DIVISION OF REAL ESTATE & CONSTRUCTION SERVICES

Office of the State Fire Marshal 450 Columbus Boulevard Hartford, CT 06103

Department of Administrative Services

2022 Connecticut State Fire Safety Code

MICHELLE GILMAN Commissioner

WILLIAM ABBOTT State Fire Marshal



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. 102 Adopted Standard**

Sec. 102.1 Part III – New construction, renovation, or change of use and new buildings. For those for which a permit was issued on or after January 1, 2006. 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., 2021 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. www.iccsafe.org.

Sec. 102.2 Existing buildings/occupancies. For those for which a permit was issued before January1, 2006. 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[®], 2021 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 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 January 1, 2006.
 - (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 January 1, 2006 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 applies.
- (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 January 1, 2006.

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.

(Amd) 112 Abatement of Hazards; Penalty

(a) The local fire marshal for their respective jurisdictions or the State Fire Marshal shall order hazardous conditions contrary to the provisions of this code to be remedied in accordance with Connecticut General Statutes Section 29-291c as amended by Public Act 21-165. An order to vacate all or part of a building may be issued by a local fire marshal or local police officer in accordance with Connecticut General Statutes Section 29-306 when severe hazardous conditions exist. The penalty for the failure to remedy or abate such hazards shall be as described in Connecticut General Statutes Sections 29-291c as amended by Public Act 21-165 as appropriate.

(b) Pursuant to Connecticut General Statutes Section 29-291c as amended by Public Act 21-165, section 113 of this code lists those sections of this code for which a citation may be issued.

SECTION 113 (Add) Enforcement by Citation

(Add) **113.1 Enforcement by citation.** The following chapters or sections of this code may be enforced through the use of the citation process pursuant to section §29-292 of the Connecticut General Statutes.

Chapter /Section	Subject Matter	
Part III - Section 105 Part IV – see CSFPC, Section 1.12	Operating without a permit required by local ordinance	
Part III - Section 806.1 Part IV – Section 10.3.9.2.1	Provisions for naturally cut (Christmas) trees	
Part III - Sections 901.6 Part IV, Section 9.6 and 9.11	Failure to maintain or the shutting off of any fire protection or fire warning system required by the Connecticut State Fire Safety Code	
Part III - Sections 1003.6 Part IV – 7.1.10	Blocked, insufficient or impeded egress	
Part III - Section 3301 Part IV – Section 4.6.10	Safeguards during building construction, alteration, and demolition operations	
Part III - Section 1004.9 Part IV – Section 13.7.9.3	Exceeding the established occupancy limit- assembly occupancies	
Part III - Section 5609.1 Part IV – Section 37.4.5.3.1	Storage and display of sparklers and fountains	

Part III - Chapter 35 Part IV – see CSFPC, Chapter 41	Hot work operations	
Part III - Section 607.3 Part IV – Section 9.2.3	Procedures for use and maintenance of commercial cooking equipment	
Part III - Section 308.2 see also CSFPC Part IV – Section 13.7.3 see also CSFPC	Flame effects before an audience	
Part III - Chapter 56 Part IV – Section 37.4.5.3.1	Sale, handling, and storage of fireworks, sparklers, and fountains	
Part III - Part IV – see CSFPC, Section 69.3.13.1	Patio heaters	
Part III - Section 6106 Part IV – see CSFPC, Section 69.4.1.3	Filling an LP container without the permission of the owner.	

Part II—Reserved

PART III CONNECTICUT STATE FIRE SAFETY CODE

Amendments to the 2021 International Fire Code

PART 1 GENERAL PROVISIONS

CHAPTER 1 SCOPE & ADMINISTRATION

SECTION 101 SCOPE & GENERAL REQUIREMENTS

(Amd) **101.1 Title.** Part III of the Connecticut State Fire Safety Code and the adopted standards, as amended, shall be known as Part III of the Connecticut State Fire Safety Code, hereinafter referred to as "the code" or "this code".

(Add) **101.1.1 Adopted standard.** The following standard, including selected appendices, 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., 2021 edition except as amended, altered or deleted and by the addition of certain provisions as indicated in this code.

The following appendices are adopted as part of this code: Appendices D, H, I, and N as amended.

The following appendices are permitted to be used as guidance: Appendices B, E, F, G, and J as amended.

The International Fire Code is available from the International Code Council, Inc., 4051 W. Flossmoor Road, Country Club Hills, IL 60478-5795; 1-888-422-7233; <u>www.iccsafe.org</u>.

(Add) **101.1.1.1 Classification of Occupancy and Use** Both the fire code official and the building code official shall jointly determine the classification of occupancy and use. The provisions for the classification of occupancy and use are found in Chapter 13, *Occupancy Classification and Use.*

(Add) **101.1.2 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.

(Add) **101.1.3** 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.

(Del) **101.2 Scope.** Delete section in its entirety.

- (Del) **101.3 Purpose.** Delete section in its entirety.
- (Del) **101.4 Severability.** Delete section in its entirety.
- (Del) **101.5 Validity.** Delete section in its entirety.

SECTIÓN 102 APPLICABILITY

(Amd) **102.1 Application.** This part of the Code shall apply to all buildings, structures, or portions thereof; facilities, processes, for which application for an initial building permit was made on or after January 1, 2006 as outlined below; except as specifically provided for in the wording of a section.

- (a) For initial building permit applications made on or after the effective date of this code, this code shall apply to:
 - (1) The design and construction of new buildings, structures, facilities or portions thereof;
 - (2) Buildings, structures, or portions thereof; or conditions 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 102.3 of this code, and
 - (4) Except as expressly provided for in the wording of a section, it shall also be applicable to facilities or conditions for which application for the initial building permit was made on or after January 1, 2006.
 - (5) For existing occupancies subject to an abatement order for violations of Part

IV of this Code or the Connecticut State Fire Prevention Code, only new fire protection systems, and electrical and mechanical system work.

(e) For those buildings, structures, facilities 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 but before the adoption of this code whose requirements are different than those of this code, the requirements of the previous edition of the code shall prevail.

Notes:

Pursuant to Connecticut General Statutes 29-291a and PA 21-165 the Connecticut State Fire Prevention Code for oil burners, flammable and combustible liquids, gas equipment and piping, liquefied gas and liquefied natural gas, hazardous chemicals, and processes and activities that occur in the building or structure that are not used to support the building components services and/or systems

Part IV of this Code shall apply to buildings, structures, facilities, or portions thereof; or conditions that existed prior to January 1, 2006.

(Add) **102.1.1 Alternative Compliance.** In conjunction with the building official, any existing building or portion thereof, structure, evaluated and determined to be in compliance with the 2021 *International Existing Building Code* portion of the State Building Code, shall be deemed in compliance with this Code. For buildings or structures constructed under an original application of permit prior to January 1, 2006, 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. For buildings or structures constructed under an application of permit on or after to January 1, 2006, those portions of the building or structure not affected by alteration, addition, or change of occupancy shall comply with Part IV of this Code. For buildings or structures constructed under an application of permit on or after to January 1, 2006, those portions of the building or structure not affected by alteration, or change of occupancy shall comply with the applicable requirements of the Connecticut State Fire Safety Code under which it was constructed. Regardless of any wording in the 2021 *International Existing Building Code* portion of the State Building Code, the means of egress in existing buildings shall meet the requirements of the Part IV of this Code for the proposed occupancy.

(Add) **102.1.1.1 Emergency responder communication coverage in existing buildings.** Regardless of any wording in the 2021 *International Existing Building Code* portion of the State Building Code, emergency responder communication coverage in existing buildings shall meet the requirements of this section. Existing buildings other than Group R-3, that do not have *approved* in-building, two-way emergency response communication coverage for emergency responders in the building based on existing coverage levels of the public safety communication systems, shall be equipped with such coverage according to one of the following:

1. Where an existing wired communication system cannot be repaired or is being replaced, or where not *approved* in accordance with Section 510.1, Exception 1.

2. Within a time frame established by the adopting authority.

Exception: Where it is determined by the *fire code official* that the inbuilding, two-way emergency responder communication coverage system is not needed.

(Add) **102.1.2 Grandstands and bleachers.** 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.

(Add) **102.1.3 Federal agency.** 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.

(Amd) **102.1.4 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.

(Add) **102.2 Administrative, operational and maintenance provisions**. The administrative, operational and maintenance provisions of this code shall be administered as provided in Chapter 541 of the Connecticut General Statutes and shall apply to buildings, structures, facilities or portions thereof or conditions arising after January 1, 2006.

(Amd) **102.3 Change of use or occupancy.** A change of occupancy shall not be made unless the use or occupancy is made to comply with the requirements of this code and the *2021 International Building Code* portion of the Connecticut State Building Code. A change of tenants or ownership shall not be construed to be a change of occupancy classification where the nature of the use and assigned occupancy classification remain the same.

(Amd) **102.5 Application of residential code.** Where structures are designed, constructed, and occupied in accordance with the 2021 *International Residential Code* portion of the Connecticut State Building Code the provisions of this 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 Connecticut 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 as amended by Public Act 21-165. Tents and membrane structures erected on such sites shall not be regulated by the Connecticut State Fire Safety Code.

(Del) 102.6 Historic buildings. Delete section.

(Del) 102.8 Subjects not regulated by this code. Delete section.

(Amd) **102.9 Matters not provided for.** Refer to Connecticut General Statutes section 29-306.

(Add) **102.13 Building Code.** Any references within the body of this Code to the *International Building Code* shall be considered references to the 2021 edition of the *International Building Code* portion of the Connecticut State Building Code.

(Add) **102.14 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) **102.15 Electrical.** Any references within the body of this Code to the *International Electrical Code* shall be considered references to the 2020 edition of NFPA 70, *National Electrical Code* portion of the Connecticut State Building Code.

(Add) **102.16 Mechanical Code.** Any references within the body of this Code to the *International Mechanical Code* shall be considered references to the 2021 edition of the *International Mechanical Code* portion of the Connecticut State Building Code.

PART 2 ADMINISTRATION and ENFORCEMENT

(Del) SECTION 103 CODE COMPLIANCE AGENCY

Delete Section in its entirety

SECTION 104 DUTIES AND POWERS OF THE FIRE CODE OFFICIAL (FIRE MARSHAL)

(Amd) 104.1 Authority Having Jurisdiction.

(a) For the purposes of this Code and 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 this Code.

(b) The local fire marshal shall make the initial determination concerning compliance with this 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 State Fire Marshal as provided in subsection (d) of this section.

(c) The State Fire Marshal shall make the determination concerning compliance with this 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.

Note: The term fire code official and fire marshal shall be considered as having the same meaning.

(Amd) **104.2 Applications and permits.** The *fire code official* is authorized to receive applications, review *construction documents* and issue permits for operations regulated by this Code, inspect premises for which such *construction documents* were prepared for, and enforce compliance with the provisions of this Code.

(Add) **104.2.1 Plan submittal and review.** Detailed plans and specifications for new buildings, structures and additions, renovations or alterations to existing structures, equipment, and systems regulated by this Code shall be submitted by the applicant to the local fire marshal having jurisdiction or the State Fire Marshal as applicable to demonstrate compliance with section 29-263 of the Connecticut General Statutes and this Code. Pursuant to the requirements of section 29-263 of the Connecticut General Statutes and Statutes, such documents shall be accompanied by evidence of licensure

(Add) **104.2.1.1 Information on construction documents.** *Construction documents* shall be drawn to scale on suitable material. Electronic media documents may be submitted where *approved* by the *fire code official. Construction documents* 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 relevant laws, ordinances, rules and regulations as determined by the *fire code official*.

(Add) **104.2.1.2 Amended construction documents.** Work shall be installed in accordance with the *approved construction documents*, and any changes made during construction that are not in compliance with the *approved construction documents* shall be resubmitted for approval as an amended set of *construction documents*.

(Add) **104.2.1.3 Means of egress.** The *construction documents* shall show in sufficient detail the location, construction, size, and character of all portions of the means of egress including the path of the exit discharge to the public way in compliance with the provisions of this code. In other than occupancies in Groups R-2, R-3, and I-1, the *construction documents* shall designate the number of occupants to be accommodated on every floor, and in all rooms and spaces. For those occupancies utilizing the Small I-2 provisions, the construction documents shall designate the locations of the client areas and beds.

(Add) **104.2.1.4 Fire protection system shop drawings.** Shop drawings for the fire protection system(s) shall be submitted to indicate compliance with this Code and applicable referenced standards and the *construction documents*, and shall be *approved*

prior to the start of installation. Shop drawings shall contain all information as required by the referenced installation standards in Chapter 80.

(Add) **104.2.1.5 Fire sprinkler system shop drawings**. Shop drawings for fire sprinkler system(s) shall be submitted to indicate conformance to this Code and the *construction documents* and shall be approved prior to the start of system installation. Shop drawings shall contain all information as required by the referenced installation standards in Chapter 80. Pursuant to section 29-263a of the Connecticut General Statutes, such documents shall be accompanied by evidence of licensure as a fire sprinkler layout technician in accordance with 20-304a of the Connecticut General Statutes or a professional engineer licensed in accordance with chapter 391.

(Add) **104.2.1.6 Fire alarm system shop drawings**. Shop drawings for fire alarm system(s) shall be submitted to indicate conformance to this Code and the *construction documents* and shall be approved prior to the start of system installation. Shop drawings shall contain all information as required by the referenced installation standards in Chapter 80. Pursuant to section 29-263a of the Connecticut General Statutes, such documents shall be accompanied by evidence of licensure, if applicable, in accordance with 20-304a of the Connecticut General Statutes a professional engineer licensed in accordance with Connecticut General Statutes Chapter 391.

(Add) **104.2.1.7 Examination of documents.** The *fire code official* shall examine or cause to be examined the accompanying *construction documents* and shall ascertain by such examination whether the work indicated and described is in accordance with the requirements of this Code.

(Add) **104.2.1.8 Approved documents.** *Construction documents approved* by the *fire code official* are *approved* with the intent that such *construction documents* comply in all respects with this Code. Review and approval by the *fire code official* shall not relieve the applicant of the responsibility of compliance with this Code.

(Add) **104.2.1.9 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 local fire marshal shall notify the building official of the degree of compliance within that time period.

(Add) **104.2.2 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.

(Amd) **104.3 Inspections and right of entry.** Refer to Connecticut General Statutes section 29-305 as amended by Public Act 21-165.

(Del) 104.3.1 Warrant. Delete section.

(Del) **104.6 Official records.** Delete section in its entirety.

(Add) **104.6 Official records.** Refer to Connecticut General Statutes 29-305 as amended by Public Act 21-165.

(Del) **104.7 Liability.** Delete section in its entirety.

(Amd) **104.9 Modifications, variations, or exemptions.** In accordance with section 29-296 of the Connecticut General Statutes, as amended by Public Act 21-165, the State Fire Marshal may modify the requirements of the Connecticut State Fire Safety Code where the State Fire Marshal deems 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.

(Del) **104.11 Fire investigations.** Delete section in its entirety.

(Del) **104.11 Authority at fires and other emergencies.** Delete section in its entirety.

SECTION 105 PERMITS

(Amd) **105.1 General.** A municipality or fire district, by ordinance, may establish requirements and a fee schedule for construction document review, permits, certificates, notices, approvals, or orders pertaining to fire control and fire hazards pursuant to section 105 of this code. The local fire marshal shall issue such permits, certificates, notices, approvals or orders. Permits shall be in accordance with sections 105.1.1 to 105.7.25 inclusive.

(Amd) **105.1.1 Permits required.** A property owner or the owners authorized agent who intends to conduct an operation or business regulated by this code, shall first make application to the local fire marshal and obtain the required permit.

(Amd) **105.1.2 Types of permits.** The permits prescribed by Section 105.1.1 shall be operation permits. An operational permit allows the applicant to have an occupancy,

conduct an operation, or business for which a permit is required by section 105.6 for either:

- a) A prescribed period as specified by the local fire marshal, or.
- b) Until renewed or revoked.
- (Del) 105.1.4 Emergency repairs. Delete section.
- (Del) 105.1.5 Repairs. Delete section.
- (Del) **105.1.6 Annual permit.** Delete section in its entirety.
- (Del) 105.2.3 Time limitation of application. Delete section.
- (Del) 105.2.4 Action on application. Delete section.

(Del) **105.3 Conditions of a permit.** Delete section in its entirety.

(Amd) **105.5 Required operational permits.** The *fire code official* is authorized to issue operational permits for the operations set forth in Sections 105.5.2 to 105.5.52 inclusive where specified by ordinance.

(Amd) **105.5.16 Explosives.** Reference sections 29-343 to 29-355a, inclusive, of the Connecticut General Statutes.

(Amd) **105.5.34 Open burning.** Reference section 23-48 of the Connecticut General Statutes.

