27.9			
Concourse	100	9.3			
Waiting areas	15	1.4			
Business Use (other than below)	100	9.3			
Concentrated Business Use ^f	50	4.6			
Air traffic control tower					
Observation levels	40	3.7			
Day-Care Use	35 net	3.3 net			
-					
Detention and Correctional Use	120	11.1			
Educational Use	00				
Classrooms	20 net	1.9 net			
Shops, laboratories, vocational rooms	50 net	4.6 net			
Health Care Use					
Inpatient treatment departments	240	22.3			
Sleeping departments	120	11.1			
Ambulatory health care	150	13			
Outpatient treatment departments	100	9.3			
Industrial Use					
General and high hazard industrial	100	9.3			
Special-purpose industrial	NA	NA			
Mercantile Use					
Sales area on street floor ^{b,c}	30	2.8			
Sales area on two or more street floors ^c	40	3.7			

(Amd) Table 7.3.1.2 Occupant Load Factor

Sales area on floor below street floor ^c Sales area on floors above street floor ^c Floors or portions of floors used only	30 60	2.8 5.6
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 ^d	Per factors applicabl	e to use of space ^e
Residential Use		
Hotels and dormitories	200	18.6
Apartment buildings	200	18.6
Board and care, large	200	18.6
Storage Use		
In storage occupancies	NA	NA
In mercantile occupancies	300	27.9
In other than storage		
and mercantile occupancies	500	46.5

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

^aAll factors are expressed in gross area unless marked "net."

^bFor the purpose of determining occupant load in mercantile occupancies where, due to differences in the finished ground level 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 ft² (3.7 m²) of gross floor area of sales space.

^cFor the purpose of determining occupant load in mercantile occupancies with no street floor, as defined in 3.3.271, 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.

^dFor 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 Table 7.3.1.2. The remaining mall area is not required to be assigned an occupant load.

^eThe 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 Table 7.3.1.2. 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 7.3.1.2(a) or Figure 7.3.1.2(b). 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 Table 7.3.1.2. Each individual anchor store is required to have means of egress independent of the mall.

^fSee A.7.3.1.2.

(Add) **7.4.1.6.1.1** The provisions of Section 7.4.1.6 shall not apply to buildings for which a building permit was issued prior to June 15, 1994.

(Amd) **7.9.1.1*** Emergency lighting facilities for means of egress shall be provided in accordance with Section 7.9 for the following:

- (1) Buildings or structures where required in Chapter 11 to Chapter 42, inclusive, where the building or structure is required to have two or more means of egress.
- (2) Underground and limited access structures as addressed in Section 11.7, where the building or structure is required to have two or more means of egress.
- (3) High-rise buildings as required by other sections of this code.
- (4) Doors equipped with delayed-egress locks.
- (5) Stair shaft and vestibule of smoke enclosures, for which the following also shall apply:
 - (a) The stair shaft and vestibule may include a standby generator that is installed for the smoke proof enclosure mechanical ventilations equipment.
 - (b) The standby generator may be used for the stair shaft and vestibule emergency lighting power supply.

(Del) 7.9.3 Delete section.

(Del) 7.10.9 Testing and maintenance. Delete section.

(Del) **7.14 Elevators for occupant-controlled evacuation prior to Phase I emergency recall operations**. Delete section.

CHAPTER 8 FEATURES OF FIRE PROTECTION

(Amd) **8.2.2.4** Where door assemblies are required elsewhere in this code to be smoke leakagerated in accordance with 8.2.2.4, door assemblies shall comply with all of the following:

(1) They shall be tested in accordance with ANSI/UL 1784, *Standard for Air Leakage Tests for Door Assemblies.*

(2) The maximum air leakage rate of the door assembly shall be 3.0 ft³/min/ft2 (0.9 m^3 /min/m²) of door opening at 0.10 in. water column (25 N/m²) for both the ambient and elevated temperature tests.

(3)Door assemblies shall be installed in accordance with NFPA 105, *Standard for Smoke Door Assemblies and Other Opening Protectives*.

(4) Door assemblies shall be inspected in accordance with the Connecticut State Fire Prevention Code.

(Del) 8.3.3.13 Delete section.

(Amd) Table 8.3.4.2 Minimum fire protection ratings for opening protectives in fire-resistance-rating assemblies.

	Walls and	Fire Door	Fire Window Assemblies
Component	Partitions	Assemblies	(hr.)
	(hr.)	(hr.)	
	2	11⁄2	NP
Elevator hoistways	1	1	NP
	2	11⁄2	NP
Vertical shafts (including stairways, exits, and refuse chutes)	1	1	NP (3/4 in other than exits)
Other than exits	1/2	1/3	(1/3 in other than exits)
	2	11⁄2	NP
Fire barriers	1	3⁄4	3/4
Horizontal exits	2	11⁄2	NP
	1	1/3	3/4
Exit access corridors ¹	1/2	1/3	1/3
Smoke barriers ¹	1/2	1/3	3/4
Smoke partitions ^{1,2}	1/2	1/3	1/3

Note: NP = not permitted.

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

² For residential board and care, see Section 33.2.3.1.1.

(Add) **8.3.4.3.1** Doors having a 20-min fire protection rating or door assemblies consisting of door frames constructed of at least ³/₄ inches thick hardwood stock and 1³/₄ inches thick solid core doors that are self-closing and positive-latching may be used in vertical openings and in exit enclosures provided the building has either partial automatic sprinkler protection in accordance with Section 9.7 or a partial fire detection system in accordance with Section 9.6. These systems shall include either a sprinkler or fire detector opposite the center of and inside any door that opens into the exit, and provisions for occupant notification in accordance with Section 9.6.3.

(Add) **8.3.4.3.2** Doors having a 20-min fire protection rating or door assemblies consisting of door frames constructed of at least ³/₄ inches thick hardwood stock and 1³/₄ inches thick solid core doors that are self-closing and positive-latching may be used in vertical openings and in exit enclosures provided the building has either full automatic sprinkler protection in accordance with Section 9.7 or a full fire detection system in accordance with Section 9.6.

(Amd) **8.6.7* Atriums.** Unless prohibited by Chapters 11 through Chapter 42 of this code, an atrium shall be permitted, provided that all of the following conditions are met:

- (1) The atrium is separated from the adjacent spaces by fire barriers with not less than a 1hour fire resistance rating, with opening protectives for corridor walls, unless one of the following is met:
 - (a) The requirement of 8.6.7(1) shall not apply to existing, previously approved atriums.
 - (b) Any number of levels of the building shall be permitted to open directly to the atrium without enclosure, based on the results of the engineering analysis required in 8.6.7(5), except that two levels of the building may to open directly to the atrium without enclosure or the need for the engineering analysis.
 - (c) Glass walls and inoperable windows shall be permitted in lieu of the fire barriers where all the following are met:
 - i. Automatic sprinklers are spaced along both sides of the glass wall and the inoperable windows at intervals not to exceed 6 feet (1830 mm).
 - ii. The automatic sprinklers specified in 8.6.7(1)(c)i are located at a distance from the glass wall not to exceed 12 inches (305 mm) and arranged so that the entire surface of the glass is wet upon operation of the sprinklers.
 - iii. The glass wall is of tempered, wired, or laminated glass held in place by a gasket system that allows the glass framing system to deflect without breaking (loading) the glass before the sprinklers operate.
 - iv. The automatic sprinklers required by 8.6.7(1)(c)i are not required on the atrium side of the glass wall and the inoperable window where there is no walkway or other floor area on the atrium side above the main floor level.
 - v. Doors in the glass walls are of glass or other material that resists the passage of smoke.
 - vi. Doors in the glass walls are self-closing or automatic-closing upon detection of smoke.
 - vii. The glass is continuous vertically, without horizontal mullions, window treatments, or other obstructions that would interfere with the wetting of the entire glass surface.
- (2) Access to exits is permitted to be within the atrium, and exit discharge in accordance with 7.7.2 is permitted to be within the atrium.
- (3) The occupancy within the atrium meets the specifications for classification as low or ordinary hazard contents. (see 6.2.2.)
- (4) The entire building is protected throughout by an approved, supervised automatic sprinkler system in accordance with Section 9.7, unless that area of a building adjacent to or above the atrium need not be sprinkled provided that portion of the building is separated from the atrium portion by a 2-hour fire barrier wall or horizontal assembly or both.
- (5) *For other than existing, previously approved atriums, and atriums connecting less than three stories, an engineering analysis is performed that demonstrates that the building is designed to keep the smoke layer interface above the highest unprotected opening to adjoining spaces, or 6 feet (1830 mm) above the highest floor level of exit access open to the atrium, for a period equal to 1.5 times the calculated egress time or 20 minutes,

whichever is greater.

- (6) *For other than existing, previously approved atriums, and atriums connecting less than three stories, where an engineered smoke control system is installed to meet the requirements of 8.6.7(5), the system is independently activated by each of the following:
 - (a) Upon actuation of the required automatic sprinkler system within the atrium or areas open to the atrium
 - (b) Manual controls that are readily accessible to the fire department

(Amd) **8.6.9.1** Where permitted by Chapters 11 through Chapter 42, unenclosed vertical openings not concealed within the building construction shall be permitted as follows:

- (1) Such openings shall connect not more than two adjacent stories (one floor pierced only).
- (2) Such openings shall be separated from unprotected vertical openings serving other floors by a barrier complying with 8.6.5.
- (3) Such openings shall be separated from corridors, unless they are located within buildings protected throughout by an automatic sprinkler system in other than residential or institutional occupancies.
- (4) *In other than approved, existing convenience openings, such openings shall be separated from other fire or smoke compartments on the same floor.
- (5) *Such openings shall not serve as a required means of egress.

(Amd) **8.6.10.3 Openness.** Mezzanines shall be in accordance with Section 8.6.10.3.1, Section 8.6.10.3.2, Section 8.6.10.3.3, Section 8.6.10.3.4 or Section 8.6.10.3.5.

(Add) **8.6.10.3.3** A mezzanine or portions thereof are not required to be open to the room in which the mezzanines are located, provided the aggregate floor area of the enclosed space does not exceed 10 percent of the mezzanine area.

(Add) **8.6.10.3.4** In industrial facilities, mezzanines used for control equipment may be glazed on all sides.

(Add) **8.6.10.3.5** In industrial occupancies permitted to be of unlimited area by the State Building Code, mezzanines or portions thereof are not required to be open to the room in which the mezzanines are located, provided an approved fire alarm system is installed throughout the entire building or structure and notification appliances are installed throughout the mezzanines in accordance with the provisions of NFPA 72[®]. In addition, the fire alarm system shall be initiated by automatic sprinkler water flow.

(Amd) **8.7.3.1** The storage and handling of flammable liquids or gases shall be in accordance with the Connecticut State Fire Prevention Code.

(Amd) **8.7.3.3* Alcohol-Based Hand-Rub Dispensers.** Where permitted by Chapters 11 through 42, alcohol-based hand-rub dispensers shall be permitted provided they comply with the Connecticut State Fire Prevention Code.

(Del) 8.8 Inspection and Testing of Door Assemblies. Delete Section

CHAPTER 9 BUILDING SERVICE AND FIRE PROTECTION EQUIPMENT

(Amd) **9.1.1 Gas.** Equipment utilizing gas and related gas piping shall be in accordance with the Connecticut State Fire Prevention Code.

(Amd) **9.2.2** Ventilating or heat-producing equipment shall be installed in accordance with NFPA 91, Standard for Exhaust Systems for Air Conveying of Vapors, Gases, Mists, and Non-combustible Particulate Solids; NFPA 211, Standard for Chimneys, Fireplaces, Vents, and Solid Fuel-Burning Appliances; the Connecticut Fire Prevention Code; or NFPA 70, National Electrical Code[®], as applicable.

(Amd) 9.2.3 Commercial cooking operations. Commercial cooking operations shall be in accordance with the Connecticut State Fire Prevention Code.

(Add) **9.2.3.1 Isolated cooking operations**. The requirements for the hood, grease removal devices, duct and fixed fire extinguishing system may be waived by the authority having jurisdiction for cooking operations in free standing tents, mobile units or other small buildings located greater than 30 feet from grandstands or other public buildings and occupied by employees only, when the clearance to combustibles, safety controls, portable fire extinguishers, staff training, fuel use, storage, and shut off of fuel, and electrical shut off for equipment are in compliance with this code.

(Amd) **9.3.1** Where required by the provisions of another section of this code, smoke control systems shall be installed in accordance with the Connecticut State Building Code.

(Amd) **9.4.2.1** New and existing elevators, escalators, dumbwaiters, and moving walks shall be installed and maintained in accordance with the requirements of the Connecticut Safety Code for Elevators and Escalators enforced by the Connecticut Department of Administrative Services.

- (Del) 9.4.2.2 Delete section.
- (Del) 9.4.2.3 Delete section.
- (Del) 9.4.2.4 Delete section.
- (Del) 9.4.3 Fire Fighters' Emergency Operations. Delete section.
- (Del) 9.4.5* Elevator Machine Rooms. Delete section.
- (Del) 9.4.6 Elevator Testing. Delete section.

(Amd) **9.5.2 Installation.** Rubbish chutes, laundry chutes, and incinerators shall be installed in accordance with NFPA 82, *Standard on Incinerators and Waste and Linen Handling Systems and Equipment*, unless such installations are approved existing installations, which shall be permitted to be continued in service.

(Amd) **9.6.1.3** A fire alarm system required for life safety shall be installed and tested in accordance with the applicable requirements of NFPA 70, *National Electrical Code*, and NFPA 72, *National Fire Alarm and Signaling Code*, unless it is an approved existing installation, which may be continued in use.

(Amd) **9.6.1.5*** To ensure operational integrity, the fire alarm system shall be maintained in accordance with the Connecticut State Fire Prevention Code.

(Amd) **9.6.2.10.7** Smoke alarms shall receive their operating power as follows:

- 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, 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.

(Add) **9.6.3.5.9** When selective occupant notification is utilized in accordance with Section 9.6.3.6.2 or Section 9.6.3.6.3, 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) **9.7.1.2** 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 0.15 gallons per minute/square foot (6.1L/min/m²) 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, may be installed in an accessible, visible, location between the sprinklers and the connection to the domestic water supply.

(Add) **9.7.1.6 Statutory requirements.** An automatic fire sprinkler system shall be installed in accordance with the provisions of Section 9.7.1 as required by the provisions of section 29-315 of the Connecticut General Statutes in effect on October 1, 1973. For the purpose of this section, building height shall be measured from the lowest level of fire department vehicle access to the floor of the highest occupiable story. (see Section 3.3.36.7) The provisions of Section 9.8.1 shall not apply to these systems.

(Add) **9.7.1.7 Electric fire pumps**. Buildings provided with standby electrical power for the purpose of continuing operations or occupancy shall provide standby power in accordance with Article 701 of the National Electrical Code 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.

(Amd) **9.9* Portable Fire Extinguishers**. Where required by another section of this Code, portable fire extinguishers shall be selected, installed, inspected, and maintained in accordance with the Connecticut State Fire Prevention Code.

(Add) **9.10.1.1 Water Supply.** In buildings equipped throughout with an automatic sprinkler system where the highest floor level is not more than 150 feet above the lowest level of fire department vehicle access, Class I standpipes shall have an automatic or manual-wet supply.

(Del) 9.11 Fire Protection System Operating Features. Delete section.

(Del) 9.13 Special Inspections and Tests. Delete section.

CHAPTER 11 SPECIAL STRUCTURES AND HIGH-RISE BUILDINGS

(Amd) **11.7.3.4** Underground and limited access structures, and all areas and floor levels traversed in traveling to the exit discharge, shall be protected by an approved, supervised automatic sprinkler system in accordance with Section 9.10, unless such structures meet one of the following criteria:

- (1) They have an occupant load of 100 or fewer persons in existing underground or limited access portions of the structure.
- (2) The structure is a single-story underground or limited access structure that is permitted to have a single exit per Chapter 13 through Chapter 42.
- (Del) 11.9.1.6.3 Delete section.
- (Del) **11.10 Temporary membrane structures.** Delete section.
- (Del) **11.11 Tents.** Delete section.

CHAPTER 12 NEW ASSEMBLY OCCUPANCIES

(Del) Delete chapter.

CHAPTER 13 EXISTING ASSEMBLY OCCUPANCIES

(Del) 13.1.1.4 Delete section.

(Del) **13.1.1.6** Delete section.

(Del) 13.1.1.7 Delete section.

(Del) 13.1.1.8 Delete section.

(Amd) **13.2.3.6.1** Every assembly occupancy shall be provided with a main entrance/exit. With respect to the capacity of such main entrance/exit, the requirements of section 29-381a of the Connecticut General Statutes shall supersede the requirements of Sections 13.2.3.6.2 to 13.2.3.6.4, inclusive.

(Amd) **13.2.5.1.2** The common paths of travel shall be permitted for the first 30 feet (9.14 m) from any point where the common path serves any number of occupants, and for the first 75 feet (23 m) from any point where the common path serves not more than 50 occupants.

(Amd) **13.2.5.1.3** Dead-end corridors shall not exceed 20 feet (6.1 m), except that a dead-end corridor shall not be limited in length where the length of the dead-end corridor is less than 2.5 times the narrowest width of the dead-end corridor.

(Amd) **13.3.2.1.2** Rooms or spaces for the storage, processing, or use of materials specified in Section 13.3.2.1.2(1) to Section 13.3.2.1.2(3), inclusive, shall be protected in accordance with the following:

- (1) Separation from the remainder of the building by fire barriers having a fire resistance rating of not less than 1 hour or protection of such rooms by automatic extinguishing systems as specified in Section 8.7 in the following areas:
 - (a) Boiler and furnace rooms, unless otherwise protected by the following:
 - i. The requirement of Section 13.3.2.1.2(1)(a) shall not apply to rooms enclosing furnaces, heating and air-handling equipment, or compressor equipment, where any piece of equipment has a total aggregate input rating less than or equal to 400,000 BTU (422 MJ), nor to rooms containing a boiler not over 15 psi and 10 horsepower.
 - ii. The requirement of Section 13.3.2.1.2(1)(a) shall not apply to attic locations of the rooms addressed in Section 13.3.2.1.2(1)(a)(i) provided such rooms comply with the draftstopping requirements of 8.6.11.
 - (b) Rooms or spaces used for the storage of combustible supplies in quantities deemed hazardous by the authority having jurisdiction.
 - (c) Rooms or spaces used for the storage of hazardous materials or flammable or combustible liquids in quantities deemed hazardous by recognized standards.
 - (d) Laundries over 100 feet² (9.3 m^2).
- (2) Separation from the remainder of the building by fire barriers having a fire resistance rating of not less than 1 hour and protection of such rooms by automatic extinguishing systems as specified in Section 8.7 in the following areas:
 - (a) Maintenance shops, including woodworking and painting areas.

- (b) Rooms or spaces used for processing or use of combustible supplies deemed hazardous by the authority having jurisdiction.
- (c) Rooms or spaces used for processing or use of hazardous materials or flammable or combustible liquids in quantities deemed hazardous by recognized standards.
- (3) Where automatic extinguishing is used to meet the requirements of Section 13.3.2, the protection may be in accordance with Section 9.7.1.2.

(Amd) **13.3.5.1** Buildings with occupant loads greater than 300 for which a permit for new occupancy was issued on or after April 15, 1987 or the occupant load is increased shall be protected by an approved supervised automatic sprinkler system in accordance with Section 9.7.1 as follows:

- (1) Throughout the story containing the assembly occupancy.
- (2) Throughout any story below the story containing the assembly occupancy.
- (3) In the case of an assembly occupancy located below the level of exit discharge, throughout any story intervening between this story and the level of exit discharge, including the level of exit discharge.

(Add) **13.3.5.5** The requirements of Section 13.3.5.4 shall not apply to the following:

- (1) Assembly occupancies used primarily for worship with fixed seating.
- (2) Assembly occupancies consisting of a single multi-purpose room less than 12,000 square feet. (1,100 sq. m) and not used for exhibition or display.
- (3) Gymnasiums, skating rinks, swimming pools used exclusively for participant sport with no audience facilities for more than 300.

(Add) **13.3.5.6** Automatic sprinkler protection shall also be provided as required by Section 9.7.1.6.

(Amd) **13.3.6 Corridors.** Interior corridors and lobbies shall be separated from use areas by fire barriers having a fire resistance rating of not less than 1 hour in accordance with Section 8.3, except under any of the following conditions:

- (1) Where assembly rooms served by the corridor or lobby have at least 50 per cent of their exit capacity discharging directly to the outside, independent of corridors and lobbies.
- (2) When the building is protected throughout by an approved supervised automatic sprinkler system installed in accordance with Section 9.7.1.
- (3) Where lobbies serve only one assembly area that meet the requirements of intervening rooms (see Section 7.5.1.2), such lobbies need not have a fire resistance rating.
- (4) Construction for which a permit was issued prior to April 15, 1987.

(Add) **13.3.6.1** Openings in corridor partitions required to have a fire resistance rating shall be protected in accordance with Section 8.3.

(Amd) **13.4.6.7.3** This requirement shall not apply to proscenium fire curtains or water curtains complying with Section 13.4.6.7.3.1 through Section 13.4.6.7.3.3, inclusive.

(Add) **13.4.6.7.3.1* Proscenium opening protection.** The proscenium opening shall be protected by a fire curtain or an approved water curtain complying with NFPA 13, Standard for the Installation of Sprinkler Systems.

(Add) **13.4.6.7.3.2** The fire curtain or water curtain shall be designed to activate upon automatic detection of a fire and upon manual activation.

(Add) **13.4.6.7.3.3** The fire curtain shall be a listed minimum 20-minute opening protective assembly or shall be constructed as required in Section 13.4.5.7.3.3(A) to Section 13.4.5.7.3.3(G), inclusive.

(A) Fabrics. Curtains shall be made of one or more thicknesses of a noncombustible fabric or a fabric with a noncombustible base material and shall comply with the following:

- (1) The fabric may be given a coating, provided that the modified fabric meets the criteria detailed in Section 13.4.5.7.
- (2) Curtain fabrics shall have a weight of not less than 2 3/8 pounds/yard² (1.3 kg/m²).

(B) Tensile strength requirements. Curtain fabric shall have tensile strength requirements of not less than 400 lbf/inch (540 N/m) in both the warp and fill directions.

(C) Wire-insertion reinforcement requirements. The fabric shall be reinforced with noncorrosive wire intertwined with the base fiber at a rate of not less than one wire per yarn. Wire shall not be required, and fabric weight may be less than 2 3/8 pounds/yard² (1.3 kg/m²) if it can be substantiated by approved tests that it is equivalent in strength and durability.

(D) Fire test. A sample curtain with not less than two vertical seams shall be subjected to the standard fire test specified in NFPA 251, Standard Methods of Tests of Fire Endurance of Building Construction and Materials, as applicable to nonbearing walls and partitions for a period of 30 minutes, as follows:

- (1) The curtain shall overlap the furnace edges by a length that is appropriate to seal the top and sides.
- (2) The curtain shall have a bottom pocket containing not less than 4 pounds/linear foot (5 kg/linear m) of batten.
- (3) The unexposed surface of the curtain shall not glow, and neither flame nor smoke shall penetrate the curtain during the test period.
- (4) Unexposed surface temperature and hose stream test requirements shall not be applicable to this proscenium fire safety curtain test.

(E) Smoke test. Curtain fabrics shall have a smoke density not to exceed 25 where tested in accordance with NFPA 255, Standard Method of Test of Surface Burning Characteristics of Building Materials, and the curtain fabric shall be tested in the condition in which it is to be used.

(F) Curtain operation. The complete installation of every proscenium curtain shall be subjected to operating tests, as follows:

- (1) Any theater in which a proscenium curtain is placed shall not be open to public performance until after the proscenium curtain has been accepted and approved by the authority having jurisdiction.
- (2) The curtain shall be automatic-closing without the use of applied power.
- (3) The curtain also shall be capable of manual operation.

(G) Curtain position. All proscenium curtains shall be in the closed position, except during performances, rehearsals, or similar activities.

(Amd) **13.4.6.12.1** Stages greater than 1,000 feet² (93 m²) in area shall be equipped with 1½-inch (38-mm) hose connections for first aid firefighting at each side of the stage.

(Add) **13.4.9.1.1.1** The provisions of Section 13.4.9 shall not apply to portable grandstand and bleachers providing seating for fewer than 100 persons located outside of a building.

(Add) **13.4.10.1.1.1** The provisions of Section 13.4.10 shall not apply to portable grandstand and bleachers providing seating for fewer than 100 persons located outside of a building.

(Del) 13.7 Operating features. Delete section.

CHAPTER 14 NEW EDUCATIONAL OCCUPANCIES

(Del) Delete chapter.

CHAPTER 15 EXISTING EDUCATIONAL OCCUPANCIES

(Amd) **15.1.2.2** Educational occupancies shall include preschools, kindergartens, and other schools meeting both of the following criteria:

(1) The purpose is primarily educational, even though the children who attend such schools are of preschool age.

(2) The children are all 3 years of age or older.

(Add) **15.1.4.1.1** Buildings or spaces where training and skill development occur not within a school or academic program shall be classified as business occupancies.

(Add) 15.2.2.2.4 Classroom Door Locking to Prevent Unwanted Entry.

Classroom doors shall be permitted to be locked to prevent unwanted entry provided that the locking means is approved and all of the following conditions are met:

1. The locking means shall be capable of being engaged without opening the door.

2. The unlocking and unlatching from the classroom side of the door can be accomplished without the use of a key, tool, or special knowledge or effort.

3. The releasing mechanism shall unlock and unlatch the door with not more than one releasing operation.

4. The releasing mechanism for unlocking and unlatching shall be located at a height not less than 34 in. (865 mm) and not exceeding 48 in. (1220 mm) above the finished floor.

5. Locks, if remotely engaged, shall be unlockable from the classroom side of the door without the use of a key, tool, or special knowledge or effort.

6. The door shall be capable of being unlocked and opened from outside the room with the necessary key or other credential.

7. The locking means shall not modify the door closer, panic hardware, or fire exit hardware.

8. Modifications to fire door assemblies, including door hardware, shall be in accordance with NFPA 80.

9. The emergency action plan, required by the Connecticut State Fire Prevention Code, shall address the use of the locking and unlocking means from within and outside the room.

10. Staff shall be drilled in the engagement and release of the locking means, from within and outside the room, as part of the emergency egress drills required by the Connecticut State Fire Prevention Code.

(Amd) **15.2.3.2 Minimum Corridor Width.** Exit access corridors shall have not less than 72 inches (1,830 mm) of clear width, unless they serve an occupancy of 100 or less, then the exit access corridors shall have not less than 44 inches (1,120 mm) of clear width.

(Add) **15.2.4.3** A one-story educational occupancy may have a single exit provided the occupancy has a maximum of 50 occupants and a maximum travel distance of 75 feet (23 m) to the exit.

(Amd) **15.2.5.2** No dead-end corridor shall exceed 20 feet (6.1 m), other than in buildings protected throughout by an approved, supervised automatic sprinkler system in accordance with Section 9.7, in which case dead-end corridors shall not exceed 50 feet (15 m), except that a dead-end corridor shall not be limited in length where the length of the dead-end corridor is less than 2.5 times the narrowest width of the dead-end corridor.

(Amd) **15.2.9.1** Emergency lighting shall be provided in accordance with Section 7.9 unless otherwise permitted by either Section 15.2.9.2 or Section 15.2.9.3.

(Add) **15.2.9.3** Educational occupancies permitted to have a single means of egress in accordance with Section 15.2.4.1 shall not be required to have emergency lighting.

(Amd) **15.2.11.1.1** Every room or space greater than 250 feet² (23.2 m²) and used for classroom or other educational purposes or normally subject to student occupancy shall have not less than one outside window for emergency escape/ventilation and rescue with an associated opening in the outside wall that complies with the following, unless otherwise permitted by Section 15.2.11.1.2:

- (1) Such windows shall be openable from the inside without the use of tools and shall provide a clear opening of not less than 22 inches (560 mm) in width, 22 inches (560 mm) in height and 3.3 feet² (0.31 m²) in area.
- (2) The bottom of the opening shall be not more than 44 inches (1,120 mm) above the floor, and any latching device shall be capable of being operated from not more than 54 inches (1,370 mm) above the floor. Where the bottom of the window opening is higher than 44 inches (1,120 mm) but less than 60 inches (1,525 mm) above the floor, a stair fixed in place at the window may be utilized to meet the 44 in. (1120 mm) sill height and 54 inches (1,370 mm) latch operation. Said stair shall have a minimum width equal to or exceeding the operable width of the opening and centered on such opening, a maximum riser height of 8 inches (205 mm), a minimum tread depth of 9 inches (230 mm) and shall be provided with a handrail on at least one side.
- (3) The opening in the outside wall for rescue shall allow a rectangular solid, with a width and height that provides not less than a 5.7 feet² (0.5 m²) opening and a depth of not less than 20 inches (510 mm), to pass fully through the opening.
- (Amd) **15.2.11.1.2** The requirements of Section 15.2.11.1.1 shall not apply to any of the following:
 - (1) Buildings protected throughout by an approved automatic sprinkler system in accordance with Section 9.7.
 - (2) Where the room or space has a door leading directly to an exit or directly to the outside of the building.
 - (3) Where the room has a door, in addition to the door that leads to the exit access corridor as required by Section 15.2.5.5, and such door leads directly to another corridor located in a compartment separated from the compartment housing the corridor addressed in Section 15.2.5.5 by smoke partitions in accordance with Section 8.4.
 - (4) Rooms located four or more stories above the finished ground level.
 - (5) Where awning-type or hopper-type windows that are hinged or subdivided to provide a clear opening of not less than 4 feet² (0.38m²) or any dimension of not less than 22 inches (560 mm) meet the following:
 - (a) Such windows shall be permitted to continue in use.
 - (b) Screen walls or devices located in front of required windows shall not interfere with rescue operations.
 - (6) Where the room or space complies with all of the following:
 - (a) One door providing direct access to an adjacent classroom and a second door providing direct access to another adjacent classroom shall be provided.
 - (b) The two classrooms to which exit access travel is made in accordance to Section 15.2.11.1.2(6)(a) shall each provide exit access in accordance with Section 15.2.11.1.2(2) or Section 15.2.11.1.2(3).
 - (c) The corridor required by Section 15.2.5.5, and the corridor addressed by Section 15.2.11.1.2(3), if provided, shall be separated from the classroom by a wall that resists the passage of smoke, and all doors between the classrooms and the corridor shall be self-closing or automatic-closing in accordance with Section 7.2.1.8.
 - (d) The length of travel to exits along such paths shall not exceed 150 feet (46 m).

- (e) Each communicating door shall be marked in accordance with Section 7.10.
- (f) No locking device shall be permitted on the communicating doors.
- (7) Where the building is protected throughout by an approved automatic fire detection system, the length of travel to an exit does not exceed 100 feet (30 m) and a window is provided in each room for ventilation. Smoke detection shall be used in all spaces except where not appropriate due to environmental conditions.

(Amd) **15.3.2.1** Rooms or spaces for the storage, processing, or use of materials shall be protected in accordance with the following:

- (1) Separation from the remainder of the building by fire barriers having a fire resistance rating of not less than 1 hour or protection of such rooms by automatic extinguishing systems as specified in Section 8.7 in the following areas:
 - (a) Boiler and furnace rooms where any piece of equipment is greater than 400,000 BTU per hour input, or any boiler greater than 15 psi and 10 horsepower, unless such rooms enclose only air-handling equipment.
 - (b) Rooms or spaces used for the storage of combustible supplies in quantities deemed hazardous by the authority having jurisdiction.
 - (c) Rooms or spaces used for the storage of hazardous materials or flammable or combustible liquids in quantities deemed hazardous by recognized standards.
 - (d) Janitor closets [see also Section 15.3.2.1(4)].
 - (e) Laundries over 100 feet² (9.3 m^2).
- (2) Separation from the remainder of the building by fire barriers having a fire resistance rating of not less than 1 hour and protection of such rooms by automatic extinguishing systems as specified in Section 8.7 in the following areas:
 - (a) Maintenance shops, including woodworking and painting areas.
 - (b) Rooms or spaces used for processing or use of combustible supplies deemed hazardous by the authority having jurisdiction.
 - (c) Rooms or spaces used for processing or use of hazardous materials or flammable or combustible liquids in quantities deemed hazardous by recognized standards.
- (3) Where automatic extinguishing is used to meet the requirements of Section 15.3.2.1(1) or 15.3.2.1(2), the protection shall be permitted in accordance with Section 9.7.1.2.
- (4) Where janitor closets addressed in Section 15.3.2.1(1)(d) are protected in accordance with the sprinkler option of Section 15.3.2.1(1), the janitor closet doors shall be permitted to have ventilating louvers.

(Add) 15.3.4.4 Carbon monoxide (CO) detection.

(Add) **15.3.4.4.1 General.** In rooms containing permanently installed fuel-burning heating equipment, carbon monoxide detection shall be provided on the ceiling or in accordance with the manufacturer's instructions. The carbon monoxide detectors shall be located as remotely as possible from the heating equipment.

Exception: Rooms with cooking appliances, laboratories and maintenance spaces.

(Add) **15.3.4.4.2 Signage.** A sign shall be provided at all entrances to such rooms indicating that carbon monoxide detectors are located within the space.

(Add) **15.3.4.4.3 Detection equipment.** Single and Multiple Station Carbon Monoxide Alarms, carbon monoxide detection equipment and sensors and must meet or exceed UL Standards 2034 or 2075 as applicable.

(Add) **15.3.4.4.4 Installation.** Carbon Monoxide detectors shall be installed in accordance with the manufacturer's instructions.

(Add) **15.3.4.4.5 Power source.** Carbon Monoxide detectors may be battery operated or 120 volt AC plug-in equipment that has a battery as its backup power source.

(Add) **15.3.4.4.6 Supervision.** If connected to the fire alarm signaling system, the carbon monoxide detection shall only activate a supervisory signal and shall not activate the building fire evacuation signal.

(Add) **15.3.4.4.7 Maintenance.** Carbon Monoxide detectors shall be maintained and tested in accordance with the manufacturer's instructions and Section 9.8.

(Amd) **15.3.5.3** Automatic sprinkler protection shall not be required where student occupancy exists below the level of exit discharge, provided either of the following criteria is met:

- (1) Where every classroom has at least one exterior exit door at ground level.
- (2) Windows for rescue and ventilation are provided in accordance with Section 15.2.11.1.

(Add) **15.3.5.6** Automatic sprinkler protection shall also be provided as required by Section 9.7.1.6.

(Amd) **15.3.6 Corridors.** Corridors shall be separated from other parts of the story by walls having a ½-hour fire resistance rating in accordance with Section 8.3, unless otherwise permitted by one of the following.

- (1) Corridor protection shall not be required where all spaces normally subject to student occupancy have not less than one door opening directly to the outside or to an exterior exit access balcony or corridor in accordance with Section 7.5.3.
- (2) In buildings protected throughout by an approved automatic sprinkler system with valve supervision in accordance with Section 9.7, corridor walls shall not be required to be rated.
 - a. Corridor walls shall not be required to be rated, provided that such walls form smoke partitions in accordance with Section 8.4.
 - b. The provisions of 8.4.3.5 shall not apply to normally occupied classrooms.
- (3) Where the corridor ceiling is an assembly having a ½-hour fire resistance rating where tested as a wall, the corridor wall shall be permitted to terminate at the corridor ceiling.
- (4) Lavatories shall not be required to be separated from corridors, provided that they are separated from all other spaces by walls having not less than a ½-hour fire resistance rating in accordance with Section 8.3.