(Amd) **105.5.42 Pyrotechnic special effects material.** Reference sections 29-356 to 29-366 inclusive of the Connecticut General Statutes.

(Add) **105.5.53 Additional operational permits.** In addition to the requirements of sections 105.5.2 through 105.5.52 permits to operate an occupancy for a use for a building as classified as an occupancy in Chapter 13 shall be required.

(Del) **105.6 Required construction permits.** Delete section in its entirety.

(Del) 107.3 Permit valuation. Delete section.

(Del) 107.4 Work commencing before permit issuance. Delete section.

(Del) 107.5 Related fees. Delete section.

(Amd) **108.1 Inspection authority.** 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 as amended by Public Act 21-165 of buildings and facilities regulated by this Code within their jurisdictions. 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, or processes 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.

(Amd) 108.2 Inspections.

- (d) 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, as amended by Public Act 21-165 of buildings and facilities regulated by the Connecticut State Fire Safety Code within their jurisdictions.
- (e) 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.
- (f) The minimum requirements for the frequency of inspections as prescribed in Section 29-305 of the Connecticut General Statutes shall be as follows:
 - Annual inspections for the occupancy classifications all R Residential, A-1, A-2, E, H-1, I-1, I-2 including small I-2, M selling consumer fireworks [sparklers and fountains] (1.4G), H-3 containing consumer fireworks [sparklers and fountains] (1.4G).
 - 6. Inspections every two years for the occupancy classifications A-3, H-2, I-3, I-4, B-Medical, B-College, Ambulatory Health Care.
 - 7. Inspections every three years for occupancy classifications B, H-3, M, S-1, A-4, A-5.
 - 8. Inspections every four years for the occupancy classifications F-1, F-2, H-4, H-5, S-2, U.

(Amd) **108.3 Concealed work.** It shall be the duty of the permit applicant or person performing the work to cause the work to remain visible and able to be accessed for inspection purposes. Where any installation subject to inspection prior to use is covered or concealed without having first been inspected, the *fire code official* shall have the authority to require that such work be made visible and able to be accessed for inspection. Neither the *fire code official* nor the jurisdiction shall be liable for expense entailed in the removal or replacement of any material required to allow inspection.

(Add) **108.5 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.

(Add) **108.6 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.

(Add) **108.6.1 Notification of inspection results.** Notification as to the passage or failure, in whole or in part, of any required inspection shall be made in writing by the *fire code official* or his/her duly authorized representative and shall be left at the job site, electronically sent, or delivered to the holder of the building permit or his/her designee. It shall be the duty of the building permit holder to ascertain the results of the required inspection.

SECTION 109 MAINTENANCE

(Add) **109.5.1** An order to vacate all or part of a building may be issued by a local fire marshal or local police officer in accordance with section 29-306 of the Connecticut General Statutes, as amend by Public Act 21-165 when severe hazardous conditions exist. The penalty for the failure to remedy or abate such hazards shall be as described in section and 29-295 of the Connecticut General Statutes as appropriate.

(Add) **109.6.1** An order to vacate all or part of a building may be issued by a local fire marshal or local police officer in accordance with section 29-306 of the Connecticut General Statutes, as amended by Public Act 21-165 when severe hazardous conditions exist. The penalty for the failure to remedy or abate such hazards shall be as described in section 29-295 of the Connecticut General Statutes, as amended by Public Act 21-165 as appropriate.

(Del) SECTION 110 SERVICE UTILITIES

(Del 110.1 Authority to disconnect service utilities. Delete section.

SECTION 111

(Amd) APPEAL OF THE DECISION OF THE LOCAL OR STATE FIRE MARSHAL

(Amd) **111.1 Appeal of the decision of the local or state fire marshal.** 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.

(Del) 111.2 Limitations on authority. Delete section.

(Del) **111.3 Qualifications.** Delete section.

(Del) **111.4 Administration.** Delete section.

SECTION 112

(Amd) ABATEMENT OF FIRE HAZARDS

(Amd) **112.1 Abatement of fire hazards.** The local fire marshal for their respective jurisdictions or the State Fire Marshal shall order hazardous conditions contrary to the provisions of this code to be remedied in accordance with Section 29-306 of the Connecticut General Statutes, as amended by Public Act 21-165.

(Add) **112.1.1 Unauthorized tampering.** Signs, tags or seals posted or affixed by the *fire code official* shall not be mutilated, destroyed or tampered with, or removed, without authorization from the *fire code official*.

- (Del) 112.2 Owner/occupant responsibility. Delete section.
- (Del) **112.3 Notice of Violation.** Delete section in its entirety.
- (Del) 112.4 Violation penalties. Delete section in its entirety.

SECTION 113 (Del) STOP WORK ORDER

- (Del) 113.1 Authority. Delete section.
- (Del) 113.2 Issuance. Delete section.
- (Del) **113.3 Emergencies.** Delete section.

SECTION 114 UNSAFE STRUCTURES OR EQUIPMENT

(Amd) **114.1 General.** See sections 7-313e and 29-306 of the Connecticut General Statutes Section, as amended by Public Act 21-165.

- (Del) 114.1.1 Unsafe conditions. Delete section.
- (Del) 114.1.2 Structural hazards. Delete section.
- (Del) **114.2 Evacuation.** Delete section.
- (Del) 114.3 Record. Delete section.
- (Del) **114.4 Notice.** Delete section.
- (Del) **114.5 Method of service.** Delete section in its entirety.

(Del) 114.6 Restoration or abatement. Delete section in its entirety.

(Del) **114.7 Summary abatement.** Delete section in its entirety.

(Add) SECTION 115 OCCUPANCY CLASSIFICATION AND USE

(Add) **115.1 Occupancy Classification and Use.** The provisions of Chapter 3 of the 2021 *International Building Code* portion of the 2022 Connecticut State Building Code shall also be considered requirements of this Code and known as the 2021 *International Building Code*, Chapter 3 portion of the 2022 Connecticut State Fire Safety Code.

(Add) SECTION 116 SPECIAL DETAILED REQUIREMENTS BASED UPON OCCUPANCY AND USE

(Add) **116.1 Special Detailed Requirements Based Upon Occupancy and Use.** The provisions of Chapter 4 of the 2021 *International Building Code* portion of the 2022 Connecticut State Building Code shall also be considered requirements of this Code and known as the 2021 *International Building Code*, Chapter 4 portion of the 2022 Connecticut State Fire Safety Code.

(Add) SECTION 117 GROUP R-1 BED AND BREAKFAST ESTABLISHMENTS.

(Add) **117.1 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) **117.2 Group R-1 bed and breakfast establishments.** The height limitation for existing unsprinklered *buildings* of Type VB construction undergoing a *change of occupancy* from detached one- and two-family *dwellings* to *Group R-1 bed and breakfast establishments* shall be increased by 5 feet (1524 mm) from the value in Table 504.3 of

the 2021 *International Building Code* portion of the State Building Code and one *story* from the value in Table 504.4 of the 2021 *International Building Code* portion of the Connecticut State Building Code where 1-hour fire-resistance rated assemblies are constructed between the second and third floors. The structural members supporting the rated assemblies shall not be required to be fire-resistance rated.

(Add) SECTION 118 INCIDENTAL USES.

(Add) **118.1 Incidental Uses.** The provisions of Section 509 of the 2021 *International Building Code* portion of the 2022 Connecticut State Building Code shall also be considered requirements of this Code and known as the 2021 *International Building Code*, Section 509 portion of the 2022 Connecticut State Fire Safety Code.

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

(Add) SECTION 119 MIXED USE AND OCCUPANCY

(Add) **119.1 Mixed Used and Occupancy.** The provisions of Section 508 of the 2021 *International Building Code* portion of the 2022 Connecticut State Building Code except as noted below shall also be considered requirements of this Code and known as the 2021 *International Building Code*, Section 508 portion of the 2022 Connecticut State Fire Safety Code.

Exception #1: Sections 508.5.9 and 508.5.11 addressing Accessibility and Plumbing Facilities respectively are not adopted as part of the 2022 Connecticut State Fire Safety Code.

Exception #2: Any reference to allowable building height, allowable building area, or the number of stories in section 508 are not adopted as part of the 2022 Connecticut State Fire Safety Code and shall be determined by the Building Official.

CHAPTER 2 DEFINITIONS

(Add) **APPROVED AGENCY.** An established and recognized agency regularly engaged in conducting tests or furnishing inspection services or furnishing product certification, where 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. Pursuant to subsection (e)(1) of section 29-276b of the Connecticut General Statutes. Approved Agencies conducting tests or furnishings inspection services of soils or concrete must be certified under the National Voluntary Laboratory Accreditation Program of the National Institute of Standards and Technology.

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

(Add) **BULK MERCHANDISING RETAIL BUILDING.** A building exceeding 12,000 square feet $(1,115 \text{ m}^2)$ 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) **EXISTING.** Buildings, facilities or conditions that are already in existence, constructed or officially authorized prior to the adoption of this code. For the purposes of Chapter 11 of this Code, existing shall be defined as a building, structure or condition for which a building permit was applied for on or after December 31, 2005, and prior to the adoption of this Code, and not have undergone any alterations, renovations, or change of use.

(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) **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 1.3G fireworks or 1.4G fireworks. See also section 29-356 of the Connecticut General Statutes.

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.

Fireworks, 1.4G. Small fireworks devices containing restricted amounts of pyrotechnic composition designed primarily to produce visible or audible effects by combustion or *deflagration* that complies 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.

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.

Sparklers and Fountains. See definition under Sparklers and Fountains.

OCCUPANCY CLASSIFICATION:

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

(Add) **NIGHT CLUB/DISCOTEHQUE/DANCE HALL.** 1) An establishment (night club) with showy décor and use special lighting effects and features electronically amplified music for dancing. 2) A commercial establishment that provides food, drink, and entertainment and stays open late at night.

(Add) **GROUP B COLLEGE** A building, structure, or portion thereof that is of a Group B Business occupancy classification and associated with a facility of higher education above the twelfth grade. This definition does not include training or skill development facilities.

(Add) Group B MEDICAL OCCUPANCIES Shall apply to Group B medical and dental

occupancies that provide services or treatment for four or more patients who may simultaneously be rendered incapable of taking action for self-preservation under emergency conditions. The occupancy shall include, but not be limited to, the following:

Outpatient clinics with general anesthesia or life-support equipment;

Dental centers providing treatment under general anesthesia;

One-day surgical centers;

Physician's offices providing treatment under general anesthesia.

Facilities such as the above that do not provide general anesthesia or life-support equipment simultaneously to four or more patients shall be classified as Group B Business occupancy.

(Add) **IN-HOME GROUP B OCCUPANCY. (Live-Work Unit)** Customary in-home business occupancies located within a single-family dwelling unit that provide professional services that employ a maximum of one employee within the dwelling in addition to the residents of the dwelling unit shall be classified as a single-family dwelling.

(Add) **IN-HOME INDUSTRIAL OCCUPANCIES, OTHER THAN HIGH HAZARD INDUSTRIAL OCCUPANCIES. (Live-Work Unit)** 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) **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 or 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, Family Day Care Home.** 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 2021 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.

BED and BREAKFAST or BED and BREAKFAST ESTABLISHMENT. A building:

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

(Add) **ONE-FAMILY DWELLING.** A building containing one dwelling unit with not more than six lodgers or boarders. Also known as a single-family dwelling.

(Add) **TWO-FAMILY DWELLING.** A building containing two dwelling unit with not more than six lodgers or boarders per dwelling unit.

(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 2018 *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 2018 *International Residential Code* portion of the State Building Code.

(Add) **Small I-2 Home, Alternative compliance for small I-2 homes.** See Section 1407.14 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 Family Day Care.** 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 2021 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

(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.

Care facilities that provide accommodations for five or fewer persons receiving care.

Congregate living facilities (nontransient) with 6 or fewer occupants where personal care services are not provided.

Boarding houses (nontransient)

Convents

Dormitories

Fraternities and Sororities

Monasteries

Congregate living facilities (transient) with 6 or fewer occupants where personal care services are not provided.

Boarding houses (transient) 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 2018 *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, other than horizontal sliding curtains, 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) **SPARKLERS 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 REQUIREMENTS

(Amd) **301.2 Permits.** Permits shall be required as set forth in Section 105.5 for the activities or uses regulated by Sections 303, 306, 307, 308 and 315.

(Del) Section 307 OPEN BURNING, RECREATIONAL FIRES AND

PORTABLE OUTDOOR FIREPLACES Delete section in its entirety. See Connecticut General Statutes 23-48.

(Amd) **Section 308.1 General.** Open flame, fire and burning shall be in accordance with Sections 308.1.1 to 308.4.1 inclusive and with other applicable sections of this code.

(Amd) **308.1.6.3 Sky lanterns.** A person shall not release or cause to be released an unterhered sky lantern; See Connecticut General Statutes 29-356.

(Amd) **308.2 Permits required.** Permits shall be obtained from the *fire code official* in accordance with Section 105.5 prior to engaging in the following activities involving open flame, fire and burning:

1. Use of a torch or flame-producing device to remove paint from a structure.

2. Except for theatrical performance open flame devices as specified in 308.3.2, the use of open flame, fire or burning in connection with Group A or E occupancies.

3. Use or operation of torches and other devices, machines or processes liable to start or cause fire in or on wildfire risk areas.

Note: See Connecticut General Statutes 29-357a for permits for effects before a proximate audience.

(Amd) **308.3.2 Theatrical performances, flame effects before an audience.** Where *approved* by the State Fire Marshal, open flame devices or effects used in conjunction with theatrical performances or flame effects before an audience shall be in conformance with and governed by the requirements of the Connecticut State Fire Prevention Code.

(Add) **308.3.2.1 Approval.** The use of flame effect materials, devices or components governed by NFPA 140 or NFPA 160; the device, their arrangement, and location(s) shall be *approved* by the State Fire Marshal and shall be in conformance with the requirements of the Connecticut State Fire Prevention Code.

(DEL) SECTION 310 SMOKING

(DEL) SECTION 319 MOBILE FOOD PREPRATION VEHICLES

(Del) Delete section in its entirety.

CHAPTER 4

EMERGENCY PLANNING AND PREPAREDNESS.

(Amd) **401.1 Scope.** Reporting of emergencies, coordination with emergency response forces, emergency plans and procedures for managing or responding to emergencies shall comply with the provisions of this section.

(Amd) **403.2.2 Announcements.** As required by Connecticut General Statutes 29-381(b); before any performance or event at any theater, concert or music hall or assembly hall or at any building, auditorium or room used for public gatherings of more than one hundred persons, the owner, proprietor, manager or agent of such theater, hall, building, auditorium or room shall make a public announcement that describes the location of emergency exits.

(Amd) **403.4.1 Fire drills. Crisis response drills.** (a) Each local and regional board of education shall provide for a fire drill to be held in the schools of such board not later than thirty days after the first day of each school year and at least once each month thereafter, except as provided in subsection (b) of this section.

(b) Each such board shall substitute a crisis response drill for a fire drill once every three months and shall develop the format of such crisis response drill in consultation with the appropriate local law enforcement agency. A representative of such agency may supervise and participate in any such crisis response drill.

(Amd) **403.7.2 Group I-2 occupancies.** Group I-2 occupancies shall comply with Sections 401, 403.7.2.1 to 403.7.2.4.1 inclusive, and 404 to 406 inclusive.

(Amd) **403.7.2.4 Emergency evacuation drills not including small I-2 homes.** Emergency evacuation drills shall comply with Section 405.

Exceptions:

1. The movement of patients to safe areas or to the exterior of the building is not required.

2. Where emergency evacuation drills are conducted after visiting hours or where patients or residents are expected to be asleep, a coded announcement shall be an acceptable alternative to audible alarms

(Add) **403.7.2.4.1 Emergency evacuation drills for small I-2 homes.** The drills shall involve the actual evacuation of all residents to an assembly point, as specified in the emergency action plan, and shall provide residents with experience in egressing through all exits and means of escape required by the Code.

(Amd) 403.9.2.1 College and university buildings; Residential boarding and high

school buildings. An *approved* fire safety and evacuation plan in accordance with Section 404 shall be prepared and maintained for Group R-2 college and university buildings, R-2 Residential boarding and high school buildings. Group R-2 college and university buildings, R-2 Residential boarding and high school buildings shall comply with Sections 403.9.2.1.1 and 403.9.2.1.2.

(Amd) **403.9.2.1.1 First emergency evacuation drill.** The first emergency evacuation drill of each school year shall be conducted within 30 days of the beginning of classes.

(Amd) **403.9.2.2.1 Guide contents.** A fire emergency guide shall describe the location, function and use of fire protection equipment and appliances available for use by residents, including fire alarm systems, smoke alarms and portable fire extinguishers. Guides shall include an emergency evacuation plan for each sleeping unit or *dwelling unit*.

(Amd) **403.9.3.1.1 Fire safety plans.** A copy of the plan shall be maintained at the facility at all times. Plans shall include the following in addition to the requirements of Section 404.2.2:

- 1. Location and number of resident sleeping rooms.
- 2. Location of special locking or egress control arrangements.
- 3. Location of all points of safety.

(Add) **403.10.6 Road tunnels.** Newly-constructed road tunnels shall comply with Chapter 7 of NFPA 502. Renovations to existing road tunnels are not required to comply with Chapter 7 of NFPA 502.

(Amd) **403.11.3 Crowd managers.** Where facilities or events involve a gathering of more than 250 people, crowd managers shall be provided in accordance with Sections 403.11.3.1 to 403.11.3.3 inclusive.

(Amd) **403.11.3.1 Number of crowd managers.** Not fewer than one trained crowd manager for each 250 persons or portion thereof, shall be provided for the gathering.

Exceptions:

1. Outdoor events with fewer than 1,000 persons in attendance shall not require crowd managers.

2. Assembly occupancies used exclusively for religious worship with an *occupant load* not exceeding 500 shall not require crowd managers.

3. The number of crowd managers shall be reduced where, in the opinion of the *fire code official*, the fire protection provided by the facility and the nature of the event warrant a reduction.

(Amd) **404.2.3.2 Drills**. Lockdown plan drills shall be conducted in accordance with the approved plan. Except as provided for in section 403.4.1 such drills shall not be substituted for fire and evacuation drills required by section 405.2.

Group or	Frequency	Participation	
Occupancy			
Group A	Quarterly	Staff	
Group B ^₅	Annually	All occupants	
Group B° (Ambulatory care facilities)	Quarterly on each shift ^a	Staff	
Group B ^b (Clinic, outpatient)	Annually	Staff	
Group E	Monthly ^{a,e}	All occupants	
Group F	Annually	Staff	
Group I-1	Semiannually on each shift ^b	All occupants	
Group I-2	Quarterly on each shift ^a	Staff	
Small I-2 Group Homes	Quarterly on each shift	All occupants See 403.7.2.4	
Group I-3	Quarterly on each shift ^a	Staff	
Group I-4	Monthly on each shift ^a	All occupants	
Group R-1	Quarterly on each shift	Staff	
Group R-2 ^d	Four annually	All occupants	
Group R-4	Semiannually on each shift ^{a,f}	All occupants ^f	

(Amd) Table 405.3

FIRE AND EVACUATION DRILL FREQUENCY AND PARTICIPATION

a. In severe climates, the fire code official shall have the authority to modify the emergency evacuation drill frequency.

b. Emergency evacuation drills are required in Group B buildings having an occupant load of 500 or more persons or more than 100 persons above or below the lowest level of exit discharge.

c. Emergency evacuation drills are required in ambulatory care facilities in accordance with Section 403.3.

d. Emergency evacuation drills in Group R-2 college and university buildings shall be in accordance with Section 403.9.2.1. Other Group R2 occupancies shall be in accordance with Section 403.9.2.2.

e. See 403.4.1 for crisis response drills.

f. See 403.9.3.4

CHAPTER 5

FIRE SERVICE FEATURES

(Amd) **501.1 Scope** The fire chief in conjunction with the *fire code official* shall assure fire service features for buildings, structures, operations, and premises shall comply with this chapter.

(Amd) **501.2 Permits.** A permit shall be required as set forth in section 105.5.

(Amd) **503.1 Where required.** Fire apparatus access roads shall be provided and maintained in accordance with section 503.1.

(Amd) **503.1.1 Buildings and facilities.** *Approved* fire apparatus access roads shall be provided for every facility, building, or portion hereafter constructed or moved into or within the jurisdiction. The fire apparatus access road shall comply with the requirements of Appendix D.

(Amd) **503.1.2 Additional access.** The fire code official in conjunction with the fire chief is authorized to require more than one fire apparatus access road based on the potential for impairment of a single road by vehicle congestion, condition of terrain, climate conditions or other factors that could limit access.

(Del) **503.2 Specifications.** Delete section in its entirety.

(Del) 503.4 Obstruction to fire department access roads. Delete section in its entirety.

(Del) **503.5 Required gates or barriers.** Delete section in its entirety.

- (Del) 503.6 Security gates. Delete section.
- (Del) **507.1 Required water supply.** Delete section in its entirety.
- (Del) **507.2 Type of water supply.** Delete section in its entirety.
- (Del) **507.3 Fire flow.** Delete section in its entirety.
- (Del) **507.4 Water supply test.** Delete section in its entirety.

(Amd) **507.1 Required water supply.** Fire hydrant systems shall comply with sections 507.1.1. to 507.5.6 inclusive.

(Del) 507.5.1 Where required. Delete section.
(Amd) **510.2 Emergency responder radio coverage in existing buildings.** Existing buildings other than Group R-3, undergoing an addition, alteration, renovation, or change of use either by the requirements of this *Code* or the *International Existing Building Code portion* of the State Building Code, that do not have *approved* in-building, two-way emergency response communication coverage for emergency responders in the building based on existing coverage levels of the public safety communication systems, shall be equipped with such coverage according to one of the following:

1. Where an existing wired communication system cannot be repaired or is being replaced, or where not *approved* in accordance with Section 510.1, Exception 1.

2. Within a time frame established by the adopting authority.

Exception: Where it is determined by the *fire code official* that the in-building, two-way emergency responder communication coverage system is not needed.

CHAPTER 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.

(Amd) **603.10 Abandoned wiring.** Abandoned cables that are able to be accessed without causing damage, or requiring demolition to the building, shall be tagged for future use or removed.

(Amd) **604.1 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 and the requirements of this section.

(Del) 604.2 Emergency operations. Delete section in its entirety.

(Del) 604.3 Standby power Delete section in its entirety.

(Del) 604.5 Maintenance of elevators. Delete section in its entirety.

(Del) 604.6 Elevator keys. Delete section in its entirety.

(Amd) **605.4 Fuel oil storage systems.** Fuel oil storage systems for building heating systems shall be installed and maintained in accordance with the requirements of NFPA 31 and this Code. Tanks and fuel-oil piping systems shall be installed in accordance with NFPA 31 and Chapter 13 of the *International Mechanical Code*.

(Amd) **605.5 Portable unvented heaters.** Portable unvented heaters shall conform to the requirements found in the Connecticut General Statutes sections 29-318, 29-318a, 29-318b, and 29-318c. Portable unvented fuel fired heating equipment shall be prohibited in occupancies in Groups A, E, I, R-1, R-2, R-3 and R-4 and ambulatory care facilities.

Exception:

1. Portable outdoor gas-fired heating appliances in accordance with Section 605.5.2.

(Amd) **606.1 General**. Commercial kitchen exhaust hoods shall comply with the requirements of the *2021 International Mechanical Code* portion of the State Building Code.

C H A P T E R 7 (AMD) INSPECTION AND MAINTENANCE OF FIRE AND SMOKE PROTECTION FREATURES

701.1 Scope. The provisions of this chapter shall govern the inspection and maintenance of the materials, systems and assemblies used for structural *fire resistance*, *fire-resistance rated* construction separation of adjacent space and construction installed to resist the passage of smoke to safeguard against the spread of fire and smoke within a building and the spread of fire to or from buildings. New buildings shall comply with the 2021 *International Building Code* portion of the State Building Code and section 701.1.1.

(Add) **701.1.1 Additional requirements.** In addition to the requirements of this chapter, the provisions of Chapter 7 of the 2021 International Building Code portion of the 2022 Connecticut State Building Code shall also be considered requirements of this Code and known as the 2021 International Building Code, Chapter 7 portion of the 2022 Connecticut State Fire Safety Code.

(Amd) **701.6 Owner's responsibility.** The *owner* shall maintain an inventory of all required *fire-resistance-rated* construction, construction installed to resist the passage of smoke and the construction included in sections 703 to 707 inclusive and Sections 602.4.1 and 602.4.2 of the 2021 *International Building Code* portion of the Connecticut State Building Code. Such construction shall be visually inspected by the *owner* annually and properly repaired, restored or replaced where damaged, altered, breached or

penetrated. Records of inspections and repairs shall be maintained. Where concealed, such elements shall not be required to be visually inspected by the *owner* unless the concealed space is accessible by the removal or movement of a panel, access door, ceiling tile or similar movable entry to the space.

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

(Amd) **801.1 Scope.** The provisions of this Chapter shall govern interior finish, interior trim, furniture, furnishings, decorative materials and decorative vegetation in buildings. Buildings shall comply with Sections 801 to 808 inclusive.

(Add) **801.1.1 Additional requirements.** In addition to the requirements of this chapter, the provisions of Chapter 8 of the 2021 *International Building Code* portion of the 2022 Connecticut State Building Code shall also be considered requirements of this Code and known as the 2021 *International Building Code*, Chapter 8 portion of the 2022 Connecticut State Fire Safety Code.

(Amd) SECTION 803 Wall and Ceiling Finishes

(Amd) Section 804 Interior Wall and Ceiling Trim and Interior Floor Finish in Buildings

(Amd) 804.1 **804.1 Interior trim.** Combustible trim in buildings, excluding *handrails* and guards, shall not exceed 10 percent of the specific wall or ceiling areas to which it is attached. Other than foam plastic, material used as interior trim shall comply with Section 804.1.1 or 804.1.2. Foam plastic used as interior trim shall comply with Section 804.2.

(Amd) Section 805 Upholstered Furniture and Mattresses in Buildings

(Amd) Section 806 Natural Decorative Vegetation in Buildings

(Add) **806.1.1** Where permitted by the *fire code official* Christmas trees shall be permitted in accordance with Table 806.1.1.

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

 Table 806.1.1 Provisions for Christmas Trees by Occupancy

** Cut trees in dwelling units that are associated with supervisory personnel in dormitory occupancies are permitted subject to the approval of the AHJ.

(Amd) 807

Decorative Materials and Trim; and Artificial Decorative Vegetation in Buildings

(Amd) Section 808

Furnishings and Other Upholstered Furniture and Mattresses or Decorative Materials in Buildings.

C H A P T E R 9 FIRE PROTECTION AND LIFE SAFETY SYSTEMS

(Amd) 901.3 Permits. A permit shall be required as set forth in Section 105.5.

(Amd) **901.5 Installation acceptance testing.** Fire detection and alarm systems, emergency alarm systems, gas detection 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* shall be notified before any required acceptance testing. 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

(Amd) **901.6 Inspection, testing and maintenance.** Fire detection and alarm systems, emergency alarm systems, gas detection systems, fire-extinguishing systems, mechanical smoke exhaust systems and smoke and heat vents shall be maintained in an operative condition at all times, and shall be replaced or repaired where defective. Non-required *fire protection systems* and equipment shall be inspected, tested and maintained or removed. The responsible person conducting an inspection, testing, or maintenance shall make records of all inspections, tests, and maintenance of the systems and its components and make the records available to the AHJ upon request. In the event of a system deficiency discovered during a required inspection or other event, the system shall be immediately tagged by such responsible person conducting the inspection noting the issue and date. The discovered deficiency(cies) shall be noted on the inspection report and a copy of such report shall be immediately forwarded to the AHJ. Contact information for the responsible person shall be included in the report.

(Add) 901.6.1.1 Maintenance of NFPA 13D systems.

(Add) **901.6.1.1.1** A minimum monthly maintenance program shall include:

- (1) Visually inspecting all sprinklers to ensure against obstruction of spray.
- (2) Inspecting all valves to ensure they are open.

- (3) Checking the pressure of air used with dry systems.
- (4) Checking the water level in storage tanks.

(Add) **901.6.1.1.2** A minimum quarterly maintenance program shall include:

- (1) Testing of all water flow alarms.
- (2) Testing of the alarm system.

(Add) **901.6.1.1.3** Operated or damaged sprinklers shall be replaced with sprinklers having the same performance characteristics as the original equipment.

(Add) **901.6.1.1.4** Any sprinklers that have been painted outside the factory shall be replaced with a new listed sprinkler.

(Amd) **901.7 Systems out of service.** Where a required *fire protection system* is out of service for more than 4 hours in a 24 hour period, the fire department and the *fire code official* shall be notified immediately and, where required by the *fire code official*, the building shall be either evacuated or an *approved* fire watch shall be provided for all occupants left unprotected by the shutdown until the *fire protection system* has been returned to service. Where utilized, fire watches shall be provided with not less than one *approved* means for notification of the fire department and their only duty shall be to perform constant patrols of the protected premises and keep watch for fires.

Exception: Facilities with an *approved* notification and impairment management program. The notification and impairment program for water-based *fire protection systems* shall comply with NFPA 25,

(Add) **901.11 Ceiling tiles and ceiling assemblies.** Where automatic sprinklers or automatic fire detection devices are installed, ceilings necessary for the proper actuation of the fire protection devices shall be maintained.

(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 throughout all stories from the Group A-2 occupancy to and including the levels of exit discharge serving that occupancy where one of the following conditions exists:

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).
- 5. 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.
- 6. In Group M occupancies 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, 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, and separated by a minimum of 4 feet of clear space.
- 7. In Group M occupancies, the total quantity of sparklers and fountains on hand either displayed or in storage shall not exceed 227.2 lb. (gross) [103 kg (gross)], including packaging; or 1,000 lb. (gross) [454 kg (gross)] in a building protected throughout with an approved automatic sprinkler system installed in accordance with NFPA 13. A quantity in excess of these amounts is subject to approval by the State Fire Marshal.

(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. In existing buildings four stories or less in height containing not more than four dwelling units where dwelling units are added to an existing Group R use that does not involve a physical increase in the height or area of the building and where each dwelling units 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*.

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*.
 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 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)*.

The use of any exceptions in this section shall not negate the requirements of Chapter 10.

(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, and

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.

(Amd) **903.2.11 Specific building areas and hazards**. In all occupancies other than Group U, an automatic sprinkler system shall be installed for building design or hazards in the locations set forth in sections 903.2.11.1 to 903.2.11.7 inclusive.

(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 tall 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 2021 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 1712.1.3.1 (Section 712.1.3.1 of the 2021 *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.

(Amd) **904.1 General.** Automatic fire-extinguishing systems, other than *automatic sprinkler systems*, shall be designed, installed, inspected, tested and maintained in accordance with the provisions of this section and the applicable referenced standards listed in Chapter 80. Where other fire protection systems are required to be installed by the provisions of this Code, or are installed with the approval of the AHJ as an alternative or equivalency or by a condition of a modification, the design and installation of the system shall comply with the appropriate standards listed in Chapter 80. The responsible person conducting an inspection, testing, or maintenance shall make records of all inspections, tests, and maintenance of the systems and its components and make the records available to the AHJ upon request. In the event of a system deficiency discovered during a required inspection or other event, the system shall be immediately tagged by such responsible person conducting the inspection noting the issue and date. The discovered deficiency(cies) shall be noted on the inspection report and a copy of such report shall be immediately forwarded to the AHJ. Contact information for the responsible person shall be included in the report.

(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) (690 kPa) at the topmost outlet of each riser while flowing the minimum quantities of water specified based upon a pressure of 150 psi (1035 kPa) 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.

SECTION 906 PORTABLE FIRE EXTINGUISHERS.

(Amd) **906.1 Where required.** Portable fire extinguishers shall be installed and maintained in accordance with NFPA 10 in all of the following locations:

1) In Group A, B, E, F, H, I, M, R-1, R-1 Bed and Breakfast in the kitchen, R-2, R-4, and S occupancies.

Exceptions:

1. In Group R-2 occupancies, that are classified as apartment or dormitory occupancy.

2. In storage areas of Group S occupancies where forklift, powered industrial truck or powered cart operators are the primary occupants, fixed

extinguishers, as specified in NFPA 10, shall not be required where in accordance with all of the following:

2.1. Use of vehicle-mounted extinguishers shall be *approved* by the *fire code official*.

2.2. Each vehicle shall be equipped with a 10-pound, 40A:80B:C extinguisher affixed to the vehicle using a mounting bracket *approved* by the extinguisher manufacturer or the *fire code official* for vehicular use.

2.3. Not less than two spare extinguishers of equal or greater rating shall be available on-site to replace a discharged extinguisher.

2.4. Vehicle operators shall be trained in the proper operation, use and inspection of extinguishers.

2.5. Inspections of vehicle-mounted extinguishers shall be performed daily.

2. Within 30 feet (9144 mm) distance of travel from commercial cooking equipment and from domestic cooking equipment in Group I-1; I-2, Condition 1.

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

4. On each floor of structures under construction, except Group R-3 occupancies, in accordance with Section 3316.1.

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

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

7. Portable fire extinguishers shall be required in all occupancies, outside and immediately adjacent to the entrance to all special hazardous areas except general storage areas. If the only entrance to a special hazardous area is from the exterior of the building, the fire extinguisher may be located just inside the entrance door.