- (5) Lavatories shall not be required to be separated from corridors, provided the building is protected throughout by an approved, supervised automatic sprinkler system in accordance with Section 9.7.
- (6) Existing doors in ½-hour fire resistance rated corridor walls may be 1¾-inches (44-mm) thick solid-bonded wood core doors or the equivalent.

(Add) **15.3.6.1** Self-closing devices may be omitted on doors between corridors and classrooms, except rooms or areas used as shops or laboratories, where the facility has a written and practiced fire exit drill policy which provides for the closing of all corridor doors upon evacuation, and where said policy provides for doors to classrooms not in use to be kept closed.

(Del) 15.7 Operating features. Delete section.

CHAPTER 16 NEW DAY-CARE OCCUPANCIES

(Del) Delete chapter.

CHAPTER 17 EXISTING DAY-CARE OCCUPANCIES

(Amd) **17.1.1.4** The requirements of Section 17.1 to Section 17.5, inclusive, shall apply to existing day-care occupancies in which more than 12 clients receive care, maintenance, and supervision by other than their relative(s) or legal guardian(s) for less than 24 hours per day. An existing day-care occupancy has the option of meeting the requirements of Part III of this in lieu of Chapter 17. An existing day-care occupancy that meets the requirements of Part III shall be judged as meeting the requirements of Chapter 17.

(Amd) **17.1.1.5** The requirements of Section 17.1 and Sections 17.4 through 17.6 shall apply to existing day-care homes as defined in 17.1.4. An existing day-care home shall be permitted the option of meeting the requirements of Part III of this code in lieu of Chapter 17. An existing day-care home that meets the requirements of Part III shall be judged as meeting the requirements of Chapter 17.

(Amd) **17.1.2.1 General.** Occupancies that include preschools, kindergartens, and other schools whose purpose is primarily educational for children 3 years of age or older, even though the children who attend such schools are of preschool age, shall comply with the provisions of Chapter 15.

(Amd) **17.1.2.3*** **Conversions.** A conversion from a day-care home to a day-care occupancy with more than 12 clients shall be permitted only if the day-care occupancy conforms to the requirements of Part III of this code.

Location of Day-Care Occupancy	Sprinklered Building	Construction Type
1 story below LED	Yes	I(443), I(332), II(222), II(111), II(000), III(211), IV(2HH), V(111)
	No	I(443), I(332), II(222), II(111), III(211), IV(2HH), V(111)
Level of exit discharge	Yes	Any type
	No	Any type
1 story above LED	Yes	Any type
	No	I(443), I(332), II(222)
	No	II(111) [*] , III(211) [*] , V(111) [*]
2 stories above LED	Yes	I(443), I(332), II(222)
	Yes	II(111) [*] , III(211) [*] , V(111) [*]
	No	I(443), I(332), II(222)
≥3 stories above LED but not high-rise	Yes	I(443), I(332), II(222)
	Yes	ll(111) [*]
	No	I(443), I(332), II(222)
High-rise	Yes	I(443), I(332), II(222)
	No	Not permitted

(Amd) Table 17.1.6.1 Location and construction type limitations

LED: Level of exit discharge.

*Permitted only if clients capable of self-preservation.

(Amd) **17.2.4.1** The number of means of egress shall be in accordance with Section 7.4.1.1 and Section 7.4.1.3 to Section 7.4.1.6, inclusive, or Part III Section 1014.1

(Amd) **17.2.5.2** No dead-end corridor shall exceed 20 feet (6.1 m), other than in buildings protected throughout by an approved, supervised, automatic sprinkler system in accordance with Section 9.7, in which case dead-end corridors shall not exceed 50 feet (15 m), except that a dead-end corridor shall not be limited in length where the length of the dead-end corridor is less than 2.5 times the narrowest width of the dead-end corridor.

(Amd) **17.2.11.1.1** Every room or space greater than 250 feet² (23.2 m²) and used for client occupancy shall have not less than one outside window for emergency escape/ventilation and rescue with an associated opening in the outside wall that complies with the following, unless otherwise permitted by Section 17.2.11.1.2:

- (1) Such windows shall be openable from the inside without the use of tools and shall provide a clear opening of not less than 22 inches (560 mm) in width, 22 inches (560 mm) in height and 3.3 feet² (0.31 m²) in area.
- (2) The bottom of the opening shall be not more than 44 inches (1,120 mm) above the floor, and any latching device shall be capable of being operated from not more than 54 inches (1,370 mm) above the finished floor.

(3) The opening in the outside wall for rescue shall allow a rectangular solid, with a width and height that provides not less than a 5.7 feet² (0.5 m²) opening and a depth of not less than 20 inches (510 mm), to pass fully through the opening.

(Amd) 17.2.11.1.2 The requirements of Section 17.2.11.1.1 shall not apply to any of the following:

- (1) Buildings protected throughout by an approved automatic sprinkler system in accordance with Section 9.7.
- (2) Where the room or space has a door leading directly to an exit or directly to the outside of the building.
- (3) Where the room has a door, in addition to the door that leads to the exit access corridor, and such door leads directly to an exit or directly to another corridor located in a compartment separated from the compartment housing the initial corridor addressed in Section 17.2.5.5 by smoke partitions in accordance with Section 8.4.
- (4) Rooms located four or more stories above the finished ground level.
- (5) Where awning-type or hopper-type windows that are hinged or subdivided to provide a clear opening of not less than 4 ft² (0.38m²) or any dimension of not less than 22 inches (560 mm) meet the following:
 - (a) Such windows shall be permitted to continue in use.
 - (b) Screen walls or devices located in front of required windows shall not interfere with rescue operations.
- (6) Where the room or space complies with all of the following:
 - (a) One door providing direct access to an adjacent room and a second door providing direct access to another adjacent room shall be provided.
 - (b) The two rooms to which exit access travel is made in accordance to Section 17.2.11.1.2(6)(a) shall each provide exit access in accordance with Section 17.2.11.1.2(2) or Section 17.2.11.1.2(3).
 - (c) The corridor required by Section 17.2.5.5, and the corridor addressed by Section 17.2.11.1.2(3), if provided, shall be separated from the room by a wall that resists the passage of smoke, and all doors between the rooms and the corridor shall be self-closing or automatic-closing in accordance with Section 7.2.1.8.
 - (d) The length of travel to exits along such paths shall not exceed 150 feet (46 m).
 - (e) Each communicating door shall be marked in accordance with Section 7.10.
 - (f) No locking device shall be permitted on the communicating doors.
- (7) Where the building is protected throughout by an approved automatic fire detection system, the length of travel to an exit does not exceed 100 feet (30 m) and a window is provided in each room for ventilation. Smoke detection shall be used in all spaces except where not appropriate due to environmental conditions.

(Amd) **17.3.2.1** Rooms or spaces for the storage, processing, or use of materials specified in Section 17.3.2.1(1) to Section 17.3.2.1(3), inclusive, shall be protected in accordance with the following:

- (1) Separation from the remainder of the building by fire barriers having a fire resistance rating of not less than 1 hour or protection of such rooms, by automatic extinguishing systems as specified in Section 8.7, in the following areas:
 - (a) Boiler and furnace rooms where any piece of equipment is greater than 400,000 BTU per hour input, or any boiler is greater than 15 psi and 10 horsepower, unless such rooms enclose only air-handling equipment.
 - (b) Rooms or spaces used for the storage of combustible supplies in quantities deemed hazardous by the authority having jurisdiction.
 - (c) Rooms or spaces used for the storage of hazardous materials or flammable or combustible liquids in quantities deemed hazardous by recognized standards.
 - (d) Janitor closets.
 - (e) Laundries with an area greater than 100 feet² (9.3 m^2).
- (2) Separation from the remainder of the building by fire barriers having a fire resistance rating of not less than 1 hour and protection of such rooms by automatic extinguishing systems as specified in Section 8.7 in the following areas:
 - (a) Maintenance shops, including woodworking and painting areas.
 - (b) Rooms or spaces used for processing or use of combustible supplies deemed hazardous by the authority having jurisdiction.
 - (c) Rooms or spaces used for processing or use of hazardous materials or flammable or combustible liquids in quantities deemed hazardous by recognized standards.
- (3) Where automatic extinguishing is used to meet the requirements of Section 17.3.2.1(1) and Section 17.3.2.1(2), the protection shall be permitted in accordance with Section 9.7.1.2.

(Add) **17.3.5.4** Automatic sprinkler protection shall also be provided as required by Section 9.7.1.6.

(Amd) **17.3.6 Corridors**. Every interior corridor shall be constructed of walls having not less than a ½-hour fire resistance rating in accordance with Section 8.3, unless otherwise permitted by the following:

- (1) Corridor protection shall not be required where all spaces normally subject to client occupancy have not less than one door opening directly to the outside or to an exterior exit access balcony or corridor in accordance with Section 7.5.3.
- (2) In buildings protected throughout by an approved automatic sprinkler system with valve supervision in accordance with Section 9.7.
- (3) Where the corridor ceiling is an assembly having a ½-hour fire resistance rating where tested as a wall, the corridor walls may terminate at the corridor ceiling.
- (4) Lavatories shall not be required to be separated from corridors, provided that they are

separated from all other spaces by walls having not less than a ½-hour fire resistance rating in accordance with Section 8.3.

- (5) Lavatories shall not be required to be separated from corridors, provided the building is protected throughout by an approved, supervised automatic sprinkler system in accordance with Section 9.7.
- (6) Existing doors in ½-hour fire resistance rated corridors may be 1¾-inches (44-mm) thick, solid-bonded wood core doors or the equivalent.

(Add) **17.3.6.1** Self-closing devices may be omitted on doors between corridors and client activity rooms where the facility has a written and practiced fire exit drill policy which provides for the closing of all corridor doors upon evacuation and where said policy provides for doors to client activity rooms not in use to be kept closed.

(Amd) **17.6.1.1.2*** The requirements of Section 17.6 shall apply to existing day-care homes in which more than 3, but not more than 12, clients receive care, maintenance, and supervision by other than their relative(s) or legal guardian(s) for less than 24 hours per day, generally within a dwelling unit.

(Add) **17.6.1.1.6** The requirements of Section 17.6 shall not apply to facilities located within residential living units or private dwellings and that provide care, maintenance and supervision to not more than six children except that during the school year a maximum of three additional children who are in school full time shall be permitted for up to three hours before school and up to three hours after school. Such facilities are subject to the regulations adopted by the Connecticut Department of Public Health and are exempt from the requirements of this code.

(Amd) **17.6.1.4.2*** **Conversions.** A conversion from a day-care home to a day-care occupancy with more than 12 clients shall be permitted only if the day-care occupancy conforms to the requirements for new day-care occupancies with more than 12 clients in accordance with Part III of this code.

(Del) **17.6.1.7** Delete section.

(Del) 17.7 Operating features. Delete section.

CHAPTER 18 NEW HEALTH CARE OCCUPANCIES

(Del) Delete chapter.

CHAPTER 19 EXISTING HEALTH CARE OCCUPANCIES

(Amd) **19.1.1.1*** The requirements of this chapter shall apply to existing buildings or portions thereof currently occupied as health care occupancies, unless the State Fire Marshal has determined equivalent safety has been provided in accordance with Section 1.4.

(Del) **19.1.1.4 Additions, conversions, modernizations, renovation, and construction operations.** Delete section.

(Amd) **19.1.3.9** Egress provisions for areas of health care facilities that correspond to other occupancies shall meet the corresponding requirements of this code for such occupancies, and, where the clinical needs of the occupant necessitate the locking of means of egress, staff shall be present for the supervised release of occupants during all times of use and, such arrangement shall comply with Section 19.1.1.1.7.

(Amd) **19.2.2.2.5** Door-locking arrangements permitted by Section 19.1.1.1.7 shall be in accordance with either Section 19.2.2.2.5.1 or Section 19.2.2.2.5.2.

(Add) **19.2.4.2.1** A single exit shall be permitted for a one-story building with a maximum occupant load of 10 persons and a maximum travel distance of 75 feet (23 m) to the exit.

(Amd) **19.2.5.2* Dead End Corridors**. Existing dead-end corridors not exceeding 30 ft. (9.1m) shall be permitted. Existing dead-end corridors exceeding 30 ft. (9.1m) shall be permitted to continue in use if it is impractical and unfeasible to alter them. A dead-end corridor shall not be limited in length where the length of the dead-end corridor is less than 2.5 times the narrowest width of the dead-end corridor.

(Amd) **19.2.9.1** Emergency lighting shall be provided in accordance with Section 7.9 unless otherwise permitted by Section 19.2.9.2.

(Amd) **19.2.9.2** Health care occupancies permitted to have a single means of egress in accordance with Section 19.2.4.2.1 shall not be required to have emergency lighting.

(Amd) **19.3.2.1.5** Hazardous areas shall include, but not be restricted to, the following:

- (1) Boiler and fuel-fired heater rooms where any piece of equipment is greater than 400,000 BTU per hour input or any boiler greater than 15 psi and 10 horsepower.
- (2) Central/bulk laundries larger than 100 feet² (9.3 m²).
- (3) Paint shops.
- (4) Repair shops.
- (5) Soiled linen rooms.
- (6) Trash collection rooms.
- (7) Rooms or spaces larger than 50 feet² (4.6 m²), including repair shops, used for storage of combustible supplies and equipment in quantities deemed hazardous by the authority having jurisdiction.
- (8) Laboratories employing flammable or combustible materials in quantities less than those that would be considered a severe hazard.

(Add) **19.3.5.1.1** Automatic sprinkler protection shall also be provided as required by Section 9.7.1.6.

(Del) **19.3.5.7** Delete section.

(Del) 19.7 Operating features. Delete section.

CHAPTER 20 NEW AMBULATORY HEALTH CARE OCCUPANCIES

(Del) Delete chapter.

CHAPTER 21 EXISTING AMBULATORY HEALTH CARE OCCUPANCIES

(Amd) **21.1.1.5** It shall be recognized that, in buildings housing certain types of patients or having detention rooms or a security section, it might be necessary to lock doors and bar windows to confine and protect building inhabitants. In such instances, the State Fire Marshal shall make appropriate modifications in accordance with section 29-296 of the Connecticut General Statutes to those sections of this code that would otherwise require means of egress to be kept unlocked.

(Del) **21.1.1.4 Additions, conversions, modernizations, renovation, and construction operations.** Delete section.

(Amd) **21.1.3.6** Egress provisions for areas of ambulatory health care facilities that correspond to other occupancies shall meet the corresponding requirements of this code for such occupancies, and, where the clinical needs of the occupant necessitate the locking of means of egress, staff shall be present for the supervised release of occupants during all times of use and such arrangement shall comply with Section 21.1.1.1.5.

(Del) 21.1.6.6 Delete section.

(Amd) **21.2.2.7** Access-controlled egress doors complying with Section 7.2.1.6.2 shall be permitted in the means of egress on the entrance doors to buildings and to tenant spaces. These doors shall not be secured from the egress side when the occupancy is open to the general public.

(Add) **21.2.4.2.1** A single exit shall be permitted for a one-story building with a maximum occupant load of 10 persons and a maximum travel distance of 75 feet (23 m) to the exit.

(Amd) **21.2.9.1** Emergency lighting shall be provided in accordance with Section 7.9 unless otherwise permitted by Section 21.2.9.1.1.

(Add) **21.2.9.1.1** Ambulatory health care occupancies permitted to have a single means of egress in accordance with Section 21.2.4.2.1 shall not be required to have emergency lighting.

(Amd) **21.3.1.1 V**ertical openings shall be enclosed or protected in accordance with Section 8.6, unless otherwise permitted by any of the following:

(1) Previously approved vertical openings.

(2) Unenclosed vertical openings in accordance with 8.6.9.1 shall be permitted.

(3) Unprotected vertical openings shall be permitted in buildings complying with all of the following:

(a) Where protected throughout by an approved automatic sprinkler system in accordance with 9.7.1.1(1)

(b) Where no unprotected vertical opening serves as any part of any required means of egress

(c) Where required exits consist of exit doors that discharge directly to the finished ground level in accordance with 7.2.1, outside stairs in accordance with 7.2.2, smokeproof enclosures in accordance with 7.2.3, or horizontal exits in accordance with 7.2.4

(Del) 21.3.5.3 Delete section.

(Del) 21.7 Operating features. Delete section.

CHAPTER 22 NEW DETENTION AND CORRECTIONAL OCCUPANCIES

(Del) Delete chapter.

CHAPTER 23 EXISTING DETENTION AND CORRECTIONAL OCCUPANCIES

(Amd) **23.2.5.2*** Existing dead-end corridors greater than 50 feet (15 m) shall be altered wherever possible so that exits are accessible in not less than two different directions from all points in aisles, passageways and corridors. A dead-end corridor shall not be limited in length where the length of the dead-end corridor is less than 2.5 times the narrowest width of the dead-end corridor.

(Del) 23.2.11.3 Delete section

(Add) **23.3.2.1.1** The protection requirements of Table 23.3.2.1 shall apply to those boiler and fuel-fired heater rooms where any piece of equipment is greater than 400,000 BTU per hour input or any boiler greater than 15 psi and 10 horsepower.

(Add) **23.3.5.1.1** Automatic sprinkler protection shall also be provided as required by Section 9.7.1.6.

(Del) 23.3.5.4 Delete section.

(Amd) **23.4.5.1.4** The lockup shall be permitted to comply with the requirements for the predominant occupancy in which the lockup is placed, provided that all of the following criteria are met:

(1)*Doors and other physical restraints to free egress by detainees can be readily released by staff within 2 minutes of the onset of a fire or similar emergency.

(2) Staff is in sufficient proximity to the lockup so as to be able to effect the 2-minute release required by 23.4.5.1.4(1) whenever detainees occupy the lockup.

(3) Staff is authorized to effect the release required by 23.4.5.1.4(1).

(4) Staff is trained and practiced in effecting the release required by 23.4.5.1.4(1).

(5) Where the release required by 23.4.5.1.4(1) is effected by means of remote release, detainees are not to be restrained from evacuating without the assistance of others.