Exception: Portable fire extinguishers are not required at normally unmanned Group U occupancy buildings or structures where a portable fire extinguisher suitable to the hazard of the location is provided on the vehicle of visiting personnel.

(Del) **906.2.1 Certification of service personnel for portable fire extinguishers**. Delete section.

(Amd) **907.2.7.1 Occupant notification.** During times that the building is occupied, the initiation of a signal from a manual fire alarm box shall not be required to activate the alarm notification appliances when an alarm signal is activated at a constantly attended location from which evacuation instructions shall be initiated over an emergency voice/alarm communication system installed in accordance with Section 907.5.2.2.

(Add) **907.2.7.2 Staged evacuation/selective occupant notification.** Where *approved* by the authority having jurisdiction and where total evacuation of occupants is impractical

due to building configuration, only occupants in the affected zones shall be initially notified, and provisions shall be made to selectively notify occupants in other zones to afford orderly evacuation of the entire building. When selective occupant notification is utilized, the portion of the building that does not receive the initial notification of alarm shall be separated from areas of immediate emergency and initial evacuation by construction having a fire resistance rating of at least 1 hour or other features approved by the authority having jurisdiction.

(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.

(Amd) **907.2.9.3 Group R-2 college and university buildings and primary or secondary school buildings.** An automatic smoke detection system that activates the occupant notification system in accordance with Section 907.5 shall be installed in Group

R-2 occupancies operated by a college or university, or primary or secondary schools for student or staff housing in all of the following locations:

- 1. Common spaces outside of dwelling units and sleeping units.
- 2. Laundry rooms, mechanical equipment rooms and storage rooms.
- 3. All interior *corridors* serving *sleeping units* or *dwelling units*.

Exception: An automatic smoke detection system is not required in buildings that do not have interior *corridors* serving *sleeping units* or *dwelling units* and where each *sleeping unit* or *dwelling unit* either has a *means of egress* door opening directly to an exterior *exit access* that leads directly to an *exit* or a *means of egress* door opening directly to an *exit.* Required smoke alarms in *dwelling units* and *sleeping units* in Group R-2 occupancies operated by a college or university for student or staff housing shall be interconnected with the fire alarm system in accordance with NFPA 72.

(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 *dwelling units*. 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) **907.2.11.2.2.1 During construction.** Pursuant to section 29-315b of the Connecticut General Statutes, whenever a single-family two-family dwelling is occupied during interior alterations or additions requiring a building permit, the temporary installation of battery-operated smoke alarms shall be required in the vicinity of such alterations or additions for the duration of construction activities. A combined smoke and carbon monoxide alarm may be installed to comply with 915.8 and this section.

(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.

(Add) **907.4.3.2 Ceiling tiles and ceiling assemblies.** Where automatic fire detectors are installed, ceilings necessary for the proper actuation of the fire protection device in accordance with NFPA 72 shall be maintained.

(Add) **907.6.6.1.1 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) 907.9 Where required in existing building sand structures. Delete section.

(Amd) **912.2 Location.** With respect to hydrants, driveways, buildings and landscaping, fire department connections shall be so located that fire apparatus and hose connected to supply the system will not obstruct access to the buildings for other fire apparatus. The location of fire department connections shall be *approved* by the *fire code official* in conjunction with the fire chief.

(Amd) **912.2.1 Visible location.** Fire department connections shall be located on the street side of buildings or facing *approved* fire apparatus access roads, fully visible and recognizable from the street, fire apparatus access road or nearest point of fire department vehicle access or as otherwise *approved* by the *fire code official* in conjunction with the fire chief.

(Amd) **912.2.2 Location signage**. On buildings, wherever the fire department connection is not visible to approaching fire apparatus, the fire department connection shall be indicated by an *approved* sign mounted on the street front or on the side of the building. Such sign shall have the letters "FDC" not less than 6 inches (152 mm) high and words in letters not less than 2 inches (51 mm) high or an arrow to indicate the location. Such signs shall be subject to the approval of the *fire code official* in conjunction with the fire chief.

(Add) **913.2.3 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 2020 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 1203.

(Amd) **915.1 General.** Carbon monoxide detection and warning equipment 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 and warning equipment shall be provided in accordance with Section 915.7.

(Amd) **915.1.1 Where required.** Carbon monoxide detection shall be provided in the following locations:

- 1. Group E occupancies in accordance with section 915.2.3
- 2. Group I-1, I-2, I-4 and R occupancies where any of the conditions in sections 915.1.2 through 915.1.6 exist.

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

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

Exception: Carbon monoxide detection and warning equipment 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 and warning equipment 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 and warning equipment 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 and warning equipment shall not be required in *dwelling units* and *sleeping units* where a carbon monoxide detection and warning equipment is provided in one of the following locations:

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

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

(Amd) **915.1.5 Private garages.** Carbon monoxide detection and warning equipment 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 and warning equipment 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 and warning equipment shall be provided in the locations specified in Section 915.2.3.1. and 915.2.3.2.

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) **915.4.5** Interconnection of alarms. Carbon monoxide alarms shall be interconnected in accordance with Section 29.7.2 of NFPA 72.

(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 72. 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 bed and breakfast establishments*, 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 bed and breakfast establishments, 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 fuel-burning appliance, fireplace or attached garage.

(Add) **915.8 During construction**. Pursuant to section 29-315b of the Connecticut General Statutes, whenever a single-family or two-family dwelling is occupied during interior alterations or additions requiring a building permit where a fuel-burning appliance, fireplace or attached garage exists, the temporary installation of battery-operated carbon monoxide alarms shall be required in the vicinity of such alterations or additions for the duration of construction activities. Combined smoke and carbon monoxide alarms may be installed to comply with 907.2.11.2.2.1and this section.

CHAPTER 10 MEANS OF EGRESS

Amd) **1001.1 General.** Buildings or portions thereof shall be provided with a *means of egress* system as required by this chapter. The provisions of this chapter shall control the design, construction and arrangement of *means of egress* components required to provide an approved *means of egress* from structures and portions thereof.

Exception: Pursuant to CGS 29-292, detached one- and two-family dwellings and multiple single-family dwellings (townhouses) not more than three stories above grade plane in height with a separate means of egress and their accessory structures shall comply with the International Residential Code

(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) **1004.5 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 1004.5. 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 1004.5. Where an intended function is not listed in Table 1004.5, 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 *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 1030.6.2 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 *open-air assembly seating* shall be permitted to the capacity factors in Section 1030.6.3 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 1030.6.2 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 *open-air assembly seating* shall be permitted to the capacity factors in Section 1030.6.3 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 or occupied roofs.

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

(Add) **1006.2.2.7 Group I-4 Day care means of egress.** Group I-4 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) **1008.2 Illumination required.** The *means of egress from a room or space*, 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) **1008.2.4 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 (2.15 lux) at the floor level.

(Amd) **1008.3.3 Rooms and spaces**. 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) **1008.3.6 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.

(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.** Side-hinged swinging doors, pivoted doors, or balanced 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/dwelling unit that opens directly into an exit enclosure) or a Group H occupancy.

(Add) **1010.2.1.1 Bathroom doors.** In Group R-4 occupancies, Group I-2 child care facilities, and Group I-4 day care facilities, 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 or between the stairway landing and the adjacent tread. 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 1030.14.
- 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 (209.5 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 (9.5mm) and the greatest tread depth within any *flight of stairs* shall not exceed the smallest by 3/8 inch (9.5 mm).

- 7. See Section 503.1 of the *International Existing Building Code* for the replacement of existing stairways.
- 8. 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 treads.** *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* shall be protected to prevent the accumulation of snow and ice.

(Amd) **1011.11 Handrails.** *Flights of 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 2021 *International Building Code* portion of the Connecticut State Building Code.

Exceptions:

- 1. *Flights of 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 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*.

5. Where a platform lift is in a stationary position and the floor of the platform lift serves as the upper landing of a *stairway*, *handrails* shall not be required on the *stairway*, provided that all of the following criteria are met:

5.1. The *stairway* contains not more than two risers.

5.2. A handhold, positioned horizontally or vertically, is located on one side of the *stairway* adjacent to the top landing.

5.3. The handhold is located not less than 34 inches (864 mm) and not more than 42 inches (1067 mm) above the bottom landing of the *stairway*.

5.4. The handhold gripping surface complies with Section 1014.3 and is not less than 4.5 inches (114 mm) in length.

(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 Low-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 sleeping areas and *dwelling units* in Group R-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 *stairways*, and stepped *aisles*, from the line connecting the leading edges of the tread *nosings*.
- 3. On *ramps*, ramped aisles, 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.
- 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 a line connecting 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 (914 mm) high, measured vertically above the adjacent walking surface.
- 5. The guard height in assembly seating areas shall be in accordance with Section 1030.17 as applicable.
- 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) and not more than 34 inches (864 mm) measured vertically from the leading edge of the device tread *nosing*.
- 7. In group F occupancies where exit access stairways serve fewer than three stories and such stairways are not open to the public, and where the top of the guard also serves as a *handrail*, the top of the guard shall be not 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.

(Amd) **1015.4 Opening limitations.** Required *guards* shall not have openings which allow passage of a sphere 4 inches (102 mm) in diameter from the walking surface to the required *guard* height.

Exceptions:

- 1. From a height of 36 inches (914 mm) to 42 inches (1067 mm), *guards* shall not have openings which allow passage of a sphere 4³/₈ inches (111 mm) in diameter.
- 2. The triangular openings at the open side of a *stair*, formed by the riser, tread and bottom rail shall not allow passage of a sphere 6 inches (152 mm) in diameter.
- 3. At elevated walking surfaces for access to and use of electrical, mechanical or plumbing systems or equipment, *guards* shall not have openings which allow passage of a sphere 21 inches (533 mm) in diameter.
- 4. In areas that are not open to the public within occupancies in Group I-3, F, H or S, and for alternating tread devices and ship ladders, *guards* shall not have openings which allow passage of a sphere 21 inches (533 mm) in diameter.

- 5. In assembly seating areas, *guards* required at the end of aisles in accordance with 1030.17.4 shall not have openings which allow passage of a sphere 4 inches in diameter (102 mm) up to a height of 26 inches (660 mm). From a height of 26 inches (660 mm) to 42 inches (1067 mm) above the adjacent walking surfaces, *guards* shall not have openings which allow passage of a sphere 8 inches (203 mm) in diameter.
- 6. Within individual *dwelling units* and *sleeping units* in Group R-2 and R-3 occupancies, *guards* on the open sides of *stairs* shall not have openings which allow passage of a sphere 4³/₈ inches (111 mm) in diameter.
- 7. In *Group R-1 bed and breakfast establishments, guards* shall have balusters or ornamental patterns such that a 6-inch-diameter (152 mm) sphere cannot pass through any opening.

(Add) **1015.9 Retaining walls.** Retaining walls where the difference in height between the finished grade at the top of the wall and the finished grade at the bottom of the wall is greater than 4 feet (1219 mm) shall be provided with *guards* complying with Sections 1015.3, 1015.4 and 1607.9 when a walking surface, parking lot or driveway is located closer than 2 feet (610 mm) from the edge of the top of the retaining wall. For the purpose of this section, grass, planting beds or landscaped areas shall not be considered a walking surface.

(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 2021 *International Fire Code* Portion of the Connecticut State Building Code.

Exceptions:

- 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, *exit access stairways and ramps* 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 of the 2021 *International Fire Code* Portion of the Connecticut State Building Code
- 6. *Exit access stairways* and *ramps* in open parking garages that serve only the open parking garage.
- 7. *Exit access stairways* and *ramps* serving smoke-protected or open air seating assembly complying with the exit access travel distance requirements of Section 1029.7.
- 8. *Exit access stairways* and *ramps between* 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 505 of the 2021 *International Fire Code* Portion of the Connecticut State Building Code.
- 11. Exterior *exit access stairways* or *ramps* between occupied roofs.

(Add) **1020.1.2 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.

(Amd) **1020.2 Construction.** *Corridors* shall be *fire-resistance rated* in accordance with Table 1020.2. The *corridor* walls required to be *fire-resistance rated* shall comply with Section 708 of the *International Building Code* for *fire partitions*.

Exceptions:

1. A *fire-resistance rating* is not required for *corridors* in an occupancy in Group E where each room that is used for instruction has not less than one door opening directly to the exterior and rooms for assembly purposes have not less than 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. A *fire-resistance rating* is not required for *corridors* contained within a *dwelling unit* or *sleeping unit* in an occupancy in Groups I-1 and R.

3. A *fire-resistance rating* is not required for *corridors* in open parking garages.

4. A *fire-resistance rating* is not required for *corridors* in an occupancy in Group B that is a space requiring only a single *means of egress* complying with Section 1006.2.

5. *Corridors* adjacent to the *exterior walls* of buildings shall be permitted to have unprotected openings on unrated *exterior walls* where unrated walls are permitted by Table 705.5 of the 2021 *International Fire Code* Portion of the Connecticut State Building Code and unprotected openings are permitted by Table 705.8 of the 2021 *International Fire Code* Portion of the Connecticut State Building Code and Unprotected openings are permitted by Table 705.8 of the 2021 *International Fire Code* Portion of the Building Code.

(Amd) TABLE 1020.2 CORRIDOR FIRE-RESISTANCE RATING

OCCUPANCY	OCCUPANT LOAD SERVED BY	REQUIRED FIRE-RESISTANCE RATING (hours)			
	CORRIDOR	WITHOUT SPRINKLER SYSTEM	WITH SPRINKLER SYSTEM °		
H-1, H-2, H-3	All	Not Permitted	1		
H-4, H-5	Greater than 30	Not Permitted	1		
A, B, E, F, M, S, U	Greater than 30	1	0		
R	Greater than 10	Not Permitted	0.5 ° / 1 d		
I-2 ^d	All	Not Permitted	0		
I-1, I-3	All	Not Permitted	1 b, c		
1-4	All	1 e	0		

a. For requirements for occupancies in Group I-2, see Sections 1407.2 and 1407.3.

b. For a reduction in the fire-resistance rating for occupancies in Group I-3, see Section 1408.8.

c. Buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 or 903.3.1.2 where allowed.

d. Group R-3 and R-4 buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.3. See Section 903.2.8 for occupancies where automatic sprinkler systems are permitted in accordance with Section 903.3.1.3.

e. For Group I-4 day care facilities that satisfy Section 903.2.6, Exception #2, a corridor fire-resistance rating of zero (0) shall be permitted.

(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. For the purpose of this section, bulk merchandising retail *building* is defined as a *building* exceeding 12,000 square feet (1115 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 (3658 mm) in storage height.

(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. Such systems shall not be required 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) in width, 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 common paths of travel and 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) **1028.4.1 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) **1030.2 Assembly main exit.** Pursuant to Section 29-381a of the Connecticut General Statutes, in a building, room or space used for assembly purposes and 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) **1031.2 Where required.** 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 1006.3.4(1) and 1006.3.4(2) or utilizing an exception to 903.2.8.

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 *emergency escape and rescue opening* in accordance with this section.

Where *basements* contain one or more sleeping rooms, an *emergency escape and rescue opening* 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 (2032 mm) 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 egress 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. *Storm shelters* are not required to comply with this section where the shelter is constructed in accordance with ICC 500.

5. Within individual *dwelling* and *sleeping units* in Groups R-2 and R-3, where the building is equipped throughout with an *automatic sprinkler system* installed in accordance with Section 903.3.1.1, 903.3.1.2 or 903.3.1.3, sleeping rooms in *basements* shall not be required to have

emergency escape and rescue openings provided that the *basement* has one of the following:

5.1. One *means* of egress and one *emergency* escape and rescue opening.

5.2. Two means of egress.

(Add) 3. Group E occupancies. In Group E occupancies, *emergency escape and rescue openings* shall be provided in every room or space greater than 250 ft² (23.3 m²) 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) 4. 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 ft² (23.3 m²) 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) **1031.3.2 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) **1031.3.3 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.

(Add) **1032.2.3 Inspection of door openings.** Door openings shall be inspection in accordance with the requirements of NFPA 80.

C H A P T E R 11 (Amd) CODE REQUIREMENTS FOR EXISTING BUILDING

(Amd) **1101.1 Scope.** The provisions of this chapter shall apply to buildings for which a building permit was applied for on or after January 1, 2006, and prior to the adoption of this Code, and not undergoing any alterations, renovations, or change of use. Buildings for which a permit was applied for prior to, January 1, 2006 shall be governed by the Connecticut State Fire Prevention Code.

(Amd) **1101.2 Intent.** The intent of this chapter is to provide a minimum degree of fire and life safety to persons occupying existing buildings by providing minimum code requirements where such existing buildings do not comply with the minimum requirements found elsewhere in this code.

(Amd) **1101.3 Conflicts.** Where a conflict exists between a provision in this Chapter and a code requirement in effect at the time of construction, the code requirement in effect at the time of construction shall prevail.

(Del) 1101.4 Owner notification. Delete entire section.

(Amd) **1103.1 Required construction.** Existing buildings shall comply with not less than the minimum provisions specified in Table 1103.1 and as further enumerated in Sections 1103.2 through 1103.10.

The provisions of this chapter shall not be construed to allow the elimination of *fire protection systems* or a reduction in the level of fire safety provided in buildings constructed in accordance with previously adopted codes.

Exceptions:

- 1. Where a change in fire-resistance rating has been approved in accordance with Section 501.2 or 802.6 of the 2021 *International Existing Building Code* portion of the State Building Code.
- 2. Group U occupancies.

(Amd) **1103.1.1 Historic buildings.** Historic Buildings are evaluated on a case-by-case basis with use of the code modification process.

(Amd) **1103.3 Existing elevators.** Existing elevators shall comply with the State of Connecticut Safety Code for Elevators and Escalators.

(Amd) **1103.4 Vertical openings.** Interior vertical openings, including but not limited to stairways, elevator hoistways, service and utility shafts, that connect two or more stories of a building, shall be enclosed or protected as required by Chapter 7.

- (Del) 1103.4.1 Group I-2 and I-3 occupancies. Delete section.
- (Del) 1103.4.2 Three to five stories. Delete section.
- (Del) 1103.4.3 More than five stories. Delete section.
- (Del) 1103.4.4 Atriums and covered malls. Delete section.
- (Del) 1103.4.5 Escalators in Group B and M occupancies. Delete section.
- (Del) 1103.4.6 Escalators connecting four or fewer stories. Delete section.
- (Del) 1103.4.7 Escalators connecting more than four stories. Delete section.
- (Del) 1103.4.8 Occupancies other than Groups I-2 and I-3. Delete section.
- (Del) 1103.4.9 Waste and linen chutes. Delete section.
- (Del) 1103.4.10 Flue fed incinerators. Delete section.

(Amd) **1103.5 Sprinkler systems.** An automatic sprinkler system shall be provided in existing buildings as required by Chapter 9.

- (Del) 1103.5.1 Group A-2. Delete section.
- (Del) 1103.5.2 Group I-2. Delete section.
- (Del) 1103.5.3 Group I-2 Condition 2. Delete section.
- (Del) 1103.5.5 Pyroxylin plastics. Delete section.

(Amd) **1103.6 Standpipes.** Standpipes shall be provided in existing buildings as required by Chapter 9.

(Amd) **1103.7 Fire alarm systems.** An *approved* fire alarm system shall be installed in existing buildings and structures as required by Chapter 9 and provide occupant notification in accordance with Section 907.5 unless other requirements are provided by other sections of this Code.

Exception: Occupancies with an existing, previously approved fire alarm system.

(Amd) **1103.8.2 Interconnection.** Where more than one smoke alarm is required to be installed within an individual *dwelling or sleeping unit*, the smoke alarms shall be interconnected in such a manner that the activation of one alarm will activate all of the alarms in the individual unit. Physical interconnection of smoke alarms shall not be required where listed wireless alarms are installed and all alarms sound upon activation of one alarm. The alarm shall be clearly audible in all bedrooms over background noise levels with all intervening doors closed.

(Amd) **1103.8.3 Power source.** Single-station smoke alarms shall receive their primary power from the building wiring provided that such wiring is served from a commercial source 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 a disconnecting switch other than as required for overcurrent protection.

(Amd) **1104.1 General.** *Means of egress* in existing buildings shall comply with Chapter 10. Where the provisions of this chapter conflict with the building code that applied at the time of construction, the most restrictive provision shall apply.

- (Del) 1104.2 Elevators, escalators and moving walks. Delete section.
- (Del) 1104.3 Exit sign illumination. Delete section.
- (Del) 1104.4 Power source. Delete section.
- (Del) 1104.5 Illumination emergency power. Delete section in its entirety.
- (Del) **1104.6 Guards.** Delete section in its entirety.
- (Del) 1104.7 Size of doors. Delete section in its entirety.
- (Del) 1104.8 Opening force for doors. Delete section.
- (Del) 1104.9 Revolving doors. Delete section in its entirety.
- (Del) 1104.10 Stair dimensions for existing stairways. Delete section in its entirety.
- (Del) 1104.11 Winders. Delete section.
- (Del) 1104.12 Curved stairways. Delete section.
- (Del) 1104.13 Stairway handrails. Delete section in its entirety.
- (Del) 1104.14 Slope of ramps. Delete section.
- (Del) 1104.15 Width of ramps. Delete section.
- (Del) 1104.16 Fire escape stairways. Delete section in its entirety.
- (Del) **1104.17** Corridor construction Delete section in its entirety.
- (Del) 1104.18 Dead ends. Delete section.
- (Del) 1104.19 Exit access travel distance. Delete section.
- (Del) 1104.20 Common path of egress travel. Delete section.
- (Del) 1104.21 Stairway discharge identification. Delete section.
- (Del) 1104.22 Exterior stairway protection. Delete section.
- (Del) 1104.23 Minimum aisle width. Delete section.
- (Del) 1104.24 Stairway floor number signs. Delete section.

(Del) 1104.25 Egress path markings. Delete section.

SECTION 1105

(Amd) CODE REQUIREMENTS FOR EXISTING GROUP I-2

(Del) 1105.2 Applicability. Delete section.

(Del) **1105.3 Construction.** Delete section.

(Del) **1105.4 Incidental Uses in Existing I-2.** Delete section in its entirety.

(Del) **1105.5 Corridor Construction.** Delete section in its entirety.

(Del) 1105.6 Means of Egress. Delete section in its entirety.

(Del) 1105.7 Smoke Compartments. Delete section in its entirety.

(Del) 1105.8 Group I-2 care suites. Delete section.

(Del) 1105.9 Group I-2 automatic sprinkler systems. Delete section.

(Del) 1105.10 Group I-2 automatic fire alarm systems. Delete section.

(Del) 1105.11 Essential electrical systems. Delete section in its entirety.

CHÁPTER 12 ENERGY SYSTEMS

(Add) **1203.2.20 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 2020 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.

(Amd) **1205.2.3 Building-integrated photovoltaic (BIPV) systems.** Where building-integrated photovoltaic (BIPV) systems are installed in a manner that creates areas with electrical hazards to be hidden from view, markings shall be provided to identify the hazardous areas to avoid. The markings shall be reflective and be visible from grade.

(Add) **1205.2.3.1 Required signage.** Where a BIPV system is installed, a placard shall be provided on the outside of the building at the electrical service meter location to which the BIPV system is connected. The placard shall display a firefighter Maltese cross with "PV" printed in the center of the cross. The placard shall be not less than four (4) inches by six (6) inches in size and made of an approved durable material.

(Amd) TABLE 1207.6 ELECTROCHEMICAL ESS TECHNOLOGY-SPECIFIC REQUIREMENTS

COMPLIANCE REQUIRED ^b		BATTERY TECHNOLOGY			DGY	OTHER ESS AND	CAPACITOR
Features	Section	Lead- Acid	Ni-Cd and Ni-MH	Lithium -ion	Flow	BATTERY TECHNOLOGIES ^b	ESS ^b
Exhaust Ventilation	1207.6.1	Yes	Yes	No ^f	Yes	Yes	Yes
Explosion control	1207.6.3	Yes ^a	Yes ^a	Yes	No	Yes	Yes
Safety caps	1207.6.4	Yes	Yes	No	No	Yes	Yes
Spill control and neutralization	1207.6.2	Yes ^c	Yes ^c	No	Yes	Yes	Yes
Thermal runaway	1207.6.5	Yes ^d	Yes	Yes	No	Yes	Yes

a. Not required for lead-acid and nickel-cadmium batteries at facilities under the exclusive control of communications utilities that comply with NFPA 76 and operate at less than 50 VAC and 60 VDC.

b. Protection shall be provided unless documentation acceptable to the fire code official is provided in accordance with Section 104.8.2 that provides justification why the protection is not necessary based on the technology used.

c. Applicable to vented-type (i.e., flooded) nickel-cadmium and lead-acid batteries.

d. Not required for vented-type (i.e., flooded) lead-acid batteries.

e. Reserved.

f. Exhaust ventilation is required when flammable gasses are released under abnormal conditions.

1207.6.1.2.4 Gas detection system. Where required by Section 1207.6.1.2, rooms, areas and walk-in units containing ESS shall be protected by an *approved* continuous gas detection system that complies with Section 916 and with the following:

1. The gas detection system shall be designed to activate the mechanical ventilation system when the level of flammable gas in the room, area or walk-in unit exceeds 25 percent of the LFL or where the level of toxic or highly toxic gasses exceeds one-half (1/2) of the IDLH, or where gas indicative of venting from a lithium-ion cell is detected.

2. The mechanical ventilation system shall remain on until the flammable gas detected is less than 25 percent of the LFL.

3. The gas detection system shall be provided with a minimum of 2 hours of standby power in accordance with Section 1203.2.5.

4. Failure of the gas detection system shall annunciate a trouble signal at an

approved central station, proprietary or remote station service in accordance with NFPA 72, or shall initiate an audible and visible trouble signal at an approved constantly attended on-site location.

(Add) **1207.6.6.** The thermal runaway detector shall activate upon detection of gas vapors produced by liquid electrolyte in a lithium-ion cell at the start of a battery venting event. Upon detection of gas vapors, the detection system shall shutdown the affected ESS rack and transmit a fire alarm signal. Detection of a thermal runaway event shall activate the mechanical ventilation when it is provided as method of explosion control.

CHAPTERS 18 and 19 RESERVED

(Del) C H A P T E R 20 AVIATION FACILITIES

Delete this Chapter in its entirety and replace with the following.

(Add) C H A P T E R 20 AVIATION FACILITIES

(Add) **2001.1 Scope**. Airports, heliports, helistops and aircraft hangers shall be in accordance with this Chapter and section 116 for items involving building construction, services and/or systems. Pursuant to Connecticut General Statutes Section 29-291a as amended by Public Act 21-165, the Connecticut State Fire Prevention Code shall be applicable for oil burners, flammable and combustible liquids, gas equipment and piping, liquefied gas and liquefied natural gas, hazardous chemicals, and processes and activities that occur in the building or structure that are not used to support the building components, services and/or systems, and for the purposes of prevention of fire and other related emergencies.

(Add) **2001.2 Regulations not covered**. Regulations not specifically addressed shall be in accordance with NFPA 407, NFPA 409, NFPA 410 and NFPA 415.

(Add) **2001.3 Permits**. The applicable provisions of section 105.5 shall apply for permits to airport terminal buildings and hangars.
CHAPTER 21 DRY CLEANING

(Amd) **2101.1 Scope.** Dry cleaning plants shall comply with the requirements this Chapter and section 116 for items involving building construction services and/or systems. Pursuant to Connecticut General Statutes section 29-291a as amended by Public Act 21-165, the Connecticut State Fire Prevention Code shall be applicable for oil burners, flammable and combustible liquids, gas equipment and piping, liquefied gas and liquefied natural gas, hazardous chemicals, and processes and activities that occur in the building or structure that are not used to support the building components services and/or systems, and for the purposes of prevention of fire and other related emergencies.

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

(Amd) **2201.1 Scope**. Combustible dust producing operations shall comply with the provisions of NFPA 652 and section 116 for items involving building construction services and/or systems. Pursuant to Connecticut General Statutes section 29-291a as amended by Public Act 21-165, the Connecticut State Fire Prevention Code shall be applicable for oil burners, flammable and combustible liquids, gas equipment and piping, liquefied gas and liquefied natural gas, hazardous chemicals, and processes and activities that occur in the building or structure that are not used to support the building components services and/or systems, and for the purposes of prevention of fire and other related emergencies.

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

(Amd) **2301.1 Scope.** Automotive motor fuel-dispensing facilities, marine motor fueldispensing facilities, fleet motor fuel-dispensing facilities, aircraft motor vehicle fueldispensing facilities and repair garages shall be in accordance with this chapter, section 116, and the State Building Code for items involving building construction services and/or systems. Pursuant to Connecticut General Statutes section 29-291a as amended by Public Act 21-165, the Connecticut State Fire Prevention Code shall be applicable for oil burners, flammable and combustible liquids, gas equipment and piping, liquefied gas and liquefied natural gas, hazardous chemicals, and processes and activities that occur in the building or structure that are not used to support the building components services and/or systems, and for the purposes of prevention of fire and other related emergencies.

(Add) **2301.7 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. This includes purging into or out of service.

(Del) Section 2305 Operational Requirements

Delete section in its entirety.

(Amd) **2307.1 General.** Motor fuel-dispensing facilities for liquefied petroleum gas (LP-Gas) fuel shall be in accordance with this section, Chapter 61 and NFPA 30A.

(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.

CHAPTER 24 FLAMMABLE FINISHES

(Amd) **2401.1 Scope** Locations or areas where any of the following activities are conducted shall be in accordance with this Chapter, and section 116 for items involving building construction services and/or systems. Pursuant to Connecticut General Statutes section 29-291a as amended by Public Act 21-165, the Connecticut State Fire Prevention Code shall be applicable for oil burners, flammable and combustible liquids, gas equipment and piping, liquefied gas and liquefied natural gas, hazardous chemicals, and processes and activities that occur in the building or structure that are not used to support the building components services and/or systems, and for the purposes of prevention of fire and other related emergencies.

1. The application of flammable finishes to articles or materials by means of spray apparatus.

2. The application of flammable finishes by dipping or immersing articles or materials into the contents of tanks, vats or containers of *flammable* or *combustible liquids* for coating, finishing, treatment or similar processes.

3. The application of flammable finishes by applying combustible powders to articles or materials utilizing powder spray guns, electrostatic powder spray guns, fluidized beds or electrostatic fluidized beds.

4. Floor surfacing or finishing operations using Class I or II liquids in areas exceeding 350 square feet (32.5 m²).

5. The application of flammable finishes consisting of dual-component coatings or Class I or II liquids where applied by brush or roller in quantities exceeding 1 gallon (4 L).

(Amd) **2401.3 Permits.** Permits shall be required as set forth in Sections 105.5.

CHAPTER 25

FRUIT AND CROP RIPENING

(Amd) **2501.1 Scope** Ripening processes where ethylene gas is introduced into a room to promote the ripening of fruits, vegetables and other crops shall comply with this Chapter and section 116 for items involving building construction services and/or systems. Pursuant to Connecticut General Statutes section 29-291a as amended by Public Act 21-165, the Connecticut State Fire Prevention Code shall be applicable for oil burners, flammable and combustible liquids, gas equipment and piping, liquefied gas and liquefied natural gas, hazardous chemicals, and processes and activities that occur in the building or structure that are not used to support the building components services and/or systems, and for the purposes of prevention of fire and other related emergencies.

Exception: Mixtures of ethylene and one or more inert gases in concentrations that prevent the gas from reaching greater than 25 percent of the lower explosive limit (LEL) when released to the atmosphere.

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

(Amd) **2601.1 Scope** Fumigation and insecticidal fogging operations within buildings, structures and spaces shall comply with this Chapter for items involving building construction services and/or systems. Pursuant to Connecticut General Statutes section 29-291a as amended by Public Act 21-165, the Connecticut State Fire Prevention Code shall be applicable for oil burners, flammable and combustible liquids, gas equipment and piping, liquefied gas and liquefied natural gas, hazardous chemicals, and processes and activities that occur in the building or structure that are not used to support the building components services and/or systems, and for the purposes of prevention of fire and other related emergencies.

C H A P T E R 2 7 SEMICONDUCTOR FABRICATION FACILITIES

(Amd) **2701.1 Scope.** Semiconductor fabrication facilities and comparable research and development areas classified as Group H-5 shall comply with this chapter and the 2021 *International Building Code* portion of the State Building Code for items involving building construction, services and/or systems. Pursuant to Connecticut General Statutes section 29-291a as amended by Public Act 21-165, the Connecticut State Fire Prevention Code shall be applicable for oil burners, flammable and combustible liquids, gas equipment and piping, liquefied gas and liquefied natural gas, hazardous chemicals, and processes and activities that occur in the building or structure that are not used to support the building components services and/or systems, and for the purposes of prevention of fire and other related emergencies. The use, storage and handling of hazardous materials in Group H-5 shall comply with this Chapter, and the Connecticut State Fire Prevention Code.