(6) A reliable means of two way communication, or a video monitor, to a constantly attended location shall be provided in lockup areas that are not under constant direct staff

(Del) 23.7 Operating features. Delete section.

CHAPTER 24 ONE AND TWO FAMILY DWELLING

(Amd) **24.1.1.1*** The requirements of this chapter shall apply to dwelling units located in any building or structure; existing one- and two-family dwelling units, which shall include those buildings containing not more than two dwelling units in which each dwelling unit is occupied by members of a single family with not more than six (6) outsiders, if any, accommodated in rented rooms, except those occupancies classified as health care, residential board and care or detention and correctional.

Buildings that contain a maximum of two dwelling units and no other occupancies are specifically exempted by section 29-292 of the Connecticut General Statutes from the jurisdiction of this code, except for the specific smoke detection provisions set forth in Section 24.3.4.

(Add) **24.1.3.1.1** Where one or two dwelling units are present in a building containing another occupancy, each dwelling shall be provided with a primary means of escape in accordance with Section 24.2.2.2. If the primary means of escape consists of an interior stairway, the stairway shall be separated by at least $\frac{1}{2}$ -hour fire barriers with all openings protected by self-closing doors of an equivalent rating.

(Amd) **24.1.3.2** No dwelling unit may have its sole means of escape through another dwelling unit or other occupancy.

(Amd) **24.2.3.3*** A window or door shall provide a clear opening in the outside wall of not less than 5.7 feet² (0.53 m²) for access into the building. The window opening for escape/ventilation by occupants shall provide a clear opening of not less than 20 inches (508 mm) in width and 22 inches (560 mm) in height, and 3.3 feet² (0.31 m²) in total area. This window shall be operable from the inside by occupants without the use of tools, keys, or special effort. The bottom of the opening shall be not more than 44 inches (1,120 mm) above the floor. Such means of escape shall be acceptable where one of the following criteria is met:

- (1) The window shall be within 240 inches (6,100 mm) of grade.
- (2) The window shall be directly accessible to fire department rescue apparatus as approved by the authority having jurisdiction.

- (3) The window or door shall open onto an exterior balcony.
- (4) Windows having a sill height below the adjacent ground level shall be provided with a window well meeting the following criteria:
 - (a) The window well shall have horizontal dimensions that allow the window to be fully opened.
 - (b) The window well shall have an accessible net clear opening of not less than 9 feet² (0.82 m^2) with a length and width of not less than 36 inches (915 mm).
 - (c) A window well with a vertical depth of more than 44 inches (1120 mm) shall be equipped with an approved permanently affixed ladder or with steps meeting the following criteria:
 - i. The ladder or steps shall not encroach more than 6 inches (150 mm) into the required dimensions of the window well.
 - ii. The ladder or steps shall not be obstructed by the window.

(Add) **24.2.2.3.3.1 Alternative compliance to Section 24.2.2.3.3(4)(c).** The 44 inch (1120 mm) maximum height of the sill above the floor level may be measured vertically above a fixed, permanent platform, step, or steps whose minimum width shall equal or exceed the width of the opening and a maximum riser height of 8 inches (205 mm) and a minimum tread depth of 9 inches (229 mm).

(Add) **24.2.5.1.1.1** Maximum riser heights of 8¼ inches (209.5 mm) and minimum tread depths of 9 inches (229 mm) shall be permitted.

(Amd) **24.3.4.1.1** Smoke alarms shall be installed in residential buildings designed to be occupied by two families, and residential buildings designed to be occupied by one family for which a building permit for new occupancy was issued on or after October 1, 1978, in accordance with Section 9.6.2.10 in all of the following locations:

- (1) In all sleeping rooms in other than existing one- and two-family dwellings
- (2) Outside of each separate sleeping area, in the immediate vicinity of the sleeping rooms
- (3) On each level of the dwelling unit, including basements

(Amd) **24.3.4.1.3** Smoke alarms shall also be provided in accordance with section 29-453 of the Connecticut General Statutes.

(Amd) **24.3.4.2.1** Carbon monoxide detection and warning equipment as required by section 29-292 and section 29-453 of the Connecticut General Statutes shall be installed at the locations as specified in Section 24.3.4.2 in accordance with Section 9.2.

- (1) Dwelling units with communicating attached garages.
- (2) Dwelling units containing fuel-burning appliances or fuel burning fireplaces.

(Del) **24.3.4.2.3** Delete section.

(Del) 24.3.5* Extinguishment requirements. Delete section.

CHAPTER 26

(AMD) LODGING OR ROOMING HOUSES AND BED AND BREAKFASTS

(Amd) **26.1.1.1*** The requirements of this chapter shall apply to existing buildings or portions thereof that do not qualify as a one- or two-family dwelling that provide sleeping accommodations for a total of 16 or fewer persons on either a transient or permanent basis, with or without meals, but without separate cooking facilities for individual occupants except as provided in Chapter 24.

(Amd) **26.2.2.2** Where an interior stair connects the street floor with the story next above or below only, but not with both, the interior stair shall be required to be enclosed only on the street floor. In bed and breakfasts, this exception shall not apply to stairs below the street floor.

(Add) **26.2.3.7** Access-controlled egress doors complying with Section 7.2.1.6.2 shall be permitted in the means of egress on the entrance doors to buildings and to tenant spaces.

(Add) **26.2.4 Illumination.** The primary means of escape within bed and breakfasts shall be provided with illumination in accordance with Section 7.8, unless illumination is provided upon activation of the fire alarm system or loss of power. The foot-candle values of illumination provided shall be as required by Section 7.9.2.1.

(Add) **26.3.1.1.4** In existing lodging or rooming houses, two or fewer stories in height, and in bed and breakfasts, stair enclosures shall not be required for levels at and above the street floor level when the building is provided with an approved household fire warning system in accordance with the requirements of NFPA 72[®], National Fire Alarm Code[®]. This system shall consist of a control unit with smoke detectors, a manual fire alarm box on each floor level, and occupant notification with a heat detector installed in the kitchen. The kitchen shall also be separated by ½-hour fire-resistive construction, or shall be protected by a limited area sprinkler system, or the range top shall be protected by a listed residential range top extinguisher unit.

(Amd) **26.3.4.5.3** Each lodging or rooming house shall install a smoke alarm that, when activated, shall provide an approved visible alarm suitable to warn occupants in at least one room.

(Del) **26.3.4.6 Carbon monoxide alarms and carbon monoxide detection systems.** Delete section.

(Amd) **26.3.6.1** Automatic sprinkler protection shall be provided as required by Section 9.7.1.6, and in lodging or rooming houses which were created by the application for a building permit for either new construction, change of use or occupancy that occurred on or after May 1, 1999. The requirement for lodging or rooming houses shall not apply to those lodging and rooming houses that complied with the exception to section 20.3.5.2 of the Connecticut State Fire Safety Code effective May 1, 1999.

(Add) **26.3.6.3** Portable fire extinguishers shall be required only in kitchens of bed and breakfasts. These portable fire extinguishers shall be installed and maintained in accordance with Section 9.9, unless the range top is protected by a listed residential range top extinguisher unit.

CHAPTER 28 NEW HOTELS AND DORMITORIES

(Del) Delete chapter.

CHAPTER 29 (AMD) EXISTING HOTELS

(Amd) **29.1.1.1** The requirements of this chapter shall apply to existing buildings or portions thereof currently occupied as hotel or motel occupancies.

(Del) 29.1.1.4 Delete section.

(Amd) **29.1.4.2 Definitions.** Terms applicable to this chapter are defined in Chapter 3 of this code and include the terms in the list that follows:

- (1) Guest Room. See Section 3.3.132.
- (2) Guest Suite. See Section 3.3.273.1.
- (3) Hotel. See Section 3.3.145.

(Amd) **29.2.2.2.3** Access-controlled egress doors complying with Section 7.2.1.6.2 shall be permitted in the means of egress on the entrance doors to buildings and to tenant spaces.

(Amd) **29.2.4.1** Means of egress shall comply with all of the following, except as otherwise permitted by Section 29.2.4.2 and Section 29.2.4.3:

- (1) The number of means of egress shall be in accordance with Section 7.4.1.1 and Section 7.4.1.3 through Section 7.4.1.6, inclusive.
- (2) Not less than two separate exits shall be provided from every part of every story, including stories below the level of exit discharge and stories occupied for public purposes.

(Amd) **29.2.4.3** Buildings of four stories or less protected throughout by an approved, supervised automatic sprinkler system in accordance with Section 29.3.5, with not more than four guest rooms or guest suites per floor, may have a single exit under the following conditions:

- (1) The stairway is completely enclosed or separated by barriers having a fire resistance rating of not less than 1 hour in accordance with Section 8.3.
- (2) The stairway does not serve more than one-half of a story below the level of exit discharge.
- (3) All corridors serving as access to exits have not less than a 1-hour fire resistance rating.
- (4) The travel distance from the entrance door of any guest room or guest suite to an exit does not exceed 35 feet (10.7 m).
- (5) Horizontal and vertical separation with a fire rating of not less than ½ hour is provided between guest rooms or guest suites.
(Amd) **29.2.5.5** Dead-end corridors shall not exceed 50 feet (15 m), except that a dead-end corridor shall not be limited in length where the length of the dead-end corridor is less than 2.5 times the narrowest width of the dead-end corridor.

(Amd) **29.3.2.2.2** The areas described in Table 29.3.2.2.2 shall be protected as indicated, except that residential-type heating appliances such as domestic hot water heaters, domestic furnaces or domestic boilers may be unenclosed when located within an individual guest room or suite serving only that room or suite that is separated from all adjacent rooms or suites by construction having at least a ½-hour fire resistance rating.

Hazardous Area Description	Separation/Protection
Boiler and fuel-fired heater rooms where any	1 hour or sprinklers
piece of equipment is greater than 400,000	
BTU per hour input or any boiler greater than	
15 psi and 10 horsepower	
Employee locker rooms	1 hour or sprinklers [†]
Gift or retail shops	1 hour or sprinklers
Bulk laundries	1 hour or sprinklers
Guest laundries outside of guest rooms or	1 hour or sprinklers [†]
guest suites	
Maintenance shops	1 hour or sprinklers
Rooms or spaces used for storage of	1 hour or sprinklers
combustible supplies and equipment in	
quantities deemed hazardous by the authority	
having jurisdiction [‡]	
Trash collection rooms	1 hour or sprinklers
[†] M/hore automatic enrinklar protection is provided	no opelosuro shall bo required

(Amd) Table 29.3.2.2.2 Hazardous Area Protection

[†]Where automatic sprinkler protection is provided, no enclosure shall be required.

[‡]Where storage areas not exceeding 24 ft² (2.2 m²) are directly accessible from the guest room or guest suite, no separation or protection shall be required.

(Amd) **29.3.4.4 Detection.**

(Add) **29.3.4.4.1** A corridor smoke detection system in accordance with Section 9.6 shall be provided, unless otherwise permitted by either of the following:

- (1) Where each guest room has direct exit to the outside of the building and the building is not over three stories in height.
- (2) In buildings protected throughout by an approved automatic sprinkler system in accordance with Section 29.3.5.

(Amd) **29.3.4.5.1** Each hotel having 100 or more units or rooms shall install such equipment that, when activated, shall provide an approved visible alarm suitable to warn occupants, in at least one per cent of the units or rooms in such establishments. In establishments having less than 100 units or rooms, at least one unit or room shall have such an alarm.

(Del) **29.3.4.5.2** Delete section.

(Amd) **29.3.5.1** An approved, supervised automatic sprinkler system shall be provided as required by Section 9.7.1.6.

(Del) 29.3.5.8 Delete section.

(Amd) **29.3.6.4.1** Transoms, louvers or transfer grilles shall be prohibited in walls or doors of exit access corridors, unless meeting Section 29.3.6.4.2.

- (Del) 29.3.6.4.3 Delete section.
- (Del) **29.3.6.4.4** Delete section.
- (Del) 29.7 Operating Features. Delete section.

CHAPTER 30 NEW APARTMENT BUILDINGS

(Del) Delete chapter.

CHAPTER 31 (AMD) EXISTING APARTMENT AND DORMITORY BUILDINGS

(Amd) **31.1.1.1** The requirements of this chapter shall apply to existing buildings or portions thereof currently occupied as apartment or dormitory occupancies. In addition, the building shall meet the requirements of one of the following options:

- (1) Option 1 Buildings without fire suppression or detection systems.
- (2) Option 2 Buildings provided with a complete automatic fire detection and notification system.
- (3) Option 3 Buildings provided with automatic sprinkler protection in selected areas.
- (4) Option 4 Buildings protected throughout by an approved automatic sprinkler system.

(Add) **31.1.1.4.1** All buildings containing three or more individual living units shall be classified as apartment buildings, except where the building and living unit arrangement is in accordance with items numbered (1) through (4) of this section, then the entire building shall be exempt from the requirements of this chapter and the individual living units need only comply with the requirements for smoke alarms in Section 31.3.4.5 and each living unit shall be treated as a single family home for the purposes of section 29-305 of the Connecticut General Statutes:

- (1) Residential buildings containing three or more individual living units, in which the living units are arranged so that no living unit is located either above or below another living unit.
- (2) Each living unit has at least one independent exit, serving that unit only which leads directly to the exterior of the building in one of the following manners:

- (a) An exit door that opens directly to the street or yard at ground level.
- (b) An outside stair that leads directly to the street or yard at ground level.
- (c) An interior stair that is part of the living unit served that leads directly to the street or yard at ground level.
- (3) Each living unit is separated from the adjoining unit by vertical fire barriers having at least a 1-hour fire resistance rating. Such walls shall extend from the lowest floor slab to the underside of the highest roof deck and shall be continuous through all spaces below the living unit, such as basements and crawl spaces, and all areas above the living unit, such as attics or other concealed spaces.
- (4) There are no spaces within the confines of the building's exterior perimeter walls that are subject to common occupant usage, including, but not limited to, corridors, hallways, laundry rooms, furnace or utility rooms, storage areas or recreation areas.

(Amd) **31.1.3.3** Multiple dwelling units may be located above a nonresidential occupancy only where one of the following conditions exists:

- (1) Where the dwelling units of the residential occupancy and exits therefrom are separated from the nonresidential occupancy by construction having a fire resistance rating of not less than 1 hour.
- (2) Where the nonresidential occupancy is protected throughout by an approved, supervised automatic sprinkler system in accordance with Section 9.7.
- (3) Where the dwelling units are located above a nonresidential occupancy that is protected by an automatic fire detection system, with detection in the nonresidential occupancy and occupant notification throughout the building in accordance with Section 9.6.

(Add) 31.1.4.2.3 Dormitory. See Section 3.3.64.

(Amd) **31.2.2.2.2** Door locking arrangements shall comply with Section 31.2.2.2.2.1, Section 31.2.2.2.2.2, Section 31.2.2.2.2.3 or Section 31.2.2.2.2.4.

(Amd) **31.2.2.2.3** Access-controlled egress doors complying with Section 7.2.1.6.2 shall be permitted in the means of egress on the entrance doors to buildings and to tenant spaces.

(Amd) **31.2.4.4** Any dwelling unit shall be permitted to have a single exit, provided that one of the following criteria is met:

- (1) The dwelling unit has an exit door opening directly to the street or yard at ground level.
- (2) The dwelling unit has direct access to an outside stair complying with Section 7.2.2.
- (3) The dwelling unit has direct access to an interior stair that serves only that unit and is separated from all other portions of the building by fire barriers having not less than a 1hour fire resistance rating with no opening therein.

(Amd) **31.2.4.5** Any building of four stories or less protected throughout by an approved, supervised automatic sprinkler system in accordance with Section 31.3.5 may have a single exit, provided the following conditions are met:

- (1) The stairway is separated from the rest of the building by barriers having not less than a 1-hour fire resistance rating in accordance with Section 8.3
- (2) The stairway does not serve more than one-half of a story below the level of exit discharge.
- (3) All corridors serving as access to exits have not less than a ½-hour fire resistance rating.
- (4) There is not more than 50 feet (15 m) of travel distance from the entrance door of any dwelling unit to an exit.
- (5) Horizontal and vertical separation with a fire rating of not less than ½ hour is provided between dwelling units.

(Amd) **31.2.4.6** Any building of three stories or less in its entirety may have a single exit, provided the following conditions are met:

- (1) The stairway is separated from the rest of the building by barriers having not less than a 1-hour fire resistance rating in accordance with Section 8.3.
- (2) The stairway does not serve more than one-half of a story below the level of exit discharge.
- (3) All corridors serving as access to exits have not less than a ½ hour fire resistance rating.
- (4) The travel distance from the entrance door of any dwelling to an exit does not exceed 50 feet (15 m).
- (5) Horizontal and vertical separation with a fire rating of not less than ½ hour is provided between dwelling units.

(Amd) **31.2.5.4** Dead-end corridors shall not exceed 50 feet (15 m), except that a dead-end corridor shall not be limited in length where the length of the dead-end corridor is less than 2.5 times the narrowest width of the dead-end corridor.

(Add) **31.2.11.1.1** The provisions of Section 31.2.11.1 shall not apply to existing dormitories.

(Add) **31.3.2.1.1.1** Residential-type heating appliances such as domestic hot water heaters, domestic furnaces or domestic boilers may be unenclosed when located within an individual living unit and serving that living unit only.

(Add) **31.3.2.1.1.2** The protection requirements of Table 31.3.2.1.1 shall apply to those boiler and fuel-fired heater rooms where any piece of equipment is greater than 400,000 BTU per hour input or any boiler greater than 15 psi and 10 horsepower.

(Add) **31.3.4.1.3** A fire alarm system is not required in buildings that do not have interior corridors serving dwelling units and are protected by an approved automatic fire sprinkler system installed in accordance with Section 9.7, provided dwelling units either have a means of egress door opening directly to an exterior exit access that leads directly to the exits or are served by exterior ways of exit access in accordance with Section 7.5.3.