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

C H A P T E R 2 8 LUMBERYARDS AND AGRO-INDUSTRIAL, SOLID BIOMASS AND WOODWORKING FACILITIES

(Amd) **2801.1 Scope.** The storage, manufacturing and processing of solid biomass feedstock, timber, lumber, plywood, veneers and agro-industrial byproducts shall be in accordance with this Chapter for items involving building construction, services and/or systems. Pursuant to Connecticut General Statutes section 29-291a as amended by Public Act 21-165, the Connecticut State Fire Prevention Code shall be applicable for oil burners, flammable and combustible liquids, gas equipment and piping, liquefied gas and liquefied natural gas, hazardous chemicals, and processes and activities that occur in the building or structure that are not used to support the building components services and/or systems, and for the purposes of prevention of fire and other related emergencies.

(Amd) **2810.3 Fire prevention plan.** The *owner* or *owner's* authorized representative shall submit a fire prevention plan for review and approval by the *fire code official* that includes all of the following:

1. Frequency of walk-through inspections to verify compliance with the plan.

2. Hot work permit program in accordance with the requirements of the Connecticut State Fire Prevention Code and Chapter 35.

3. Preventative maintenance program for equipment associated with pallet activities.

4. Inspection, testing and maintenance of *fire protection systems* in accordance with Chapter 9.

(Amd) **2810.9 Fire flow**. Fire flow requirements for the site shall be determined by the fire chief in conjunction with the *fire code official*.

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

2901.1 Scope. Organic coating manufacturing processes shall comply with this Chapter, except that this chapter shall not apply to processes manufacturing nonflammable or water-thinned coatings or to operations applying coating materials for items involving building construction, services and/or systems. Pursuant to Connecticut General Statutes section 29-291a as amended by PA 21-165, the Connecticut State Fire Prevention Code shall be applicable for oil burners, flammable and combustible liquids, gas equipment and

piping, liquefied gas and liquefied natural gas, hazardous chemicals, and processes and activities that occur in the building or structure that are not used to support the building components, services and/or systems, and for the purposes of prevention of fire and other related emergencies.

(Amd) **2909.4 Nitrocellulose storage.** Nitrocellulose storage shall be located on a detached pad or in a separate structure or a room enclosed in accordance with the 2021 *International Building Code* portion of the State Building Code. The nitrocellulose storage area shall not be utilized for any other purpose. Electrical wiring and equipment installed in storage areas adjacent to process areas shall comply with Section 2904.2. Also refer to the Connecticut General Statutes section 29-343 for the definition of explosive and the Connecticut Explosives Code adopted pursuant to Connecticut General Statutes section 29-349.

(Amd) **2909.4.2 Spills.** Spilled nitrocellulose shall be promptly wetted with water and disposed of by use or burning in the open at a detached location approved by the local fire marshal and the local open burning official.

CHAPTER 30 INDUSTRIAL OVENS

(Amd) 3001.1 Scope. This chapter shall apply to the installation and operation of industrial ovens and furnaces. Industrial ovens and furnaces shall comply with the applicable provisions of this Chapter, NFPA 54, the 2021 *International Mechanical Code* portion of the State Building Code, and NFPA 86 for items involving building construction, services and/or systems. Pursuant to Connecticut General Statutes section 29-291a as amended by Public Act 21-165, the Connecticut State Fire Prevention Code shall be applicable for oil burners, flammable and combustible liquids, gas equipment and piping, liquefied gas and liquefied natural gas, hazardous chemicals, and processes and activities that occur in the building or structure that are not used to support the building components, services and/or systems, and for the purposes of prevention of fire and other related emergencies. The terms "ovens" and "furnaces" are used interchangeably in this chapter.

(Amd) **3001.2 Permits.** Permits shall be required as set forth in Sections 105.5.

C H A P T E R 3 1 TENTS, TEMPORARY SPECIAL EVENT STRUCTURES AND OTHER MEMBRANE STRUCTURES

(Amd) 3101.1 Scope. Tents, temporary special event structures 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 Sections 3104 and 3106 are applicable to temporary and permanent tents and membrane structures. The provisions of Section 3105 are applicable to temporary special event structures. The provisions of Section 3106 are applicable to outdoor assembly events. Other temporary structures shall comply with the 2021 International Building Code portion of the State Building Code. 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. Pursuant to Connecticut General Statutes section 29-291a as amended by Public Act 21-165, the Connecticut State Fire Prevention Code for oil burners, flammable and combustible liquids, gas equipment and piping, liquefied gas and liquefied natural gas, hazardous chemicals, and processes and activities that occur in the building or structure that are not used to support the building components services and/or systems, and for the purposes of prevention of fire and other related emergencies.

(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 code 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 A minimum clearance of 12 feet (3,658 mm) to all other structures and tents.
- 3. Tents 900 square feet (84 m²) 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 shall be required as set forth in Section 105.5.

(Amd) **3103.5 Use period.** Temporary, air-supported, 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.

(Amd) **3103.6 Construction documents.** A detailed site and floor plan for *tents* or *membrane structures* with an *occupant load* of 50 or more shall be provided with each application for approval. The *tent* or *membrane structure* floor plan shall indicate details

of the *means of egress* facilities, seating capacity, arrangement of the seating and location and type of heating and electrical equipment.

(Add) **3103.6.1 Structural Stability.** Construction documents containing structural stability analysis shall be approved by the *building code official*.

(Amd) **3103.9 Structural stability and anchorage required.** *Tents or membrane structures* and their appurtenances shall be designed and installed to withstand the elements of weather and prevent collapsing. Documentation of structural stability shall be furnished to and approved by the *building code official*.

(Del) **3103.9.1 Tents and membrane structures greater than one story.** Delete section.

(Del) **3103.9.2 Tents and membrane structures greater than 7,500 square feet.** Delete section.

(Del) **3103.9.3 Tents and membrane structures with an occupant load greater than 1,000.** Delete section.

(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.

(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 2021 *International Fire Code* Portion of the Connecticut State 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) **3105.3 Permits.** Permits shall be required as set forth in Section 105.5.

(Amd) **3106.6.2 Generators.** Generators shall be installed not less than 10 feet (3048 mm) from combustible materials, and shall be isolated from the public by physical guard, fence, or enclosure installed not less than 3 feet (914 mm) away from the internal combustion power source.

Exception:

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

(Amd) **3107.12.6 Outdoor cooking.** Outdoor cooking that produces sparks shall not be performed within 20 feet (6096 mm) of a *tent* or *membrane structure*

Exception: As approved by the fire code official.

(Amd) **3107.15.1 Batteries.** Batteries shall be disconnected except where the *fire code official* requires that the batteries remain connected to maintain safety features.

(Amd) **3107.16 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).

CHAPTER 32 HIGH-PILED COMBUSTIBLE STORAGE

(Amd) **3201.1 Scope.** High-Piled combustible storage shall comply with the requirements this Chapter and section 116 for items involving building construction, services and/or systems. Pursuant to Connecticut General Statutes section 29-291a as amended by Public Act 21-165, the Connecticut State Fire Prevention Code shall be applicable for oil burners, flammable and combustible liquids, gas equipment and piping, liquefied gas and liquefied natural gas, hazardous chemicals, and processes and activities that occur in the building or structure that are not used to support the building components services and/or systems, and for the purposes of prevention of fire and other related emergencies. In addition to the requirements of this chapter, the following material-specific requirements shall apply:

1. Aerosols shall be in accordance with Chapter 51.

- 2. Flammable and combustible liquids shall be in accordance with Chapter 57.
- 3. Hazardous materials shall be in accordance with Chapter 50.
- 4. Storage of combustible paper records shall be in accordance with NFPA 13.
- 5. Storage of *combustible fibers* shall be in accordance with Chapter 37.
- 6. General storage of combustible material shall be in accordance with Chapter 3.

(Amd) **3201.2 Permits.** Permits shall be required as set forth in Section 105.5.

CHAPTER 33 FIRE SAFETY DURING CONSTRUCTION AND DEMOLITION

(Add) **3301.3 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

(Amd) **3401.1 Scope.** Tire rebuilding and tire storage shall comply with the requirements this Chapter and section 116 for items involving building construction, services and/or systems. Pursuant to Connecticut General Statutes section 29-291a as amended by Public Act 21-165, the Connecticut State Fire Prevention Code shall be applicable for oil burners, flammable and combustible liquids, gas equipment and piping, liquefied gas and liquefied natural gas, hazardous chemicals, and processes and activities that occur in the building or structure that are not used to support the building components services and/or systems, and for the purposes of prevention of fire and other related emergencies. Tire rebuilding plants, tire storage and tire byproduct facilities shall comply with this chapter, other applicable requirements of this code and NFPA 13. Tire storage in buildings shall also comply with Chapter 32.

(Amd) **3406.1 Required access.** New tire storage yards shall be provided with fire apparatus access roads in accordance with Section 503 and Section 3406.2.

C H Á P T E R 3 5 WELDING AND OTHER HOT WORK

(Amd) **3501.1 Scope.** Welding and allied processes, cutting, open torches, heat treating, power driven fasteners, hot riveting and other *hot work* operations and equipment shall comply with this Chapter, section 116 and NFPA 51B for items involving building construction, services and/or systems. Pursuant to Connecticut General Statutes section 29-291a as amended by PA 21-165, the Connecticut State Fire Prevention Code shall be applicable for oil burners, flammable and combustible liquids, gas equipment and piping, liquefied gas and liquefied natural gas, hazardous chemicals, and processes and activities that occur in the building or structure that are not used to support the building components services and/or systems, and for the purposes of prevention of fire and other related emergencies.

CHAPTER 36 MARINAS

(Amd) **3601.1 Scope.** Marina facilities shall comply with the requirements this Chapter

and section 116 for items involving building construction, services and/or systems. Pursuant to Connecticut General Statutes section 29-291a as amended by Public Act 21-165, the Connecticut State Fire Prevention Code shall be applicable for oil burners, flammable and combustible liquids, gas equipment and piping, liquefied gas and liquefied natural gas, hazardous chemicals, and processes and activities that occur in the building or structure that are not used to support the building components services and/or systems, and for the purposes of prevention of fire and other related emergencies.

(Add) **3601.3 Permits**. Permits shall be required as set forth in Section 105.5.

CHAPTER 37 COMBUSTIBLE FIBERS

(Amd) **3701.1 Scope.** The equipment involving combustible fibersshall comply with the requirements this Chapter and Section 1415.9.3 for items involving building construction, services and/or systems. Pursuant to Connecticut General Statutes section 29-291a as amended by Public Act 21-165, the Connecticut State Fire Prevention Code shall be applicable for oil burners, flammable and combustible liquids, gas equipment and piping, liquefied gas and liquefied natural gas, hazardous chemicals, and processes and activities that occur in the building or structure that are not used to support the building components services and/or systems, and for the purposes of prevention of fire and other related emergencies.

C H A P T E R 38 HIGHER EDUCATION LABORATORIES

(Amd) **3801.1 Scope.** Higher education laboratories complying with the requirements of this chapter shall be permitted to exceed the maximum allowable quantities of hazardous materials in *control areas* set forth in Chapter 50 without requiring classification as a Group H occupancy. Except as specified in this chapter, such laboratories shall comply with all applicable provisions of this code and the 2021 *International Building Code* portion of the State Building Code and section 116 for items involving building construction, services and/or systems. Pursuant to Connecticut General Statutes section 29-291a as amended by Public Act 21-165, the Connecticut State Fire Prevention Code shall be applicable for oil burners, flammable and combustible liquids, gas equipment and piping, liquefied gas and liquefied natural gas, hazardous chemicals, and processes and activities that occur in the building or structure that are not used to support the building components services and/or systems, and for the purposes of prevention of fire and other related emergencies.

(Add) **3801.3 Permits.** Permits shall be required as set forth in Section 105.5.

(Del) 3805 NONSPRINKLERED LABORATORIES Delete section in its entirety.

(Del) 3806 EXISTING SPRINKLERED LABORATORIES Delete section in its entirety.

CHAPTER 39 PROCESSING AND EXTRACTING FACILITIES

(Amd) **3901.1 Scope.** Plant processing or extraction facilities shall comply with the requirements this Chapter, section 116, and the 2021 *International Building Code* portion of the State Building Code for items involving building construction, services and/or systems. Pursuant to Connecticut General Statutes section 29-291a as amended by Public Act 21-165, the Connecticut State Fire Prevention Code shall be applicable for oil burners, flammable and combustible liquids, gas equipment and piping, liquefied gas and liquefied natural gas, hazardous chemicals, and processes and activities that occur in the building or structure that are not used to support the building components services and/or systems, and for the purposes of prevention of fire and other related emergencies. The extraction process includes the act of extraction of the oils and fats by use of a solvent, desolventizing of the raw material, production of the miscella, distillation of the solvent from the miscella and solvent recovery. The use, storage, transfilling and handling of hazardous materials in these facilities shall comply with this chapter, other applicable provisions of this code, the 2021 *International Building Code* portion of the State Building Code and NFPA 36.

(Del) **3901.2 Existing buildings or facilities.** Delete section.

(Amd) **3901.3 Permits.** A permit shall be required as set forth in Section 105.5.

CHAPTER 40 SOTRAGE OF DISTILLED SPIRITS AND WINES

(Amd) **4001.1 Scope.** Storage of distilled spirits and wines in barrels and casks shall comply with the requirements this Chapter in addition to other applicable requirements of this code, and section 116 for items involving building construction, services and/or systems. Pursuant to Connecticut General Statutes section 29-291a as amended by Public Act 21-165, the Connecticut State Fire Prevention Code shall be applicable for oil burners, flammable and combustible liquids, gas equipment and piping, liquefied gas and liquefied natural gas, hazardous chemicals, and processes and activities that occur in the building or structure that are not used to support the building components services and/or

systems, and for the purposes of prevention of fire and other related emergencies.

(Add) 4001.1.2 Permits. A permit shall be required as set forth in Section 105.5.

(Del) Chapter 41 – Reserved

(Add) Chapter 41 Fixed Guideways Transit and Passenger Rail Systems

(Amd) **4001.1 General.** Fixed guideway transit and passenger rail system facilities shall comply with NFPA 130.

(Amd) CHAPTERS 42 through 49 RESERVED

Part V – Hazardous Materials

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

(Amd) **5001.1 Scope.** Prevention, control and mitigation of dangerous conditions related to storage, dispensing, use and handling of hazardous materials shall comply with the requirements this Chapter in addition to other applicable requirements of this code, and Section 1415.9.3 for items involving building construction, services and/or systems. Pursuant to Connecticut General Statutes section 29-291a as amended by PA 21-165, the Connecticut State Fire Prevention Code shall be applicable for oil burners, flammable and combustible liquids, gas equipment and piping, liquefied gas and liquefied natural gas, hazardous chemicals, and processes and activities that occur in the building or structure that are not used to support the building components services and/or systems, and for the purposes of prevention of fire and other related emergencies. Where applicable, NFPA 400 shall also apply.

This chapter shall apply to all hazardous materials, including those materials regulated elsewhere in this code, except that where specific requirements are provided in other chapters, those specific requirements shall apply in accordance with the applicable chapter. Where a material has multiple hazards, all hazards shall be addressed.

Exceptions:

1. In retail or wholesale sales occupancies, medicines, foodstuff, cosmetics, and commercial or institutional products containing not more than 50 percent by volume of water-miscible liquids and with the remainder of the solutions not

being flammable, provided that such materials are packaged in individual containers not exceeding 1.3 gallons (5 L).

- 2. Alcoholic beverages in retail or wholesale sales occupancies providing the liquids are packaged in individual containers not exceeding 1.3 gallons (5 L).
- 3. Application and release of pesticide and agricultural products and materials intended for use in weed abatement, erosion control, soil amendment or similar applications where applied in accordance with the manufacturers' instructions and label directions.
- 4. The off-site transportation of hazardous materials where in accordance with Department of Transportation (DOTn) regulations.
- 5. Building materials not otherwise regulated by this code.
- 6. Refrigeration systems (see Section 605).
- 7. Stationary storage battery systems regulated by Section 1206.2.
- 8. The display, storage, sale or use of fireworks and *explosives* in accordance with Chapter 56.
- 9. *Corrosives* utilized in personal and household products in the manufacturers' original consumer packaging in Group M occupancies.
- 10. The storage of beer, distilled spirits and wines in barrels and casks.
- 11. The use of wall-mounted dispensers containing alcohol-based hand rubs classified as Class I or II liquids where in accordance with Section 5705.5.

12. Specific provisions for flammable liquids in motor fuel-dispensing facilities, repair garages, airports and marinas in Chapter 23.

13. Storage and use of fuel oil in tanks and containers connected to oil-burning equipment. Such storage and use shall be in accordance with Section 605. For abandonment of fuel oil tanks, Chapter 57 applies.

14. Storage and display of aerosol products complying with Chapter 51.

15. Storage and use of *flammable* or *combustible liquids* that do not have a fire point when tested in accordance with ASTM D92, not otherwise regulated by this code.

16. *Flammable* or *combustible liquids* with a *flash point* greater than 95°F (35°C) in a water-miscible solution or dispersion with a water and inert (noncombustible) solids content of more than 80 percent by weight, which do not sustain combustion, not otherwise regulated by this code.

17. Commercial cooking oil storage tank systems located within a building and designed and installed in accordance with Section 607 and NFPA 30.

(Amd) **5001.1.1 Permits.** Permits shall be required as set forth in Section 105.5.

(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) **5003.3 Release of hazardous materials.** See the Regulations of State Agencies of the Department of Energy and Environmental Protection.

(Del) 5003.3.1 Unauthorized discharges. Delete section in its entirety...

(Amd) **5003.9. General safety precautions.** General precautions for the safe storage, handling or care of hazardous materials shall be in accordance with Sections 5003.9.1 through 5003.9.10 and section 29-307a of the Connecticut General Statutes.

CHAPTER 51 AEROSOLS

(Amd) **5101.1 Scope.** The provisions of this chapter, the 2021 *International Building Code* portion of the State Building Code and NFPA 30B shall apply to the manufacturing, storage and display of aerosol products, aerosol cooking spray products and plastic aerosol 3 products as it relates to items involving building construction, services and/or systems. Pursuant to Connecticut General Statutes section 29-291a, as amended by Public Act 21-165 the Connecticut State Fire Prevention Code as applicable for oil burners, flammable and combustible liquids, gas equipment and piping, liquefied gas and liquefied natural gas, hazardous chemicals, and processes and activities that occur in the building or structure that are not used to support the building components services and/or systems, and for the purposes of prevention of fire and other related emergencies. Manufacturing of aerosol products, aerosol cooking spray products and plastic aerosol 3 products using hazardous materials shall also comply with Chapter 50.

CHAPTER 53 COMPRESSED GASES

5301.1 Scope. Storage, use and handling of *compressed gases* in *compressed gas* containers, cylinders, tanks and systems shall comply with this chapter, NFPA 55 and NFPA 400, including those gases regulated elsewhere in this code. as it relates to items involving building construction, services and/or systems. Pursuant to Connecticut General Statutes section 29-291a as amended by Public Act 21-165 the Connecticut State Fire Prevention Code as applicable for oil burners, flammable and combustible liquids, gas equipment and piping, liquefied gas and liquefied natural gas, hazardous chemicals, and processes and activities that occur in the building or structure that are not used to support the building components services and/or systems, and for the purposes of prevention of fire and other related emergencies.

Partially full *compressed gas* containers, cylinders or tanks containing residual gases shall be considered as full for the purposes of the controls required

Liquefied natural gas for use as a vehicular fuel shall also comply with NFPA 52 and NFPA 59A.

Compressed gases classified as hazardous materials shall also comply with Chapter 50 for general requirements and chapters addressing specific hazards, including Chapters

58 (Flammable Gases), 60 (Highly Toxic and Toxic Materials), 63 (Oxidizers, Oxidizing Gases and Oxidizing Cryogenic Fluids) and 64 (Pyrophoric Materials).

Compressed hydrogen (CH₂) shall also comply with the applicable portions of Chapters 23 and 58 of this code, the *International Fuel Gas Code* and NFPA 2.

Cutting and welding gases shall also comply with Chapter 35.

Exceptions:

1. Gases used as refrigerants in refrigeration systems (see Section 608).

2. Compressed natural gas (CNG) for use as a vehicular fuel shall comply with Chapter 23, NFPA 52 and the *International Fuel Gas Code*.

3. Cryogenic fluids shall comply with Chapter 55.

4. LP-gas shall comply with Chapter 61 and the *International Fuel Gas Code*.

(Add) **5301.3 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) **5306.5 Medical gas systems and equipment.** Medical gas systems and equipment shall be installed, tested and *labeled* in accordance with NFPA 99 and the general provisions of this chapter.

CHAPTER 54 CORROSIVE MATERIALS

(Amd) **5401.1 Scope.** The storage and use of *corrosive* materials shall be in accordance with this chapter and NFPA 400 as it relates to items involving building construction, services and/or systems. Pursuant to Connecticut General Statutes section 29-291a as amended by Public Act 21-165 the Connecticut State Fire Prevention Code as applicable for oil burners, flammable and combustible liquids, gas equipment and piping, liquefied gas and liquefied natural gas, hazardous chemicals, and processes and activities that occur in the building or structure that are not used to support the building components services and/or systems, and for the purposes of prevention of fire and other related emergencies.

Compressed gases shall also comply with Chapter 53.

Exceptions:

1. Display and storage in Group M and storage in Group S occupancies complying with Section 5003.11.

2. Stationary storage battery systems in accordance with Section 1206.15.

3. This chapter shall not apply to R-717 (ammonia) where used as a refrigerant in a refrigeration system (see Section 608).

CHAPTER 55 CRYOGENIC MATERIALS

5501.1 Scope. Storage, use and handling of *cryogenic fluids* shall comply with this chapter, NFPA 55 and NFPA 400 as it relates to items involving building construction, services and/or systems. Pursuant to Connecticut General Statutes section 29-291a as amended by Public Act 21-165 the Connecticut State Fire Prevention Code as applicable for oil burners, flammable and combustible liquids, gas equipment and piping, liquefied gas and liquefied natural gas, hazardous chemicals, and processes and activities that occur in the building or structure that are not used to support the building components services and/or systems, and for the purposes of prevention of fire and other related emergencies. *Cryogenic fluids* classified as hazardous materials shall also comply with the general requirements of Chapter 50. Partially full containers containing residual *cryogenic fluids* shall be considered as full for the purposes of the controls required.

Exceptions:

1. Fluids used as refrigerants in refrigeration systems (see Section 608).

2. Liquefied natural gas (LNG), which shall comply with NFPA 59A.

Oxidizing *cryogenic fluids*, including oxygen, shall comply with Chapter 63, as applicable. Flammable *cryogenic fluids*, including hydrogen, methane and carbon monoxide, shall comply with Chapters 23 and 58, as applicable.

Inert *cryogenic fluids*, including argon, helium and nitrogen, shall comply with ANSI/CGA P-18.

(Add) **5501.3 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.

C H A P T E R 56 EXPLOSIVES AND FIREWORKS

(Amd) **5601.1 Scope.** 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.

(Del) 5601.1.1 Explosive material standard. Delete section.

(Del) 5601.1.2 Explosive material terminals. Delete section.

(Amd) **5601.1.3 Sparklers and Fountains.** The possession, storage, handling and use of sparklers and fountains where permitted by sections 29-343 to 29-370, inclusive, of the Connecticut General Statutes and the Department of Emergency Services and Public Protection's regulations shall comply with Section 5809.

(Amd) **5601.1.4 Rocketry.** The storage, handling and use of model and high power rockets shall comply with Section 29-367 of the Connecticut General Statutes and the Department of Emergency Services and Public Protection's regulations pertaining to model rocketry.

(Amd) **5601.1.5 Ammonium nitrate.** The storage, handling and use of ammonium nitrate shall comply with Section 29-349 of the Connecticut General Statutes and the Department of Emergency Services and Public Protection's regulations pertaining to explosives.

(Amd) **5601.2 Permit required.** Permits shall be required as set forth in section 105.5.

(Del) 5601.2.1 Residential uses. Delete section.

(Del) 5601.2.2 Sale and retail display. Delete section.

(Del) 5601.2.3 Permit restrictions. Delete section.

(Del) 5601.2.4 Financial responsibility. Delete section in its entirety.

(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) **5601.8 Establishment of quantity of explosives and distances.** Delete section in its entirety.

(Del) 5603 RECORD KEEPING AND REPORTING. Delete section in its entirety.

(Del) **5604. EXPLOSIVE MATERIALS STORAGE AND HANDLING.** Delete section in its entirety.

(Del) 5605 MANUFACTURE, ASSEMBLY AND TESTING OF EXPLOSIVES, EXPLOSIVE MATERIALS AND FIREWORKS. Delete section in its entirety.

(Del) **5606 SMALL ARMS AMMUMITION AND SMALL ARMS AMMUNITION COMPONENTS.** Delete section in its entirety.

(Del) **5607 BLASTING.** Delete section in its entirety.

(Amd) **5608.1 General.** Outdoor fireworks displays and use of pyrotechnics before a *proximate audience* and pyrotechnic special effects in motion picture, television, theatrical and group entertainment productions shall comply with Sections 29-357 and 29-357a of the Connecticut General Statutes and the Department of Emergency Services and Public Protection's regulations pertaining to explosives and fireworks. (29-357-1b through 29-357-12b inclusive and 29-106 through 20-378 inclusive).

(Del) 5608.2 Permit application. Delete section in its entirety.

(Del) 5608.3 Approved fireworks displays. Delete section.

(Del) 5608.4 Clearance. Delete section.

(Del) 5608.5 Storage of fireworks at display site. Delete section in its entirety.

(Del) 5608.6 Installation of mortars. Delete section.

(Del) 5608.7 Handling. Delete section.

(Del) 5608.8 Fireworks display supervision. Delete section.

(Del) 5608.9 Post fireworks display inspection. Delete section.

(Del) 5608.10 Disposal. Delete section.

(Amd) **5609.1. General.** The retail display and sale of sparklers and fountains shall comply with the applicable requirements of NFPA 1124.

(Add) **5609.1.1** The provisions of NFPA 1124, the 2006, edition are amended for use in Connecticut as follows:

(Amd) NFPA 1124, **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 (102 m³), including packaging. Such storage shall be segregated into areas of 1,200 cubic feet (34 m³) or less, and separated by a minimum of 4 feet (1.22 m) of clear space.

(Amd) NFPA 1124, **7.5.3 Storage Rooms.** Storage rooms containing consumer *fireworks*, regardless of size, in a new or existing permanent store shall be protected with an automatic sprinkler system installed in accordance with NFPA 13, *Standard for the Installation of Sprinkler Systems*, or separated from the retail

sales area by a *fire barrier* having a *fire-resistance* rating of not less than 1 hour. The quantity of *fireworks* permitted in storage shall not exceed 3,600 cubic feet (102 m³), including packaging. Such storage shall be segregated into areas of 1,200 cubic feet (34 m³) or less, separated by a minimum of 4 feet (1.22 m) of clear space.

(Add) **5609.2 Permit required.** Permits for the retail sale of sparklers and fountains shall be required as set forth in Section 105.5.

CHAPTER 57 FLAMMABLE AND COMBUSTIBLE LIQUIDS

(Amd) **5701.1 Scope and application.** Prevention, control and mitigation of dangerous conditions related to storage, use, dispensing, mixing and handling of flammable and combustible liquids shall be in accordance with this chapter, Chapter 50, and NFPA 30. The provisions of this code regulates items involving building construction, services and/or systems. Pursuant to Connecticut General Statutes section 29-291a as amended by Public Act 21-165 the Connecticut State Fire Prevention Code as applicable for oil burners, flammable and combustible liquids, gas equipment and piping, liquefied gas and liquefied natural gas, hazardous chemicals, and processes and activities that occur in the building or structure that are not used to support the building components services and/or systems, and for the purposes of prevention of fire and other related emergencies.

(Del) 5703.6.3.1 Existing Piping. Delete section.

(Del) 5706.3 Well drilling and operating. Delete section in its entirety.

(Del) 5706.6 Tank Vehicles and vehicle operation. Delete section in its entirety.

(Del) **Section 5707 ON-DEMAND MOBILE FUELING OPERATIONS.** Delete section in its entirety.

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

(Amd) **5801.1 Scope.** The storage and use of flammable gases and flammable *cryogenic fluids* shall be in accordance with this chapter, NFPA 2, NFPA 55 and NFPA 400. *Compressed gases* shall also comply with Chapter 53 and *cryogenic fluids* shall also comply with Chapter 55. Flammable *cryogenic fluids* shall comply with Section 5806. Hydrogen motor fuel-dispensing stations and repair garages and their associated above-ground hydrogen storage systems shall also be designed, constructed and maintained in accordance with Chapter 23. The provisions of this code regulates items involving building construction, services and/or systems. Pursuant to Connecticut General Statutes section 29-291a as amended by Public Act 21-165 the Connecticut State Fire Prevention

Code as applicable for oil burners, flammable and combustible liquids, gas equipment and piping, liquefied gas and liquefied natural gas, hazardous chemicals, and processes and activities that occur in the building or structure that are not used to support the building components services and/or systems, and for the purposes of prevention of fire and other related emergencies.

Exceptions:

- 1. Gases used as refrigerants in refrigeration systems (see Section 608).
- 2. Liquefied petroleum gases and natural gases regulated by Chapter 61.

3. Fuel-gas systems and appliances regulated under the *International Fuel Gas Code* other than gaseous hydrogen systems and appliances.

4. Pyrophoric gases in accordance with Chapter 64.

(Add) **5801.3 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.

CHAPTER 59 FLAMMABLE SOLIDS

(Amd) **5901.1 Scope.** The storage and use of flammable solids shall be in accordance with this chapter and NFPA 400. The provisions of this code regulates items involving building construction, services and/or systems. Pursuant to Connecticut General Statutes section 29-291a as amended by Public Act 21-165 the Connecticut State Fire Prevention Code shall be applicable for oil burners, flammable and combustible liquids, gas equipment and piping, liquefied gas and liquefied natural gas, hazardous chemicals, and processes and activities that occur in the building or structure that are not used to support the building components services and/or systems, and for the purposes of prevention of fire and other related emergencies.

CHAPTER 60 HIGHLY TOXIC AND TOXIC MATERIALS

(Amd) **6001.1 Scope.** The storage and use of highly toxic and toxic materials shall comply with this chapter and NFPA 400. *Compressed gases* shall also comply with Chapter 53. The provisions of this code regulates items involving building construction, services and/or systems. Pursuant to Connecticut General Statutes section 29-291a as amended by Public Act 21-165 the Connecticut State Fire Prevention Code shall be applicable for oil burners, flammable and combustible liquids, gas equipment and piping, liquefied gas and liquefied natural gas, hazardous chemicals, and processes and activities that occur in the building or structure that are not used to support the building components services and/or systems. and for the purposes of prevention of fire and other related emergencies.

Exceptions:

1. Display and storage in Group M and storage in Group S occupancies complying with Section 5003.11.

2. Conditions involving pesticides or agricultural products as follows:

2.1. Application and release of pesticide, agricultural products and materials intended for use in weed abatement, erosion control, soil amendment or similar applications when applied in accordance with the manufacturer's instruction and label directions.

2.2. Transportation of pesticides in compliance with the Federal Hazardous Materials Transportation Act and regulations thereunder.

2.3. Storage in *dwellings* or private garages of pesticides registered by the U.S. Environmental Protection Agency to be utilized in and around the home, garden, pool, spa and patio.

C H A P T E R 61 LIQUEFIED PETROLEUM GASES

(Amd) **6101.1 Scope.** Storage, handling and transportation of liquefied petroleum gas (LP-gas) and the installation of LP-gas equipment pertinent to systems for such uses shall comply with this chapter and NFPA 58. Properties of LP-gases shall be determined in accordance with Appendix B of NFPA 58. The provisions of this code regulates items involving building construction, services and/or systems. Pursuant to Connecticut General Statutes section 29-291a as amended by Public Act 21-165 the Connecticut State Fire Prevention Code shall be applicable for oil burners, flammable and combustible liquids, gas equipment and piping, liquefied gas and liquefied natural gas, hazardous chemicals, and processes and activities that occur in the building or structure that are not used to support the building components services and/or systems, and for the purposes of prevention of fire and other related emergencies.

(Amd) **6101.2 Permits.** Permits shall be required as set forth in Sections 105.5. Distributors shall not fill an LP-gas container for which a permit is required unless a permit for installation has been issued for that location by the *fire code official*.

(Add) **6101.4 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) **6106.4 Written emergency plan.** A written emergency response plan is required for industrial plants, bulk plants, and dispensing stations. The facility emergency response plan, when required, shall be in writing and amended as required but at least every two years. Written documentation of the current emergency response plan shall be maintained at the facility and shall be provided upon written request to the local fire marshal and emergency response agencies. The fire safety analysis and special fire

protection provisions referred to in section 6.29 of NFPA 58, shall be incorporated into the emergency response plan as appropriate.

(Add) **6106.5 Identification**. LP-Gas fuel suppliers shall affix and maintain in a legible condition, their firm name(s) and emergency telephone number(s) in a readily visible location on or near LP-Gas supplier-owned Department of Transportation (DOT) and American Society of Mechanical Engineers (ASME) containers installed on a consumer's premises.

(Add) **6106.5.1** The firm name(s) and emergency telephone number(s) on the containers shall be at least one half (1/2) inch high and of contrasting color to the container.