(Add) **31.3.4.1.4** In dormitory occupancies, a fire alarm system in accordance with Section 9.6, except as modified by Sections 31.3.4.2. through 31.3.4.5 shall be provided in buildings, other than those where each guest room has exterior exit access in accordance with 7.5.3 and the building is three or fewer stories in height.

(Add) **31.3.4.2.5** In dormitory occupancies, the required fire alarm system shall be initiated by each of the following:

- 1) Manual means in accordance with 9.6.2, unless there are other effective means to activate the fire alarm system, such as complete automatic sprinkler or automatic detection systems, with manual fire alarm box in accordance with 31.3.4.2.5 (2) required
- 2) Manual fire alarm box located at a central desk or other convenient central control point under continuous supervision by responsible employees
- 3) Required automatic sprinkler system
- 4) Required automatic detection system other than sleeping room smoke alarms

(Del) **31.3.4.3.5** Delete section.

(Amd) **31.3.4.5.1** Approved single-station smoke alarms shall be installed in accordance with Section 9.6.2.10, outside every sleeping area in the immediate vicinity of the bedrooms and on all levels of the dwelling unit, including basements. Additionally, in dormitory occupancies, single or multiple station smoke alarms shall be provided in every guest room and in the living area and sleeping room within a guest suite.

(Del) 31.3.4.5.2 Delete section.

(Del) **31.3.4.5.3** Delete section.

(Del) **31.3.4.5.4** Delete section.

(Amd) **31.3.5.1** Automatic sprinkler protection shall be provided as required by Section 9.7.1.6.

(Amd) **31.3.5.9.2** An automatic sprinkler shall be installed within every dwelling unit that has a door opening to the corridor, with such sprinkler positioned over the center of the door.

(Add) **31.3.5.12.1.1** A plan for compliance with Section 31.3.5.12.1 including a specific time table shall be submitted by the owner or his agent to the local fire marshal no later than October 1, 2017.

(Add) **31.3.5.12.1.2** Compliance with section 31.3.5.12.1 shall be no later than July 1, 2021.

(Amd) **31.3.5.12.4** Where required by Section 31.3.5.12.3, an engineered life safety system shall be developed by a registered professional engineer experienced in fire and life safety system design, shall be approved by the State Fire Marshal, and shall include any or all of the following:

(1) Partial automatic sprinkler protection

- (2) Smoke detection systems
- (3) Smoke control systems
- (4) Compartmentation
- (5) Other approved systems

(Del) **31.3.5.13** Delete section.

(Amd) **31.3.6.3.2** Spaces may be unlimited in area and open to the corridor, provided all of the following criteria are met:

- (1) The spaces are not used for dwelling units or hazardous areas.
- (2) The building is protected throughout by an approved, supervised automatic sprinkler system in accordance with Section 31.3.5.2.
- (3) The space does not obstruct access to required exits.
- (Del) **31.4.1.2** Delete section.

(Del) **31.7 Operating Features.** Delete section.

CHAPTER 32 NEW RESIDENTIAL BOARD AND CARE OCCUPANCIES

(Del) Delete chapter.

CHAPTER 33 EXISTING RESIDENTIAL BOARD AND CARE OCCUPANCIES

(Add) **33.1.1.1.1** It shall be recognized that, in buildings housing certain types of residents or having detention rooms or a security section, it might be necessary to lock doors and bar windows to confine and protect building inhabitants. In such instances, the State Fire Marshal shall make appropriate modifications to those sections of this code that would otherwise require means of egress to be kept unlocked.

(Del) 33.1.1.4* Chapter 32 Compliance. Delete section.

(Del) 33.1.1.6 Conversion. Delete section.

(Amd) **33.1.8 Changes in group evacuation capability.** A change in evacuation capability to a slower level shall be permitted where the facility conforms to one of the following:

- (1) The requirements of Part III of this code.
- (2) The requirements of Chapter 33 applicable to existing board and care facilities for the new evacuation capability, provided the building is protected throughout by an approved, supervised automatic sprinkler system complying with Section 33.3.3.5.

(3) The requirements of Chapter 33 applicable to existing board and care facilities for the new evacuation capability, provided the building is protected throughout by an existing approved, supervised automatic sprinkler system complying with Section 33.2.3.5.3.2.

(Amd) **33.2.2.5.5.1** Delayed egress locks complying with Section 7.2.1.6.1 shall be permitted. A building occupant shall not be required to pass through more than one door equipped with a delayed egress lock before entering an exit.

(Amd) **33.2.2.5.5.2** Access-controlled egress door assemblies complying with Section 7.2.1.6.2 shall be permitted in the means of egress on the entrance doors to buildings and to tenant spaces.

(Amd) **33.2.2.5.5.3** Door-locking arrangements may be permitted by Section 33.1.1.1.1 where the clinical needs of residents require specialized security measures or where residents pose a security threat, provided all of the following conditions are met:

(1) Staff can readily unlock doors at all times in accordance with 33.2.2.5.5.4.

(2) The building is protected by an approved automatic sprinkler system in accordance with 33.2.3.5.

(Amd) **33.2.3.4.3.1** Approved smoke alarms shall be provided in accordance with Section 9.6.2.10.

(Del) **33.2.3.4.3.6** Delete section.

(Del) **33.2.3.4.3.7** Delete section.

(Del) **33.2.3.5.8** Delete section.

(Amd) **33.3.2.2.2 Doors.** Doors in means of egress shall be as follows:

(1) Doors complying with 7.2.1 shall be permitted.

(2) Doors within individual rooms and suites of rooms shall be permitted to be swinging or sliding.

(3) No door in any means of egress, other than those meeting the requirement of 33.3.2.2.2(4), 33.3.2.2.2(5), or 33.3.2.2.2(6), shall be locked against egress when the building is occupied.

(4) Delayed-egress locks in accordance with 7.2.1.6.1 shall be permitted.

(5) Access-controlled egress door assemblies in accordance with 7.2.1.6.2 shall be permitted.

(6) Door-locking arrangements may be permitted in accordance with 33.1.1.1.1 where the clinical needs of residents require specialized security measures or where residents pose a security threat, provided both of the following conditions are met:

(a) Staff can readily unlock doors at all times in accordance with 33.3.2.2.2(7).

(b) The building is protected by an approved automatic sprinkler system in accordance with 33.3.3.5.

(7) Doors located in the means of egress that are permitted to be locked under other provisions of Chapter 33, other than those meeting the requirement of 33.3.2.2.2(4) or 33.3.2.2.2(5), shall have adequate provisions made for the rapid removal of occupants by means such as remote control of locks, keying of all locks to keys carried by staff at all times, or other such reliable means available to staff at all times.

(8) Only one such locking device, as described in 33.3.2.2.2(7), shall be permitted on each door.

(9) Revolving doors complying with 7.2.1.10 shall be permitted.

(Add) **33.3.2.2.2.1** Where permitted by Section 33.3.2.2.2, access-controlled egress doors complying with Section 7.2.1.6.2 shall be permitted in the means of egress on the entrance doors to buildings and to tenant spaces.

(Amd) **33.3.2.5.4** Dead-end corridors shall not exceed 50 feet (15 m), except that a dead-end corridor shall not be limited in length where the length of the dead-end corridor is less than 2.5 times the narrowest width of the dead-end corridor.

(Amd) **33.3.3.2.2** Hazardous areas, which shall include, but shall not be limited to, the following, shall be separated from other parts of the building by construction having a fire resistance rating of not less than 1 hour, with communicating openings protected by approved self-closing fire doors, or such area shall be equipped with automatic fire extinguishing systems:

- (1) Boiler and heater rooms where any piece of equipment is more than 400,000 BTU per hour input or any boiler greater than 15 psi and 10 horsepower.
- (2) Laundries.
- (3) Repair shops.
- (4) Rooms or spaces used for storage of combustible supplies and equipment in quantities deemed hazardous by the authority having jurisdiction.

(Amd) **33.3.3.4.7 Smoke alarms.** Smoke alarms shall be provided in accordance with Section 33.3.3.4.7.1.

(Del) **33.3.4.7.2** Delete section.

(Del) **33.3.3.4.7.3** Delete section.

(Add) **33.3.3.5.3.1** Automatic sprinkler protection installed in accordance with Section 33.3.3.5 shall also be provided as required by Section 9.7.1.6.

(Del) **33.3.3.5.7** Delete section.

(Del) 33.7 Operating features. Delete section.

CHAPTER 36 NEW MERCANTILE OCCUPANCIES

(Del) Delete chapter.

CHAPTER 37 EXISTING MERCANTILE OCCUPANCIES

(Del) **37.1.1.5** Delete section.

(Amd) 37.1.1.6 When a change in mercantile occupancy sub-classification occurs, either of the following requirements shall be met:

(1) When a mercantile occupancy changes from Class A to Class B or Class C, or from Class B to Class C, the provisions of this chapter shall apply.

(2) When a mercantile occupancy changes from Class C to Class A or Class B, or from Class B to Class A, the provisions of Part III of this code shall apply.

(Amd) **37.1.3.2.1** The fire barrier separating parking structures from a building classified as a mercantile occupancy shall have a fire resistance rating of not less than 2 hours, or 1 hour when both structures are protected throughout by an automatic sprinkler system in accordance with Section 9.7.1.1(1).

(Amd) **37.2.2.2.6** Access-controlled egress doors complying with Section 7.2.1.6.2 shall be permitted in the means of egress on the entrance doors to buildings and to tenant spaces. The entrance doors shall not be secured from the egress side when the occupancy is open to the general public.

(Amd) 37.2.4 Number of exits.

(Amd) **37.2.4.1** Exits shall comply with the following except as otherwise permitted by Section 37.2.4.2 to Section 37.2.4.6, inclusive:

- (1) The number of exits shall be in accordance with Section 7.4.
- (2) Not less than two separate exits shall be provided on every story.
- (3) Not less than two separate exits shall be accessible from every part of every story.

(Add) **37.2.4.6** A single exit shall be permitted for a maximum two-story single tenant space/building that has a maximum area per floor of $1,500 \text{ ft}^2 (139 \text{ m}^2)$ and is protected throughout by an automatic fire detection system that includes smoke detection in all occupied spaces and heat detection in hazardous and unoccupied areas. Each occupied room on the second floor of the space/building shall be provided with a secondary means of escape in accordance with Section 24.2.2.3. The total travel distance to the outside shall not exceed 75 feet (23 m).

(Amd) **37.2.5.2*** Dead-end corridors shall not exceed 50 feet (15 m), except that a dead-end corridor shall not be limited in length where the length of the dead-end corridor is less than 2.5 times the narrowest width of the dead-end corridor.

(Amd) **37.2.6.2** In buildings not complying with Section 37.2.6.1, the travel distance shall not exceed 200 feet (61 m).

(Amd) **37.3.2.1.1** Hazardous areas shall be protected in accordance with Section 8.7. Furnace or boiler rooms shall be considered hazardous where any piece of equipment is greater than 400,000 BTU per hour input or any boiler is greater than 15 psi and 10 horsepower.

(Amd) **37.3.5.2** Automatic sprinkler protection shall also be provided as required by Section 9.7.1.6.

(Del) 37.3.5.3 Delete section.

(Amd) **37.3.6** Corridors. Where access to exits is limited to corridors, such corridors shall be separated from use areas by fire barriers having a fire resistance rating of not less than 1 hour in accordance with Section 8.3, except under any of the following conditions:

- (1) Where exits are available from an open floor area.
- (2) Within a space occupied by a single tenant.
- (3) When the building is protected throughout by an approved supervised automatic sprinkler system installed in accordance with Section 9.7.1.
- (4) Building construction for which a permit was issued prior to April 15, 1987.

(Add) **37.3.6.1** Openings in corridor partitions required to have a fire resistance rating shall be protected in accordance with Section 8.3.

(Amd) **37.4.4.7.1 General.** Mall buildings shall be provided with a fire alarm system in accordance with Section 9.6.

(Amd) **37.4.4.7.3.1 Occupant Notification.** During all times that the mall building is occupied, the required fire alarm system, once initiated, shall perform one of the following functions:

(1) It shall activate an alarm in accordance with Section 9.6.3 throughout the mall, and positive alarm sequence in accordance with Section 9.6.3.4 shall be permitted.

(2) Occupant notification shall be permitted to be made via a voice communication or public address system in accordance with Section 9.6.3.9.2.

(Amd) **37.4.5.3** The storage, arrangement, protection and quantities of hazardous commodities shall be in accordance with the Connecticut State Fire Prevention Code.

(Add) **37.4.5.3.1 Retail sales of sparklers and fountains, 1.4G.** Mercantile occupancies in which the retail sale of sparklers and fountains, 1.4G, is conducted shall comply with the Connecticut State Fire Prevention Code and NFPA 1124 2006 edition, Code for the Manufacture, Transportation, Storage, and Retail Sales of Fireworks and Pyrotechnic Articles, as amended (see Connecticut State Fire Prevention Code), and section 29-357 of the Connecticut General Statutes.

(Del) 37.4.5.6 Delete section.

(Del) 37.7 Operating features. Delete section.

CHAPTER 38 NEW BUSINESS OCCUPANCIES

(Del) Delete chapter.

CHAPTER 39 EXISTING BUSINESS OCCUPANCIES

(Add) **39.1.2.1 In-home Group B occupancies.** Customary in-home business occupancies located within a single-family dwelling unit, that provide professional services and 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 residential occupancy.

(Amd) **39.1.3.2.1** The fire barrier separating parking structures from a building classified as a business occupancy shall be a fire barrier having a fire resistance rating of not less than 2 hours, or 1 hour when both structures are protected throughout by an automatic sprinkler system in accordance with Section 9.7.1.1(1).

(Amd) **39.2.4.1** Exits shall comply with the following, except as otherwise permitted by Section 39.2.4.2 to Section 39.2.4.7, inclusive:

- (1) The number of exits shall be in accordance with Section 7.4.1.1 and Section 7.4.1.3 though Section 7.4.1.6, inclusive.
- (2) Not less than two separate exits shall be provided on every story.
- (3) Not less than two separate exits shall be accessible from every part of every story.

(Amd) **39.2.4.3** A single exit shall be permitted for a room or area with a total occupant load of fewer than 100 persons, provided that the following criteria are met:

- (1) The exit shall discharge directly to the outside at the level of exit discharge for the building.
- (2) The total distance of travel from any point, including travel within the exit, shall not exceed 100 feet (30 m).
- (3) Such travel shall be on the same floor level or, if traversing of stairs is necessary, such stairs shall not exceed 15 feet (4.57 m) in height, and the stairs shall be provided with complete enclosures to separate them from any other part of the building, with no door openings therein. A communicating door shall be permitted in the exit stair enclosure at the level of exit discharge if the floor level of the communicating opening is protected throughout by either an automatic sprinkler system or fire detection system consisting of smoke detection that provides an alarm on the floor level served by the single exit.
- (4) A single outside stair in accordance with Section 7.2.2 may serve all floors within the 15 feet (4.57 m) vertical travel limitation.

(Amd) **39.2.4.4** Any business occupancy three or few stories in height, and not exceeding an occupant load of 30 people per stories, shall be permitted a single separate exit to each story, provided the following criteria are met:

- (1) This arrangement shall be permitted only where the total travel distance to the outside of the building does not exceed 100 feet (30 m) and where the exit is enclosed in accordance with Section 7.1.3.2, serves no other levels, and discharges directly to the outside. A communicating door shall be permitted in the exit stair enclosure at the level of exit discharge if the floor level of the communicating opening is protected throughout by either an automatic sprinkler system or fire detection system consisting of smoke detection that provides an alarm on the floor level served by the single exit.
- (2) A single outside stair in accordance with Section 7.2.2 may serve all floors.

(Amd) **39.2.4.6** A single exit shall be permitted for a maximum two-story single tenant space/building that is protected throughout by an approved automatic sprinkler system in accordance with Section 9.7.1.1(1) and where the total travel distance to the outside does not exceed 100 feet (30 m).

(Add) **39.2.4.8** A single exit shall be permitted for a maximum two-story single tenant space/building that has a maximum area per floor of $1,500 \text{ ft}^2 (139 \text{ m}^2)$ and is protected throughout by an automatic fire detection system that includes smoke detection in all occupied spaces and heat detection in hazardous and unoccupied areas. Each occupied room on the second floor of the space/building shall be provided with a secondary means of escape in accordance with Section 24.2.2.3. The total travel distance to the outside shall not exceed 75 feet (23 m).

(Amd) **39.2.5.2*** Dead-end corridors shall not exceed 50 feet (15 m), except that a dead-end corridor shall not be limited in length where the length of the dead-end corridor is less than 2.5 times the narrowest width of the dead-end corridor.

(Amd) **39.3.2.1*** Hazardous areas, including, but not limited to, areas used for general storage, boiler or furnace rooms where any piece of equipment is greater than 400,000 BTU per hour input or any boiler greater than 15 psi and 10 horsepower, and maintenance shops that include woodworking and painting areas shall be protected in accordance with Section 8.7.

(Amd) **39.3.5 Extinguishment requirements.** Automatic sprinkler protection shall be provided as required by Section 9.7.1.6.

(Amd) **39.3.6. Corridors.** Where access to exits is limited to corridors, such corridors shall be separated from use areas by fire barriers having a fire resistance rating of not less than 1 hour in accordance with Section 8.3, except under any of the following conditions:

- (1) Where exits are available from an open floor area.
- (2) Within a space occupied by a single tenant.
- (3) When the building is protected throughout by an approved supervised automatic sprinkler system installed in accordance with Section 9.7.1.
- (4) Building construction for which a building permit was issued prior to September 1, 1981.

(Del) 39.7 Operating features. Delete section.

CHAPTER 40 INDUSTRIAL OCCUPANCIES

(Amd) **40.1.1.1** The requirements of this chapter shall apply to existing industrial occupancies.

(Amd) **40.1.2.1.3*** **High-Hazard Industrial Occupancy.** High-hazard industrial occupancies shall include all of the following:

(1) Industrial occupancies that conduct industrial operations that use high-hazard materials or processes or house high-hazard contents in excess of the maximum allowable quantities (MAQ) as permitted by the Connecticut State Fire Prevention Code.

(2) Industrial occupancies in which incidental high-hazard operations in low- or ordinaryhazard occupancies that are protected in accordance with Sections 8.7 and 40.3.2 are not required to be the basis for overall occupancy classification.

(Amd) **40.2.4.1** The number of means of egress shall comply with Section 40.2.4.1.1, Section 40.2.4.1.2 or Section 40.2.4.1.3.

(Amd) **40.2.4.1.2** A single means of egress shall be permitted from any story or section in low and ordinary hazard industrial occupancies, provided the following limits are not exceeded:

- (1) One story, 30 occupants and 100 feet (30 m) maximum travel distance.
- (2) Two story, 30 occupants and 75 feet (23 m) maximum travel distance.

(Add) **40.2.4.1.3** In low and ordinary hazard industrial occupancies existing prior to May 7, 2000, a single means of egress shall be permitted from any story or section, provided the exit can be reached within the distance permitted as a common path of travel.

(Amd) **40.2.5.1 General**. Means of egress, arranged in accordance with Section 7.5, shall not exceed that provided by Table 40.2.5.1, except that a dead-end corridor shall not be limited in length where the length of the dead-end corridor is less than 2.5 times the narrowest width of the dead-end corridor.

(Amd) 40.3.5 Automatic sprinkler protection shall also be provided as required by Section 9.7.1.6.

(Amd) **40.4.2.1 High-rise buildings.** Automatic sprinkler protection shall also be provided as required by Section 9.7.1.6 and Section 11.8.3.1.

(Del) 40.7 Operating features. Delete section.

CHAPTER 42 STORAGE OCCUPANCIES

(Amd) **42.1.1.1** The requirements of this chapter shall apply to existing storage occupancies.

(Amd) **42.1.5.2** Hazardous materials that exceed the maximum allowable quantities (MAQ) as permitted in the Connecticut State Fire Prevention Code shall be classified as high-hazard contents.

(Amd) **42.2.4.1** The number of means of egress shall comply with any of the following:

- (1) In low and ordinary hazard storage occupancies, a single means of egress shall be permitted from any story or section provided the following limits are not exceeded:
 - (a) One story, 30 occupants and 100 feet (30 m) maximum travel distance; or
 - (b) Two story, 30 occupants and 75 feet (23 m) maximum travel distance.
- (2) In low hazard storage occupancies existing prior to May 7, 2000, a single means of egress shall be permitted from any story or section.
- (3) In ordinary hazard storage occupancies existing prior to May 7, 2000, a single means of egress shall be permitted from any story or section, provided the exit can be reached within the distance permitted as a common path of travel.
- (4) All buildings or structures not complying with Section 42.2.4.1(1), Section 42.2.4.1(2) or Section 42.2.4.1(3) and used for storage, and every section thereof considered separately, shall have not less than two separate means of egress as remotely located from each other as practicable.

(Amd) **42.2.5 Arrangement of means of egress.** Means of egress, arranged in accordance with Section 7.5, shall not exceed that provided by Table 42.2.5, except that a dead-end corridor shall not be limited in length where the length of the dead-end corridor is less than 2.5 times the narrowest width of the dead-end corridor.

Level of Protection	Low Hazard	Ordinary Hazard	High Hazard
	Storage	Storage	Storage
Protected throughout by an approved, supervised automatic sprinkler system in accordance with Section 9.7.1.1(1)	Occupancy	Occupancy	Occupancy
	400ft m (122m)	400ft m (122m)	100ft (30m)
Not protected throughout by an approved, supervised automatic sprinkler system in accordance with Section 9.7.1.1(1)	300ft (91m)	200ft (61m)	75ft (23m)
Flammableandcombustible liquid productsstored and protected inaccordancewithTheConnecticutStatePreventionCode	Not applicable	Not applicable	150 feet (46 m)

(Amd) 42.3.5 Automatic sprinkler protection shall also be provided as required by Section 9.7.1.6.

(Amd) **42.8.3.5** Automatic sprinkler protection shall also be provided as required by Section 9.7.1.6.

(Add) **42.8.3.5.1** An open-air parking structure or open-air facility located within a mixed occupancy building shall be protected throughout by an approved, automatic sprinkler system when the other occupancy of such building requires such protection throughout the building, unless the provisions of Section 42.8.3.5.2 are met.

(Add) **42.8.3.5.2** Those portions of a building deemed "open-air parking" shall not be required to be protected by automatic sprinklers if all of the following conditions are met:

- (1) Used only for the parking or storage of passenger motor vehicles designed to carry not more than nine persons.
- (2) There are no provisions for vehicle repair or fuel dispensing.
- (3) The open parking structure and other occupancy shall be separated, both horizontally and vertically, by fire resistive separation assemblies having at least a 2-hour fire resistance rating and may have openings as permitted by the exceptions to Section 37.1.2.2 and Section 39.1.2.2.
- (4) Means of egress for the other occupancy shall be separated from the parking area by fire barriers having at least a 2-hour fire resistance rating.

(Del) 42.9 Operating features. Delete section.

CHAPTER 43 BUILDING REHABILITATION

(Del) Delete chapter.

2018 Connecticut State Fire Safety Code

Summary of changes in response to the May 21, 2018, Legislative Commissioners' Office memorandum

Substantive Concerns:

1. [On page 9] In Section 202, the definition for Consumer fireworks, Class 1.4G, was deleted from both Part III and Part IV. Instead the reference to the Connecticut General Statutes previously placed in Part IV was added to the definition of fireworks in Part III.

2. [On pages 10 and 12] The definitions referenced on these pages were changed to not conflict with the provisions of the Connecticut General Statutes.

3. [On page 41] In section 1025.6, "serving an occupant load greater than 30" was deleted.

4. [On page 88] No change was made. In section 15.2.11.1.2, the amendment adds subsection (7). The language in subsection (5)(b) is existing model code language. The same language is used elsewhere in the code, including, but not limited to, in Chapter 17 with regard to windows for rescue and in Chapter 12 with regard to turnstiles or other devices. The AHJ determines if something would interfere with rescue operations.

5. [On page 99] In section 24.3.4.1.1, smoke alarms must be installed in all of the locations listed as has been the long-standing requirement. The words "in all of" were added for consistency with the underlying code.

6. [On pages 109 and 113] No change was made. In sections 33.3.3.2.2 and 39.2.5.2, the amendment adds boiler size requirements. The language "which shall include, but not be limited to," is underlying model code language. "Hazardous areas" is a defined term in the code and is further explained within Annex A. The examples provided in each of the sections are examples of areas common to the occupancy covered by that chapter. The same approach (and "but not limited to" language) appears in several other chapters, covering other occupancies, including, but not necessarily limited to, Chapters 19, 20, 21, 32, and 38.

Technical corrections:

Technical corrections were made throughout, as indicated, except as follows:

Page 2: The zip code for NFPA was not changed as the address and zip code used are what appear on the inside back cover of every NFPA code book and on the NFPA web site on its "ordering and payment questions and support" page.

Pages 68, 73, 76, 80, 82, 103, 106, 107: Not every section being deleted has a title. There are no titles to add on these pages.

Page 63: "Delete Appendix" was not inserted as the code is only deleting section D107 of Appendix D.

Measurement conversions:

Measurement conversions were corrected on page 9, page 17, page 37 (changed to what appears in the model code), and page 42.

For consistency, measurement conversions were not changed on page 28 (where the measurement is as it appears in the model code and in at least five other places within Section 903) and on pages 71, 72, 73, 78, 84, 86, 87, 92, and 99 (where the measurements in many instances are as they appear in code and because NFPA rounds metric conversions to the nearest 10 or 5).

Use of "least width":

On the pages indicated and on page 114, "least width" was replaced with "narrowest width".

Inconsistent use of italics for terms:

No changes were made. The use of italics is consistent and deliberate. The Preface of every ICC code (in this case on pages vi and ix of the 2015 International Fire Code) explains that "selected terms set forth in Chapter 2, Definitions, are italicized where they appear in code text. Such terms are not italicized where the definition set forth in Chapter 2 does not impart the intended meaning in the use of the term. The terms selected have definitions that the user should read carefully to better understand the code."

Unclear use of asterisk:

No changes were made. The use of the asterisks is clear. In the notes of every NFPA code or standard, and in this case on page 23 of NFPA 101, the use of the asterisk is explained as: "an asterisk (*) following the number or letter designating a paragraph indicates that explanatory material on the paragraph can be found in Annex A."

Seek clarification:

Page 5: In Section 202.1, no change was made. This address, including the P.O. Box is the address listed on the inside back cover of NFPA 101 under the heading "For Further Information."

Page 18: Section 407.13.6 was rewritten and expanded for clarity.

Page 20: In section 421.7, the reference was changed.

Page 25: In Table 430, the layout was adjusted to line up the rows.

Page 27: Section 809.1.1.2 was rewritten for clarity.

Page 29: Exception 5.1 of section 903.2.8 was rewritten for clarity.

Page 31: The reference in exception 2 of section 907.2.8.2 was corrected.

Page 43: The reference in exception 4 of section 1030.1 was corrected.

Page 45: In section 2001.1, no change was made as "in accordance with" is standard code language.

Page 56: Section 3408.1 was rewritten to conform to underlying model code language.

Page 68: In Chapter 4, the use of the asterisk is as indicated above and the titles were added for the sections that do, in fact, have titles.

Page 75: In footnote f, "A.7.3.1.2" refers to a section in Annex A.

Page 81: Section 9.7.1.6 refers to October 1, 1973, because that is the date the requirements of section 29-315 became effective. The date has since been removed from statute. The date in the code lets the AHJ know that the section does not apply to high-rise buildings built before that date.

DEPARTMENT OF ADMINISTRATIVE SERVICES



Proposed 2018 Connecticut State Fire Safety Code

Comments Received During Public Comment Period January 2, 2018 – February 16, 2018

> Prepared In Response To Legislative Review May 31, 2018

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Public Comments and Resulting Actions	s and Re	sulting A	ctions		
Commenter	Model Code	Code Section(s)	Subject	Comment I	Response
Mike Sinsigalli CFMA / 541 Committee	2015 IFC 2015 IBC	Various	Various	 2015 IFC - Restore 507.1, 507.2 (Water supply), 507.5.1.1 (Standpipe systems) & 507.5.6 (Physical protection) 2015 IFC/IBC - 903.2.1.2 A-2 use group sprinkler threshold IFC/IBC 1006.3.2 (1) Single exit for R-2 buildings 	Comments were applied as discussed with the subcommittee.
Richard Taff Attorney	2015 FSC	Various	Whole Draft	Various editorial and substantive comments on draft.	Comments were applied where appropriate.
Craig Voelkert Fire Equipment Manufacturer's Association	2015 FSC 2015 FPC	Various	Fire Extinguishers	Letter in support of amended fire extinguisher requirements.	
Robert Neale Government Relations Vice President for National Fire Service Activities ICC	ICC Codes	n/a	General Support	Letter in support of adoption of 2015 ICC model codes for the 2018 Connecticut State Fire Safety Code.	Thank you for your support of the collective efforts of all who participated in the development of this code.

West Hartford Fire Department 95 Raymond Road West Hartford, CT 06107 860-561-8320

CFMA-541 Committee



To: Lou Free, Chairman Code Amendment Sub-committee

From: Michael Sinsigalli

CC: Joe Cassidy, Bill Abbott

Date: February 2, 2018

Re: CFMA Comments regarding 2015 I-Series Code Adoption

Lou,

The Connecticut Fire Marshal's Association and the CFMA 541 Committee thank you, State Building Official Joe Cassidy and State Fire Marshal Bill Abbott for the opportunity to be a part of the fire code adoption workgroup during this code cycle. We were able to resolve most of the issues that we considered important. There were a few remaining issues that we were unable to resolve which are summarized below in hopes of further resolution.

Chapter 5

Restore sections 507.1 Required Water Supply and 507.2 Type of Water Supply. These sections assure that the proposed water supply and its location will be consistent with the operating capabilities of the local fire department. [Example – Building constructed with 1250 gpm manual wet standpipe demand on municipal supply capable of only 750 gpm.]

Restore sections 507.5 1.1 Hydrant for Standpipe Systems and 507.5.6 Physical Protection. This section assures that the local fire department has the means and the appropriate location for accessing the approved water supply. [Example – dry hydrant at stored water supply.]

Chapter 9

Section 903.2.1.2

In Section 903.2.1.2 of the International Fire Code, the International Code Council sets the threshold requirements for sprinkler systems in A-2 Assembly occupancies. In the 2006 edition of the IFC, the ICC lowered the occupant load threshold from 300 persons maximum to 100 persons. This was done in direct response to the Station Nightclub fire in 2003. In West Warwick Rhode Island, 100 people died in a non-sprinklered A-2 assembly occupancy.

Over the past 100 years, there have been several large life loss fire tragedies in our country. All these incidents occurred in buildings where large numbers of people were gathered; most fitting today's definition of an A-2 Assembly occupancy. All of these incidents also shared the fact that they occurred in buildings that were not protected by an automatic sprinkler system. With the model code requirements now found in the IFC, all new buildings of this type would be protected

by a sprinkler system, preventing future tragedies.

With Connecticut's adoption of the 2012 International Fire Code in October of 2016, this sprinkler requirement was scheduled to become the law in our state. Unfortunately, during the adoption process, the Office of the State Fire Marshal amended that particular section of the code. Essentially, the amended language maintained the previous occupant load threshold of 300, unless the proposed A-2 Assembly occupancy is determined to be a nightclub or dance hall. If determined to be one of the above-mentioned occupancy uses, then the occupant load threshold would be 100, as intended by the ICC.

This amendment introduced an element of subjectivity that was never intended by the code developers. Under Connecticut's amendment, a building meets, or does not meet, the definition of a nightclub or dance hall solely on the declaration of the business owner. Prior to the occupancy of building, the authority having jurisdiction has no way of knowing what the space will be used for at any given time. It further introduces the temptation for the business owner or designer to "misrepresent" the intended use of the space in an effort to lower project costs. It can be reasonably surmised that it was for this precise reason that the ICC chose the occupant load threshold of 100 occupants, without exception, for the requirement of an automatic sprinkler system.

Since Connecticut's adoption of this amended code section in October 2016, we have seen several new A-2 Assembly occupancies constructed. Many of these projects have seen considerable construction delays as a result of disagreements over this section of code. We, as fire marshals, now have the burden of subjective interpretation as to the specific uses of a space. Additionally, we have the burden of having to monitor all future uses of the space, if it is constructed without a sprinkler system. Any A-2 Assembly occupancy constructed without a sprinkler system as a result of the Connecticut exception, would never be able to introduce "live music" in their building, based on the amended code language. This degree of enforcement is essentially impossible to perform accurately. The activities that would constitute a "nightclub", live music, dancing, etc., would almost always occur outside the normal inspection hours that any local authority would hold. Sadly, the only way a local authority would discover the non-compliant use would be after a tragedy, when it was too late.

In summary, the Connecticut amendment has created an enforcement quagmire for the local fire marshal. Further, it promotes a system that encourages the business owner to misrepresent his/her intentions for their property, while allowing little to no flexibility for the owner years later, should their business plans change. Ultimately, it does a disservice to both the local code official and the business owner alike, while also having the potentially tragic result of building unsafe buildings. There is no logical reason to amend the model code language and the practice should be ceased with this code adoption cycle.

Section 905.2.1 Piping Design, Exception and section 9.10.1.1 Water Supply have contradictory requirements. The first section allows Class One standpipes to have a manual water supply for buildings no higher than 75 feet while the second section allows a manual water supply for buildings no higher than 150 feet. 75 feet is threshold for high rise buildings referenced by the Building Code and by NFPA 14 Standard for Standpipe Systems.

Chapter 10

Section 1006.3.2 (1) Single Exit – permits as many as 320 occupants in dwelling units located on three floors and basement level to be served by a single exit, based on:

1 - A maximum of 20 occupants per dwelling unit, (per 1006.2.1 Exception 1 - based on occupant load and common path for egress travel distance),

2-4 dwelling units per floor and,

3 - Dwelling units on basement, first, second, or third stories above grade plane for a potential total of 320 occupants served by a single exit, including a convergence from the basement and first floor of 160 occupants.

This number of occupants far exceeds the maximum of 49 occupants with a single exit permitted in places of assembly limited to the first story above or below grade plane, or 29 occupants on higher floors, and not permitted at all in residential occupancies. The 320 occupants served by a single exit are found in multiple dwelling unit apartment buildings where it is presumed that occupants will be sleeping, the most challenging life safety scenario other than institutions with locking. Replace this section by 2018 NFPA Section 30.2.4.6 which has more detailed and comprehensive requirements, is widely accepted and in use for many years.

February 16, 2018

Codes Amendment Subcommittee Department of Administrative Services 450 Columbus Boulevard Hartford, CT 06103

RE: Comments to Draft 2018 Connecticut State Fire Safety Code

Dear Codes Amendment Subcommittee:

Enclosed please find technical and substantive comments to the Draft 2018 Connecticut State Fire Safety Code for review and consideration by the subcommittee.

Sincerely,

Attorney Richard D. Taff 1 Chestnut Hill Terrace Glastonbury, CT 06033

cc: Attorney Jenna Padula, Department of Administrative Services Attorney Catriona Stratton, Legislative Commissioners' Office

Comments to Draft 2018 Connecticut State Fire Safety Code

Page 9 – Section 202

Comment: Should "Consumer fireworks, Class 1.4G" be capitalized like the other defined terms?

Page 11 - Section 202, Definitions, Occupancy Classifications, Institutional Group I-3

Comment: This provision ends with "Buildings of Group I-3 shall be classified as one of the five following occupancy conditions:" The provision ends with a colon, but nothing follows.

The five conditions that follow in the IFC are omitted here. Was it the intention to delete those conditions? If so, this sentence should be deleted as well as unnecessary. Alternatively, if the intention was to retain those conditions, then they need to be reinserted here.

Page 11 - Section 202, Definitions, Occupancy Classifications, Institutional Group I-4 day care facilities, six or fewer persons of any age receiving care in a dwelling unit.

Comment: In the fourth line, "potion" should be "portion"

Page 13 – Group R-4

Comment: This provision ends:

"Group R-4 occupancies shall meet the requirements for construction as defined for Group R-3, except as otherwise provided *for in of* State Building Code." (italics added)

Is something missing here?

Should it be "otherwise provided for in the State Building Code"?

Or... "otherwise provided for in the 2015 International Residential Code portion of the State Building Code"?

Or... "otherwise provided for in Section _____ of the 2015 International Residential Code portion of the State Building Code"?

Page 13 – Chapter 3

Instead of underlining the new chapter title, wouldn't this be the format?

(Amd) GENERAL PRECAUTIONS AGAINST FIRE

Compare e.g. page 92, chapter 24; page 94, chapter 26; page 95, chapter 29

Page 13 - Section 301.2

Comment: If sections 306, 307, 308 and 315 are being proposed to be deleted, shouldn't this section also be deleted since it references those, and only those, sections?

Page 14 – Section 403.1

Comment: In the first and second lines, "thru" should be "through". In 3, "Building" should be "Buildings" for consistency with plural format of #1, 2, 4 and 5.

Page 15 – Section 406.3.4.1

Comment: Font should be adjusted to match rest of document.

Page 16 – Section 407.13

Comment: In the third line, "complaint" should be "compliant"

Page 17 – Section 407.13.6

Comment: Is this a sentence? Something missing?

Page 18 – Section 407.13.10

Comment: Should "small I-2 home" be "small I-2 homes"? (Compare Section 407.13.3)

Page 19 – Section 421.1

Comment: In the second line, "thru" should be "through"

Page 19 – Section 427.1

Draft code: "For the purpose of this section, normally occupied shall include such spaces as libraries, cafeterias, gymnasiums and multipurpose rooms."

Comment: Since it appears that "normally occupied" is being defined here, should it be enclosed in quotation marks?

Page 20 – Section 427.1.2

Comment: In the exception, second and third lines, "rooms provided" should be "rooms are provided". Compare Section 427.1.1

Page 20 – Section 428.1

Comment: "Section" should be inserted before "428.2" and "428.3"

Page 20 – Section 428.2

Comment: "Section" should be inserted before "428.2"; and "section 503.1" should be "Section 503.1"

Page 21 – Section 428.3

Comment: "section 503.1" should be "Section 503.1"

Page 22 – Section 430.1

Draft code: "Incidental uses located within single occupancy or mixed occupancy buildings shall comply with the provisions of this section. Incidental uses that are ancillary functions associated with a given occupancy that generally pose a greater level of risk to that occupancy and are limited to those uses listed in Table 430.

Exception: Incidental use within and serving a dwelling unit are not required to comply with this section."

Comment #1: The second sentence is not really a sentence. Should it be something like:

"Incidental uses *are uses* that are ancillary functions associated with a given occupancy that generally pose a greater level of risk to that occupancy and are limited to those uses listed in Table 430."

Or:

"Incidental uses [that] are ancillary functions associated with a given occupancy that generally pose a greater level of risk to that occupancy and are limited to those uses listed in Table 430."

Comment #2: In the exception, "Incidental use" should be "Incidental uses"

Page 23 – Table 430

Comment: "Laboratories" should be "laboratories" in two places in the first column, for consistency

Page 25 – Chapter 8 INTERIOR FINISHES

Comment: The title of this chapter in the 2015 IFC is "INTERIOR FINISH, DECORATIVE MATERIALS AND FURNISHINGS".

Is the intent to change the title for the Connecticut FSC? If so, the title needs to be preceded by "(Amd)"

Page 26 - Sections 809.1, 809.1.1, 809.1.1.1, 809.1.1.2

Comment: Since these sections are new, and do not appear in the 2015 IFC, shouldn't they be preceded by "(Add)"? (Compare format for new Section 428)

Page 26 – Section 809.1.1

Comment: In two places, "interior finish" should not be italicized

Page 26 – Section 903.1.1

Draft code: "In any occupancy where the character of fuel for fire is such that extinguishment or control of fire is accomplished by a type of alternative automatic extinguishing system complying with Section 904 shall be permitted in lieu of an automatic sprinkler system and shall be installed in accordance with the applicable standard and approved by the fire code official."

Comment: Something missing?

Possible redraft:

"In any occupancy where the character of fuel for fire is such that extinguishment or control of fire is accomplished by a type of alternative automatic extinguishing system complying with Section 904, *such alternative system* shall be permitted in lieu of an automatic sprinkler system and shall be installed in accordance with the applicable standard and approved by the fire code official."

Page 27 – Section 903.2.1.2

Comment: In the fourth line of the exception for "1.", "providing" should be "provided"

Page 30 – Section 907.1.1

Comment: Should the "2012 International Building Code" be the "2015 International Building Code"?

Page 30 – Section 907.2.8.2

Comment: In the second exception, should "Section 907.2.11.1.1.1" be "Section 907.2.11.1.1"?

Page 30 – Section 907.2.9.1

Draft code: At the end of the third exception it says this:

"provided dwelling units or sleeping units either have a means of egress door opening directly to an exterior exit access that leads directly to the exits or are served by open-ended corridors designed in accordance with Section 1026.6, Exception 4."

Comment: There is no Section 1026.6 in this code. The IFC provision is "Section 1027.6, Exception 3". Is that what the reference should be?

Page 31 – Section 915.1

Comment: In the second line, "Section" should be "Sections".

Page 32 - Section 915.1.1

Comment: In the second line, "Section" should be "Sections"

Page 32 – Section 915.1.3

Comment: In the second line of the exception, "Sleeping" should be "sleeping"

Page 32 – Section 915.2.3

Comment: In the second line, should "and Section 915.2.3.2" be deleted? Locations are specified in Section 915.2.3.1. Signage, not locations, is the subject of Section 915.2.3.2.

Page 33 – Section 915.7

Comment: This is designated as "(Amd)", but there is no such section in the 2015 NPFA 101, so should it be "(Add)"?

Page 35 – Section 1006.3

Comment: Various terms in this section should not be italicized.

Page 36 – Section 1011.5.2, Exception 2

Comment: The term used in IFC Section 1011.15 is "Ships" not "Ship".

Page 46 – Sections 2304 & 2305

Comment: Why the "(Del)" and "(Add)" format used here compared to the "(Amd)" and "(Del)" format used with respect to similar sections, e.g. Sections 2806, 2807, 2808, 2809, 3205, 3404, 3405, 3406, 3407 and 3408?

Page 47 – Section 2410

Comment: Why the "(Del)" and "(Add)" format used here compared to the "(Amd)" and "(Del)" format used with respect to similar sections, e.g. Sections 2806, 2807, 2808, 2809, 3205, 3404, 3405, 3406, 3407 and 3408?

Page 51 – Section 3103.4

Comment: The word "permits" has been omitted from the amended language.

Proposed redraft: "Permits, if required, shall be in accordance with the Connecticut State Fire Prevention Code."

Page 52 – Section 3105.3

Comment: The word "permits" has been omitted from the amended language.

Proposed redraft: "Permits, if required, shall be in accordance with the Connecticut State Fire Prevention Code."

Page 52 – Section 3301.1

Comment: In the first line, "Fire Safety" should be "Fire safety"

Page 54 – Section 5301.3

Comment: In the third line, "handing" should be "handling"

Page 55 - Section 5501.3

Comment: In the third line, "handing" should be "handling"

Page 55– Section 5601.1.3

Comment: In the fourth line, "Fire Works" should be "Fireworks"

Page 56 – Section 5701.4

Comment: In the third line, "handing" should be "handling"

Page 57 – Section 5801.3

Comment: In the third line, "handing" should be "handling"

Page 60 – Appendix D

Comment: The commentary, "Adopt as printed with the exception of one and two family residential developments" is unnecessary and should be deleted since the proposed deletion of Section D107 accomplishes that goal.

Page 61 - Appendix K

Comment: "REQUIRMENTS" should be "REQUIREMENTS"

Page 63 – Part heading

Comment: "Amendements" should be "Amendments"

Page 65 – Chapter 5

Comment: The chapter title in 2015 NFPA 101 is PERFORMANCE-BASED OPTION – singular, not plural

Page 68 – Section 7.2.1.6.2(1)

Comment: A period is missing at the end of this provision

Page 68 – Section 7.2.1.6.2(3)

Comment: The semi-colon at the end of this provision should be a colon

Page 69 – Section 7.2.1.6.2(7)

Comment: In two places, "access controlled" should be "access-controlled" as it is in the title of the section and in NFPA 101

Page 72 – Section 8.2.2.4

Comment: In the first line, "*Code*" should be "code"; and at the end of (4), a period should be inserted

Page 74 – Section 8.6.7

Comment: In several places, see e.g. (a), (b), (c)(ii), (c)(iv), (2), (3) and (6), "Section" should be inserted before the section numbers for consistency with the format of the code.

Page 75 - Section 8.6.9.1 (2)

Comment: "Section" should be inserted before "8.6.5"

Page 75 – Section 8.7.3.3

Comment: Since this is a Connecticut amendment of the 2015 NFPA 101 section, the section should be preceded with "(Amd)". Also, in the second line, the extraneous word "meet" should be deleted.

Page 79 – Section 13.3.2.1.2 (1)

Comment: "Section" should be inserted before "8.7"

Page 79 – Section 13.3.2.1.2 (1)(a)(ii)

Comment: In second line, there is a missing parentheses. "Section 13.3.2.1.2(1)(a)i" should be "Section 13.3.2.1.2(1)(a)(i)"

In third line, it appears that the reference should be "8.6.11" rather than "8.6.10", and that "Section" should be inserted before "8.6.11"

Redraft: "ii. The requirement of Section 13.3.2.1.2(1)(a) shall not apply to attic locations of the rooms addressed in Section 13.3.2.1.2(1)(a)(i), provided such rooms comply with the draftstopping requirements of Section 8.6.11."

Page 82 – Section 15.2.2.4 (3)

Draft code: "3. Egress shall require not more than one releasing operation."

Comment: This section concerns the locking, and consequently the unlocking of classroom doors. The other provisions all concern the locking and unlocking of the doors, not the generic topic of "egress".

A more precise wording of this provision, and one consistent with other code provisions, (compare Sec. 7.2.1.5.10.2), would be:

Redraft: "3. The releasing mechanism shall open the door with not more than one releasing operation."

Page 82 – Section 15.2.2.4(9) & (10)

Comment: This section is a new provision, so there is no need in 9 & 10 to strike-through the NFPA language and underline the Connecticut language.

In both places it should simply be: "...required by the Connecticut State Fire Prevention Code."

Page 82 – Section 15.2.5.2

Draft code: "No dead-end corridor shall exceed 20 feet (6.1 m), other than in buildings protected throughout by an approved, supervised, automatic sprinkler system in accordance with Section 9.7, in which case dead-end corridors shall not exceed 50 feet (15 m), *or that a dead-end corridor shall not be limited in length where the length of the dead-end corridor is less than 2.5 times the least width of the dead-end corridor.*" (emphasis added)

Comment: Although this is the same wording as in the 2016 CFSC, it is unclear what words or clause precede "that". The construction of the provision makes its meaning and applicability unclear.

However, comparing other sections on dead-end corridors, it appears that this provision was meant as an exception. (See e.g. Section 13.2.5.1.3, 29.2.5.5, 31.2.5.4, 33.3.2.5.4, 37.2.5.2, 39.2.5.2)

Changing "or" to "except" would clarify.

Redraft:

"No dead-end corridor shall exceed 20 feet (6.1 m), other than in buildings protected throughout by an approved, supervised, automatic sprinkler system in accordance with Section 9.7, in which case dead-end corridors shall not exceed 50 feet (15 m), except that a dead-end corridor shall not be limited in length where the length of the dead-end corridor is less than 2.5 times the least width of the dead-end corridor."

Page 83 – Section 15.2.11.1.2

Comment: In (5), "awing-type" should be "awning-type"

Page 84 – Section 15.3.4.4.1
Draft code: "Carbon monoxide detection shall be provided on the ceiling or in accordance with the manufacturer's instructions of rooms containing permanently installed fuel- burning heating equipment. The CO detectors shall be located as remotely as possible from the heating equipment. Exception: Rooms with cooking appliances, laboratories and maintenance spaces."

Comment #1: The phrase "or in accordance with the manufacturer's instructions" is inserted awkwardly into the middle of this sentence, not only interrupting the flow but obscuring the meaning.

Possible redraft: "In rooms containing permanently installed fuel-burning heating equipment, carbon monoxide detection shall be provided on the ceiling or in accordance with the manufacturer's instructions."

But how does this provision interact with Section 15.3.4.4.4 which states that carbon monoxide detectors shall be installed in accordance with manufacturer's instructions? Do the manufacturer's instructions always take precedence? Is the "ceiling" installation provision here an exception to the requirement of Section 15.3.4.4.4?

Comment #2: In this section and others proposed for Connecticut, in the regulatory language, "CO" should be "carbon monoxide"

Page 85 - Section 15.3.4.4.3

Draft code: "The carbon monoxide equipment must meet or exceed UL Standards 2034 or 2075."

Comment: Terminology. Is "carbon monoxide equipment" the correct term? Perhaps "carbon monoxide detection equipment" or "carbon monoxide detection and alarm equipment"?

Page 85 – Sections 15.3.4.4.4, 15.3.4.4.5 and 15.3.4.4.7

Draft code: "CO detectors"

Comment: It is preferable to spell out the term, , i.e. "carbon monoxide detectors", rather than use the chemical abbreviation.

Page 85 – Section 15.3.5.3

Comment: "provided either of the following criteria are met" should be "…provided either of the following criteria *is* met"

Page 86 – Chapter 17 sections

Comment: It appears that the first four sections are out of order. The sections in order should be:

Section 17.1.1.4 Section 17.1.1.5 Section 17.1.2.1 Section 17.1.2.3

Page 86 – Section 17.1.1.5

Comment: "Section" or "Sections", as appropriate, should be inserted before the section numbers

Page 87 – Section 17.2.5.2

Draft code: "No dead-end corridor shall exceed 20 feet (6.1 m), other than in buildings protected throughout by an approved, supervised, automatic sprinkler system in accordance with Section 9.7, in which case dead-end corridors shall not exceed 50 feet (15 m), *or that a dead-end corridor shall not be limited in length where the length of the dead-end corridor is less than 2.5 times the least width of the dead-end corridor.*" (emphasis added)

Comment: The italicized language does not appear in the 2015 NFPA 101, and although this is the same wording as in the 2016 CFSC, it is unclear what words or clause precede "that". The construction of the provision makes its meaning and applicability unclear.

However, comparing other sections on dead-end corridors, it appears that this provision was meant as an exception. ((See e.g. Section 13.2.5.1.3, 29.2.5.5, 31.2.5.4, 33.3.2.5.4, 37.2.5.2, 39.2.5.2)

Changing "or" to "except" would clarify.

Redraft: "No dead-end corridor shall exceed 20 feet (6.1 m), other than in buildings protected throughout by an approved, supervised, automatic sprinkler system in accordance with Section 9.7, in which case dead-end corridors shall not exceed 50 feet (15 m), except that a dead-end corridor shall not be limited in length where the length of the dead-end corridor is less than 2.5 times the least width of the dead-end corridor."

Page 87 – Section 17.2.11.1.1

Draft code: "Every room or space greater than 250 feet2 (23.2 m2) and used for classroom or other educational purposes or normally subject to student occupancy...."

Comment: Chapter 17 concerns existing day-care occupancies. It concerns "clients" not "students". Why then has this NFPA section been amended to use the language of chapter 15, concerning educational occupancies?

The NFPA language for the italicized portion above is: "...and normally subject to client occupancy..."

Why was this changed?

Page 87 – Section 17.2.11.1.2

Comment: Why is a cross-reference to Section 15.2.11.1.2 inserted here instead of using the provisions of NFPA 17.2.11.1.2, adapted if necessary?

The problem is that Section 15.2.11.1.2 is in the educational occupancy chapter and uses terminology such as "student" and "classroom", instead of Chapter 17's terminology of "client" and "room". It also then cross-references other chapter 15 sections that likewise have terminology and

provisions appropriate for educational occupancies, but not necessarily day care occupancies.

Page 88 – Section 17.3.6

Comment: In (2), why does it say "student occupancy" instead of "client occupancy"? Yes, that's what 2015 NFPA 101 says as well, but I have to believe that's an error on their part. That's the only place in chapter 17 of NFPA 101 that "student" is used; everywhere else it is "client". This chapter concerns day-care facilities, not schools.

Page 89 – Section 19.2.5.2

Proposed code: "Existing dead-end corridors may continue in use if it is impractical and unfeasible to alter them so that exits are accessible in not less than two different directions from all points in aisles, passageways and corridors. *A dead-end corridor shall not be limited in length where the length of the dead-end corridor is less than 2.5 times the least width of the dead-end corridor.*"

Comment: The italicized language does not appear in the 2015 NFPA 101. The addition of this provision to this section is odd since the manner in which Connecticut has proposed to amend this section does not in any way limit the length of dead-end corridors. (Compare Sections 29.2.5.5, 31.2.5.4, 33.3.2.5.4, 37.2.5.2, 39.2.5.2 which do limit the length.) So why is this provision needed? It appears that either a limitation on the length of dead-end corridors should be added back in (compare the NFPA 101 language where the limit is 30 feet), in which case this exception would make sense. Or, alternatively, this italicized provision should be deleted as unnecessary.

Page 90 – Section 21.1.1.1.5

Draft code: "It shall be recognized that, in buildings housing certain types of patients or having detention rooms or a security section, it might be necessary to lock doors and bar windows to confine and protect building inhabitants. In such instances, the State Fire Marshal shall make appropriate

modifications to those sections of this code that would otherwise require means of egress to be kept unlocked."

Comment: The State Fire Safety Code is a state regulation, subject to review and approval by the Legislative Regulation Review Committee. The second sentence of this provision appears to authorize the State Fire Marshal, by his or her own action, to modify, i.e. amend, sections of the State Fire Safety Code, i.e. the regulations, without review or approval by the LRRC. No limits are placed on the nature of the "modifications" to the code/regulation that the SFM could make.

Note that this is not the case of the SFM granting a variance or exemption from the requirements of a code provision which is authorized by statute, Section 29-296, but rather the SFM establishing new code requirements concerning locked doors, with no guidelines on the extent or nature of the "modifications" he or she can make.

There is no requirement that any "modifications" that the SFM might make "secure the public safety", as is the case with a variance or exemption.

Note that this chapter appears to lack provisions for special door-locking arrangements under certain specified conditions as provided in Sections 33.2.2.5.5.3 and 33.3.2.2.2(6).

In short, any "modifications" to sections of the code would be deemed to be "a change in, addition to or repeal of" (see Section 29-292a of the Connecticut General Statutes) a provision of the Fire Safety Code and would be subject to the requirements and procedures of Section 29-292a, namely public comment and legislative review.

Notwithstanding that a similar provision appeared in the 2016 CSFSC, this provision seems to exceed the statutorily delegated authority and should be deleted or revised thusly: "In such instances, the State Fire Marshal shall make appropriate modifications in accordance with section 29-292a of the Connecticut General Statutes to those sections of this code that would otherwise require means of egress to be kept unlocked."

Page 91 – Section 21.1.3.6

Draft code: "Egress provisions for areas of ambulatory health care facilities that correspond to other occupancies shall meet the corresponding requirements of this code for such occupancies, and, where the clinical needs of the occupant necessitate the locking of means of egress, staff shall be present for the supervised release of occupants during all times of use *and such arrangement shall comply with Section 21.1.1.1.5.*" (emphasis added)

Comment: The italicized language is proposed to be added for Connecticut. When this new language says "such arrangement", just what "arrangement" is it referring back to? What is the antecedent? Locked doors? Staff presence?

The reference to Section 21.1.1.1.5 is troublesome as well since there are no requirements or guidelines to "comply with" set forth in that section. As stated above with regards to that section, the SFM is being granted authority to "make appropriate modifications" to the code, with no conditions or limitations.

Page 91 – Section 21.3.1.1

Comment #1: Since this is an amendment to the NFPA provision, "(Amd)" should be inserted before the section number.

Comment #2:"Section" should be inserted before the section numbers in (2), (3)(a) and (3)(c)

Comment #3: In (2), it appears a space is needed between "8.6.9.1" and "shall"

Page 92 – Section 23.2.5.2

Draft code: "Existing dead-end corridors greater than 50 feet (15 m) shall be altered wherever possible so that exits are accessible in not less than two different directions from all points in aisles, passageways and corridors. *A dead-end corridor shall not be limited in length where the length of the dead-end corridor is less than 2.5 times the least width of the dead-end corridor.*"

Comment: As with 19.2.5.2, the italicized language doe not appear in 2015 NFPA 101. The addition of this provision to this section is odd since this section (unlike other sections, e.g. 29.2.5.5, 31.2.5.4, 33.3.2.5.4, etc) does not in any way limit the length of dead-end corridors. Why is an exception to a limitation on length being added when there is no limitation on length in the first place?

Page 92 – Section 23.4.5.1.4

Comment #1: Since this is an amendment to the NFPA provision, "(Amd)" should be inserted before the section number

Comment #2: :"Section" should be inserted before the section numbers in (2), (3), (4) and (5)

Page 93 – Section 24.2.2.3.3

Comment: In the seventh line, "where one of the following criteria are met" should be "where one of the following criteria is met"

Page 94 - Section 24.3.4.1.3

Comment: "CGS 29-253" should be "Section 29-253 of the Connecticut General Statutes"

Page 95 – Section 24.3.4.2.1

Comment #1: "Monoxide" should be "monoxide"

Comment #2: "CGS 29-292 and CGS 29-253" should be "Sections 29-292 and 29-253 of the Connecticut General Statutes"

Comment #3: "Section" should be inserted before "24.3.4.2"

Page 95 – Section 26.3.6.1

Comment: The italics should be removed.

Page 95 - Chapter 29 title Section 29.1.1.1

Comment: The term "motels" is introduced here. Unlike "hotel", "motel" is not defined in chapter 3. How does a motel differ from a hotel? What is a motel occupancy?

Page 95 – Section 29.2.4.1

Comment: The numerical indicators "(3)" and "(4)" should be "(1)" and "(2)", respectively.

Page 97 – Section 29.3.4.5.1

Comment: This section introduces the term "inn", which is not a defined term in chapter 3. How does "inn" differ from a "hotel" or "motel"? Why is it used here and not elsewhere?

Page 99 – Section 31.3.4.5.1

Comment: "Section" should be inserted before "9.6.2.10"

Page 100 – Section 31.3.5.12.1.1

Comment: The deadline date of October 1, 2017 is already in the past. Should it be updated?

Page 100 – Section 31.3.5.12.1.2

Comment: It appears the reference was not updated from the prior edition. "Section 31.3.5.11.1" should be "Section 31.3.5.12.1"

Page 100 – Section 33.1.1.1.1

Draft code: "It shall be recognized that, in buildings housing certain types of patients or having detention rooms or a security section, it might be necessary to lock doors and bar windows to confine and protect building inhabitants. In such instances, the State Fire Marshal shall make appropriate modifications to those sections of this code that would otherwise require means of egress to be kept unlocked."

Comment #1: "Patients" should be changed to "residents" since that is the appropriate terminology for this chapter.

Comment #2: This is a new provision, not appearing in chapter 33 of 2015 NFPA 101. This chapter concerns residential board and care occupancies. Is this new language even appropriate for this type of occupancy?

Why is this broad, open-ended provision needed when there are Sections 33.2.2.5.5.3 and 33.3.2.2.2(6) that allow door-locking arrangements under certain specified conditions?

The State Fire Safety Code is a state regulation, subject to review and approval by the Legislative Regulation Review Committee. The second sentence of this provision appears to authorize the State Fire Marshal, by his or her own action, to modify, i.e. amend, sections of the State Fire Safety Code, i.e. the regulations, without review or approval by the LRRC. No limits are placed on the nature of the "modifications" to the code/regulation that the SFM could make.

Note that this is not the case of the SFM granting a variance or exemption from the requirements of a code provision which is authorized by statute, Section 29-296, but rather the SFM establishing new code requirements concerning locked doors, with no guidelines on the extent or nature of the "modifications" he or she can make.

There is no requirement that any "modifications" that the SFM might make "secure the public safety", as is the case with a variance or exemption.

In short, any "modifications" to sections of the code would be deemed to be "a change in, addition to or repeal of" (see Section 29-292a of the Connecticut General Statutes) a provision of the Fire Safety Code and would be subject to the requirements and procedures of Section 29-292a, namely public comment and legislative review.

Notwithstanding that a similar provision appeared in the 2016 CSFSC and appears in Section 21.1.1.1.5 of 2015 NFPA 101, this provision seems to exceed the statutorily delegated authority.

In any case it appears unnecessary in light of the authority already granted under Sections 33.2.2.5.5.3 and 33.3.2.2.6(), and should be deleted.

Page 101 – Section 33.2.2.5.5.2

Comment: "Access-controlled egress locks" should be "Access-controlled egress doors". (Cf. e.g. Sections 21.2.2.2, 26.2.3.7, 29.2.2.2.3, 31.2.2.2.2.3)

Page 101 – Section 33.2.2.5.5.3

Comment #1: Since this is an amendment to the NFPA provision, it should be preceded by "(Amd)".

Comment #2: Also, "Section" should be inserted before the section numbers in (1) and (2), and a period added at the end of (1) and (2).

Page 101 – Section 33.3.2.2.2

Comment: "Section" should be inserted before the section numbers in (1), (3), (4), (5), (6), (7), (8), (9)



Saving Lives, Protecting Property.

February 16, 2018

William Abbott Connecticut State Fire Marshal Office of the State Fire Marshal Department of Administrative Services 450 Columbus Blvd. Suite 1303 Hartford, CT 06103 William.Abbott@ct.gov

Dear Fire Marshal Abbott,

I am writing to you on behalf of the Fire Equipment Manufacturers' Association (FEMA) to submit formal comments to the draft 2018 Fire Safety Code and Fire Prevention Code. Specifically, FEMA applauds Connecticut's decision to insert language that requires extinguishers in new construction, with apartments and dormitories being the only exceptions. These additions are a worthy first step toward moving Connecticut to an equal footing with those states using the most current model code language.

FEMA supports the following language from the two codes:

Fire Prevention Code:

13.6.1.2* Where Required. Fire extinguishers shall be provided where required by this Code as specified in Table 13.6.1.2 and the referenced codes and standards listed in Chapter 2 of this code, as well as where required by the Connecticut State Fire Safety Code and its referenced codes and standards.

Table 13.6.1.2 Portable Fire Extinguishers Required		
Occupancy Use Where Required:	New	Existing
Ambulatory health care group B medical occupancies	Yes	Yes
Apartment and dormitory group R-2 occupancies ^a	No	No
Assembly group A occupancies ^b	Yes	No
Bed and Breakfast Establishments Group R-1 occupancies ^f	Yes	Yes
Business group B occupancies	Yes	No
Day-care group I-4 & E occupancies	Yes	No
Detention and correctional group I-3 occupancies ^{c,d}	Yes	Yes
Educational group E occupancies	Yes	No
Health care group I-1 and I-2 occupancies	Yes	Yes
Hotel group R-1 occupancies	Yes	No
Industrial group F occupancies	Yes	No
Industrial group H occupancies	Yes	Yes
Lodging and rooming house group R-1 and R-2 occupancies	Yes	No
Mercantile group M occupancies	Yes	No
One- and two-family dwelling occupancies	No	No
Residential board and care, group R-4 & small I-2 occupancies	Yes	No
Storage group S and H occupancies ^e	Yes	No
^a Dortable first artinguishers shall be normitted to be located at arterior locations or in		

^a Portable fire extinguishers shall be permitted to be located at exterior locations or interior locations so that all portions of the buildings are within 75 ft (22.8 m) of travel distance to an extinguishing unit.

^b Portable fire extinguishers are not required in seating or outdoor performance areas.

^c Access to portable fire extinguishers shall be permitted to be locked.

^d Portable fire extinguishers shall be permitted to be located at staff locations only.

^e In storage areas where forklift, powered industrial truck, or cart operators are the primary occupants, fixed extinguishers, as specified in NFPA 10, need not be provided when:

(1) Use of vehicle-mounted extinguishers is approved by the AHJ.

(2) Each vehicle is equipped with a 10 lb, 4A:80-B:C extinguisher affixed to the vehicle using a mounting bracket approved by the extinguisher manufacturer or the AHJ for vehicular use.

(3) Not less than two spare extinguishers of equal or greater rating are available onsite to replace a discharged extinguisher.

(4) Vehicle operators are trained in the proper operation and use of the extinguisher.

(5) Inspections of vehicle-mounted extinguishers are performed daily.

^f Portable fire extinguishers shall be provided in bed and breakfast establishments as required by the CSFSC.

Fire Safety Code:

906.1 Where required. Portable fire extinguishers shall be provided in occupancies and locations as required by this code, its referenced standards and the Connecticut State Fire Prevention Code.

Fire extinguishers are the first line of defense for small, controllable fires. They are intended to be used for fires of limited size and easily controlled. If a fire is discovered in its early stages, the most effective means of protecting life and preventing property loss is to sound an alarm and then to control and/or extinguish the incipient stage fire with a portable fire extinguisher. To simply wait for the fire to grow large enough in size for a sprinkler head to activate, is contrary to lessons and guidance from fire service and fire protection professionals.

It is for that reason that prior to the 2012 International Fire Code (IFC), more than 20 states adopted amended versions of the 2006 and 2009 IFC that removed the Section 906.1 exception and required extinguishers throughout most buildings regardless of the presence of sprinklers. After considering a proposal from the National Association of State Fire Marshals (NASFM), the International Code Council (ICC) voted to remove this exception in the 2012 code. NASFM, and other supporters of the exception's removal, rightly argued that exempting occupancies from fire extinguisher requirements can leave those buildings without a proper firefighting tool for small, controllable fires. The ICC agreed with this rationale and removed the exception in the last two versions (2012 and 2015) of the IFC.

By adopting the language that was added to the currently released draft of the Fire Safety Code and Fire Prevention Code, Connecticut moves towards joining the majority of states who require layered fire protection in most occupancies. FEMA looks forward to providing any support and resources that the State Fire Marshal's Office and the Department of Administrative Services may need as the Committee's consider all future enhancements to the safety of the citizens of Connecticut. FEMA formally supports the adoption of this language. Thank you for your consideration to this letter and please do not hesitate to contact me with any questions.

Sincerely,

Craig Voelkert, CFPS, CFEI Amerex Chair, FEMA Government Relations Committee (205) 655-3271

FIRE EQUIPMENT MANUFACTURERS' ASSOCIATION

Executive Director: THOMAS ASSOCIATES, INC.



International Code Council 500 New Jersey Avenue, NW Sixth Floor Washington, DC 20001 tel: 888.icc.safe (422.7233) fax: 202.783.2348 www.iccsafe.org

January 24, 2018

Mr. William Abbott, State Fire Marshal Department of Administrative Services Office of the State Fire Marshal 165 Capitol Avenue; Room 266 Hartford, CT 06106

Re: Intent to Adopt the 2018 Connecticut Fire Safety Codes

Dear Fire Marshal Abbott:

My name is Rob Neale and I am the Government Relations Vice President for National Fire Service Activities at the International Code Council (ICC). Please allow this letter to serve as ICC's comments in support of updating the Connecticut Fire Safety Codes to the published 2015 *International Fire Code*[®] (IFC) [®].

Most U.S. states and communities, Federal agencies, and many global markets choose the International Codes (I-Codes) to set the standards for regulating construction, fire prevention and energy conservation in the built environment. The IFC[®] is in use or adopted in 42 states, the District of Columbia, New York City, Guam and Puerto Rico.

One significant benefit of the IFC[®] is it integrates seamlessly with the entire family of ICC codes: building, residential, mechanical, fuel, gas, plumbing, existing buildings, etc., all of which are currently adopted and enforced in Connecticut. This is a significant economic and operational benefit to owners, developers, designers and code officials who can use a single code set with common terminology and applications.

Where appropriate, and in common with other codes, the *International Fire Code* [®] references mandatory technical standards produced by such entities as the American Society of Testing and Materials, Underwriters Laboratories, American Petroleum Institute, National Fire Protection Association, etc.

IFC[®] Chapter 11 contains retroactive construction requirements for existing buildings. Using a tabular format, IFC[®] correlates requirements for *International Building Code*[®] occupancy classifications or special uses (high rise, atrium or underground buildings) and specific sections of the fire code. In existing buildings, these include, but are not limited to, emergency responder radio coverage, elevator recall and emergency operation controls, protection of vertical openings with fire-rated separations or automatic sprinklers, installation or standpipe systems for mid-rise buildings and those with roof top helistops or heliports, the addition of fire alarm systems in a variety of occupancies, and other life safety features. Chapter 11 also integrates seamlessly with the *International Existing Buildings Code*[®] that jurisdictions may choose to adopt.

IFC[®] also includes a model adoption ordinance that allows jurisdictions through zoning to regulate aboveground storage of Class I and II liquids, industrial aboveground storage of Class I and II liquids, flammable cryogenic fluids and large quantities of liquefied petroleum gases. Additional safety requirements are found in specific chapters addressing these hazardous materials.

The I-Codes are updated and revised every three years through a national consensus process that strikes a balance between the latest technology, new building products, installation techniques, economics and cost while incorporating the most recent advances in public and first responder safety. It is an open, inclusive process that encourages input from all individuals and groups, and allows ICC Governmental Members, many whom are from Connecticut, to determine the final code provisions.

The ICC commends the State of Connecticut for its outstanding work to ensure the safety, health and wellbeing of its citizens. Timely and regular updates or adoptions of the most current construction safety codes and standards will ensure the safety of residents, visitors and emergency responders while embracing new technology and building construction best practices. Further, the ICC applauds the State of Connecticut's decision to move to a current model fire code as the minimum fire prevention and safety requirements for Connecticut.

The ICC has worked closely with the Connecticut Codes and Standards Committee and the staff at the Office of the State Building Inspector (OSBI) and the Office of the State Fire Marshal (OSFM) to help determine the best model fire code for the State of Connecticut. We have provided the OSBI and OSFM staffs with information about the ICC code development process, an overview of the International Fire Code as the correlated, companion code to the I-Codes as well as information about ICC support services such as training, certification and evaluation services.

Technical assistance and training from ICC always are available to groups including, but not limited to: Connecticut Dept. of Administrative Services, Office of the State Building Inspector, Office of the State Fire Marshal, design professionals, and State and local plan review, permit, and inspection staff. They will continue to have access to ICC training programs and materials, product Evaluation Reports, certification programs and ICC technical staff, who will assist with code opinions and interpretations based on the I-Codes.

Thank you for the opportunity to submit these comments. The ICC is honored to partner with the State of Connecticut in support of the adoption and administration of the 2015 IFC[®] and we look forward to continuing to serve your needs for many more years. Please feel free to contact me if you have any questions, concerns comments or would like to have a face-to-face meeting relative to the 2015 IFC[®]/I-Codes adoption or anything else ICC related.

Sincerely,

Poliet le. Aal

Rob Neale, CFPS Government Relations Vice President National Fire Service Activities International Code Council 500 New Jersey Avenue, Sixth Floor Washington, DC 20001 P: 1.888.422.7233 Ext. 6256 M: 202.440.3244 E: rneale@iccsafe.org