(Add) **6106.5.2** The emergency telephone number(s) shall be staffed 24 hours a day to ensure that the LP-Gas supplier is available in the event of an emergency at the consumer's premises.

(Add) **6106.6 Ownership**. Cylinders, tanks or containers shall be filled, evacuated or transported only by the owner of the cylinder, tank or container or upon the owner's authorization.

(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 and NFPA 58.

CHAPTER 62 ORGANIC PEROXIDES

(Amd) **6201.1 Scope.** The storage and use of organic peroxides shall be in accordance with this chapter, Chapter 50 and NFPA 400. The provisions of this code regulates items involving building construction, services and/or systems. Pursuant to Connecticut General Statutes section 29-291a as amended by Public Act 21-165 the Connecticut State Fire Prevention Code shall be applicable for oil burners, flammable and combustible liquids, gas equipment and piping, liquefied gas and liquefied natural gas, hazardous chemicals, and processes and activities that occur in the building or structure that are not used to support the building components services and/or systems, and for the purposes of prevention of fire and other related emergencies.

Unclassified detonable organic peroxides that are capable of *detonation* in their normal shipping containers under conditions of fire exposure shall be stored in accordance with Chapter 56.

CHAPTER 63 OXIDIZERS, OXIDIZING GASES AND OXIDIZING CRYOGENIC FLUIDS

(Amd) **6301.1 Scope.** The storage and use of oxidizing materials shall be in accordance with this chapter, Chapter 50 and NFPA 400. Oxidizing gases shall also comply with Chapter 53. Oxidizing *cryogenic fluids* shall also comply with Chapter 55. The provisions of this code regulates items involving building construction, services and/or systems. Pursuant to Connecticut General Statutes section 29-291a as amended by Public Act 21-165, the Connecticut State Fire Prevention Code shall be applicable for oil burners, flammable and combustible liquids, gas equipment and piping, liquefied gas and liquefied natural gas, hazardous chemicals, and processes and activities that occur in the building or structure that are not used to support the building components services and/or systems, and for the purposes of prevention of fire and other related emergencies.

Exceptions:

1. Display and storage in Group M and storage in Group S occupancies complying with Section 5003.11.

2. Bulk oxygen systems at industrial and institutional consumer sites shall be in accordance with NFPA 55.

3. Liquid oxygen stored or used in home health care in Group I-1, I-4 and R occupancies in accordance with Section 6306.

CHAPTER 64 PYROPHORIC MATERIALS

(Amd) **6401.1 Scope.** The storage and use of pyrophoric materials shall be in accordance with this chapter and NFPA 400. *Compressed gases* shall also comply with Chapter 53. The provisions of this code regulates items involving building construction, services and/or systems. Pursuant to Connecticut General Statutes section 29-291a as amended by Public Act 21-165, the Connecticut State Fire Prevention Code shall be applicablefor oil burners, flammable and combustible liquids, gas equipment and piping, liquefied gas and liquefied natural gas, hazardous chemicals, and processes and activities that occur in the building or structure that are not used to support the building components services and/or systems, and for the purposes of prevention of fire and other related emergencies.

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 (pyroxylin) as a base, by whatever name known, in the form of blocks, sheets, tubes or fabricated shapes. The provisions of this code regulates items involving building construction, services and/or systems. Pursuant to Connecticut General Statutes section 29-291a as amended by Public Act 21-165, the Connecticut State Fire Prevention Code shall be applicable for oil burners, flammable and combustible liquids, gas equipment and piping, liquefied gas and liquefied natural gas, hazardous chemicals, and processes and activities that occur in the building or structure that are not used to support the building components services and/or

systems, and for the purposes of prevention of fire and other related emergencies. Cellulose nitrate (pyroxylin) motion picture film shall comply with the requirements of Section 306.

CHAPTER 66 UNSTABLE (REACTIVE) MATERIALS

(Amd) **6601.1 Scope.** The storage and use of unstable (reactive) materials shall be in accordance with this chapter and NFPA 400. The provisions of this code regulates items involving building construction, services and/or systems. Pursuant to Connecticut General Statutes section 29-291a as amended by Public Act 21-165, the Connecticut State Fire Prevention Code shall be applicable for oil burners, flammable and combustible liquids, gas equipment and piping, liquefied gas and liquefied natural gas, hazardous chemicals, and processes and activities that occur in the building or structure that are not used to support the building components services and/or systems, and for the purposes of prevention of fire and other related emergencies.

Compressed gases shall also comply with Chapter 53.

Exceptions:

1. Display and storage in Group M and storage in Group S occupancies complying with Section 5003.11.

2. Detonable unstable (reactive) materials shall be stored in accordance with Chapter 56.

CHAPTER 67 WATER-REACTIVE SOLIDS AND LIQUIDS

(Amd) **6701.1 Scope.** The storage and use of water-reactive solids and liquids shall be in accordance with this chapter and NFPA 400. The provisions of this code regulates items involving building construction, services and/or systems. Pursuant to Connecticut General Statutes section 29-291a as amended by Public Act 21-165, the Connecticut State Fire Prevention Code shall be applicable for oil burners, flammable and combustible liquids, gas equipment and piping, liquefied gas and liquefied natural gas, hazardous chemicals, and processes and activities that occur in the building or structure that are not used to support the building components services and/or systems, and for the purposes of prevention of fire and other related emergencies.

Exceptions:

1. Display and storage in Group M and storage in Group S occupancies complying with Section 5003.11.

2. Detonable water-reactive solids and liquids shall be stored in accordance with Chapter 56.

CHAPTER 80 REFERENCED STANDARDS

(Add) **80.1 General**. When a requirement differs between this code and a referenced code or standard, the requirement of this code shall apply. Where the extent 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 that are in the referenced code or standard. The documents or portions thereof listed in Chapter 80 as referenced, except as amended, shall be considered part of the requirements of this code to the extent called for by this code.

(Amd) NFPA

National Fire Protection Association 1 Batterymarch Park Quincy, MA 02169-7471

02—19: Hydrogen Technologies Code

1206.3, 1206.4, 2309.3.1.1, 2309.3.1.2, 2309.6, 2311.8, 2311.8.2, 2311.8.10, 2311.8.11, 5301.1, 5801.1

04—21: Standard for Integrated Fire Protection and Life Safety System Testing 901.6.2.1, 901.6.2.2

10-21: Standard for Portable Fire Extinguishers

Table 901.6.1, 906.2, Table 906.3(1), Table 906.3(2), 906.3.2, 906.3.4, 3006.3

- 11—16: Standard for Low-, Medium-, and High-expansion Foam 904.7, 5704.2.9.2.2
- 12—18: Standard on Carbon Dioxide Extinguishing Systems Table 901.6.1, 904.8, 904.12, 1207.5.5
- **12A—18: Standard on Halon 1301 Fire Extinguishing Systems** Table 901.6.1, 904.9

13—19: Standard for the Installation of Sprinkler Systems

903.3.1.1, 903.3.2, 903.3.8.2, 903.3.8.5, 904.13, 905.3.4, 907.6.4, 914.3.2, 1019.3, 1206.3.5.1, 3201.1, 3204.2, 3205.5, Table 3206.2, 3206.4.1, 3206.10, 3207.2, 3207.2.1, 3208.2.2, 3208.2.2.1, 3208.4, 3210.1, 3401.1, 5104.1, 5104.1.1, 5106.5.7, 5704.3.3.9, Table 5704.3.6.3(7), 5704.3.7.5.1, 5704.3.8.4

13D—19: Standard for the Installation of Sprinkler Systems in One- and Two-family Dwellings and Manufactured Homes

903.3.1.3

13R—19: Standard for the Installation of Sprinkler Systems in Low-rise Residential Occupancies

903.3.1.2, 903.3.5.2, 903.4

- 14—19: Standard for the Installation of Standpipe and Hose Systems 905.2, 905.3.4, 905.4.2, 905.6.2, 905.8
- 15—17: Standard for Water Spray Fixed Systems for Fire Protection 1207.5.5, 5704.2.9.2.3

16—19: Standard for the Installation of Foam-water Sprinkler and Foam-water Spray Systems

904.7, 904.13

17—20: Standard for Dry Chemical Extinguishing Systems Table 901.6.1, 904.6, 904.13

17A—20: Standard for Wet Chemical Extinguishing Systems Table 901.6.1, 904.5, 904.13

- **20—19: Standard for the Installation of Stationary Pumps for Fire Protection** 913.1, 913.2, 913.5.1
- 22—18: Standard for Water Tanks for Private Fire Protection 507.2.2

24—19: Standard for Installation of Private Fire Service Mains and Their Appurtenances

507.2.1, 2809.5

25—20: Standard for the Inspection, Testing and Maintenance of Water-based Fire Protection Systems

507.5.3, Table 901.6.1, 904.7.1, 912.7, 913.5

30—21: Flammable and Combustible Liquids Code

607.1, 5001.1, 5701.2, 5703.6.2, 5703.6.2.1, 5704.2.7, 5704.2.7.1, 5704.2.7.2, 5704.2.7.3.2, 5704.2.7.4, 5704.2.7.6, 5704.2.7.7, 5704.2.7.8, 5704.2.7.9, 5704.2.9.3, 5704.2.9.4, 5704.2.9.6.1.1, 5704.2.9.6.1.2, 5704.2.9.6.1.3, 5704.2.9.6.1.4, 5704.2.9.6.1.5, 5704.2.9.6.2, 5704.2.9.7.3, 5704.2.10.2, 5704.2.11.3, 5704.2.11.4.2, 5704.2.12.1, 5704.3.1, 5704.3.6, Table 5704.3.6.3(1), Table 5704.3.6.3(2), Table 5704.3.6.3(3), 5704.3.7.2.3, 5704.3.8.4, 5706.8.3

30A—21: Code for Motor Fuel-dispensing Facilities and Repair Garages 2301.4, 2301.5, 2301.6, 2306.6.3, 2310.1

30B—19: Code for the Manufacture and Storage of Aerosol Products

5101.1, 5103.1, 5104.1, Table 5104.3.1, Table 5104.3.2, Table 5104.3.2.2, 5104.3.3, 5104.4.1, 5104.5.2, 5104.6, 5104.8.2, 5106.2.2, 5106.2.4, 5106.3.2, Table 5106.4, 5106.5.1, 5106.5.6, 5107.1

31—20: Standard for the Installation of Oil-burning Equipment 605.1.6, 605.4.1, 605.4.3

32—16: Standard for Dry Cleaning Plants

2107.1, 2107.3

33—18: Standard for Spray Application Using Flammable or Combustible Materials 2403.3

34—18: Standard for Dipping, Coating and Printing Processes Using Flammable or Combustible Liquids

2405.3, 2405.4.1.1

35—16: Standard for the Manufacture of Organic Coatings 2901.3, 2905.4

- **36—21; Standard for Solvent Extraction Plants** 3909.1
- 40—19: Standard for the Storage and Handling of Cellulose Nitrate Film 306.2
- 45—19: Standard on Fire Protection for Laboratories Using Chemicals 3803.1.5, 3804.1.1.7, 3805.2.1, 3805.2.2

51—18: Standard for the Design and Installation of Oxygen-fuel Gas Systems for Welding, Cutting and Allied Processes

3501.5, 3507.1, 3509.1

51B—19: Standard for Fire Prevention During Welding, Cutting, and Other Hot Work

3501.1

52—19: Vehicular Gaseous Fuel System Code

319.9.2, 5301.1

54—21: National Fuel Gas Code 102.14,

55—19: Compressed Gases and Cryogenic Fluids Code

3508.1, 5301.1, 5307.4.2, 5501.1, 5801.1, 6301.1

56—20: Standard for Fire and Explosion Prevention during Cleaning and Purging of Flammable Gas Piping Systems

3307.2.1

58—20: Liquefied Petroleum Gas Code

319.8.3, 603.4.2.1.1, 2311.5, 3903.6, 6101.1, 6103.1, 6103.2.1, 6103.2.1.2, 6103.2.1.7, 6103.2.2, 6104.1, 6104.3.2, 6104.4, 6105.2, 6106.2, 6106.3, 6107.2, 6107.4, 6108.1, 6108.2, 6109.11.2, 6111.3

59A—19: Standard for the Production, Storage and Handling of Liquefied Natural Gas (LNG)

5301.1, 5501.1

61—20: Standard for the Prevention of Fires and Dust Explosions in Agricultural and Food Processing Facilities

Table 2205.1

68—13: Standard on Explosion Protection by Deflagration Venting

911.1, 911.4, Table 2205.1

69—19: Standard on Explosion Prevention Systems

911.1, 911.3, Table 2205.1

70-20: National Electrical Code -- as AMENED by the State Building Code

309.2, 603.1, 603.1.1, 603.2.1, 603.4, 603.4.1, 603.5, 603.8, 605.1.2, 605.1.6, 605.6.2, 607.6, 607.7, 608.17, 608.18, 904.3.1, 907.6.1, 909.12.2, 909.16.3, 910.4.6, 1006.2.2.4, 1010.2.9.2, 1201.2, 1203.1.3, 1205.1, 1206.4, 1206.14, 1206.3, 1207.4.1, 1207.4.2, 1207.4.8, 1207.5.3, 1207.10.6, 1207.10.7.4, 1207,11.5, 1207.11.10, 2006.3.4, 2104.2.3, 2108.2, 2203.4.1, 2203.5, Table 2205.1, 2301.5, 2305.4, 2308.8.1.2.4, 2309.2.3, 2311.3.1, 2311.8.10, 2403.2.1, 2403.2.1.1, 2403.2.1.4, 2403.2.5, 2404.6.1.2.2, 2404.9.4, 2504.5, 2603.2.1, 2703.7.1, 2703.7.2, 2703.7.3, 2803.4, 2904.1, 3103.12.6.1, 3106.6, 3107.12.7, 3305.7, 3506.4, 4003.3.3, 4003.3.4, 5003.8.7.1, 5003.9.4, 5303.7.6, 5303.8, 5303.16.11, 5303.16.14, 5503.6, 5503.6.2, 5703.1, Table 5703.1.1, 5703.1.3, 5704.2.8.12, 5704.2.8.17, 5706.2.8, 5803.1.5, 5803.1.5.1, 5807.1.10, 5906.5.5, 5906.5.6, 6109.15.1

72—19: National Fire Alarm and Signaling Code

508.1.6, Table 901.6.1, 903.4.1, 904.3.5, 907.1.2, 907.2, 907.2.6, 907.2.9.3, 907.2.11, 907.2.13.2, 907.3, 907.3.3, 907.3.4, 907.5.2.1.2, 907.5.2.1.3, 907.5.2.1.3.2, 907.5.2.2, 907.5.2.2.5, 907.6, 907.6.1, 907.6.2, 907.6.6, 907.7, 907.7.1, 907.7.2, 907.8, 907.8.2, 907.8.4, 917.1, 1103.3.2, 1203.2.4, 1207.5.4, 1207.6.1.2.3, 1207.6.1.2.4, Table 1207.7, 2810.11

76—16: Standard for Fire Protection of Telecommunications Facilities

1207.1.2.1, 1207.2.1, 1207.3.1, 1207.3.7.1, 1207.4.1, 1207.5.1, 1207.5.2, 1207.5.3, 1207.5.5, Table 1207.6, 1207.6.2.3, Table 1207.7

77—14: Recommended Practice for Static Electricity

Table 2205.1

- 80—19: Standard for Fire Doors and Other Opening Protectives 705.2, 706.1, 1010.3.3, 1032.2.2
- 85—19: Boiler and Combustion System Hazards Code Table 2205.1
- 86—19: Standard for Ovens and Furnaces 3001.1
- 92—18: Standard for Smoke Control Systems 909.7, 909.8

96—20: Standard for Ventilation Control and Fire Protection of Commercial Cooking Operations

606.3, 904.13

99—21: Health Care Facilities Code

603.1.2, 603.5.1.1, 609.1, 1105.11.1, 1105.11.2, 1203.4.1, 1203.5.1, 5003.7.4, 5306.4, 5306.5

101—21: Life Safety Code -- as AMENDED by Part IV of this Code. 1030.6.2

- **105—19: Standard for Smoke Door Assemblies and Other Opening Protectives** 705.2, 706.1, 909.20.4.1
- **110—19: Standard for Emergency and Standby Power Systems** 913.5.2, 913.5.3, 1203.1.3, 1203.4, 1203.5

111—19: Standard on Stored Electrical Energy Emergency and Standby Power Systems

1203.1.3, 1203.4, 1203.5

120—20: Standard for Fire Prevention and Control in Coal Mines Table 2205.1

130 –20: Standard for fixed Guideway Transit and Passenger Rail Systems. 400.1

- **160—21: Standard for the Use of Flame Effects Before an Audience** 308.3.2
- **170—18: Standard for Fire Safety and Emergency Symbols** 1025.2.6.1

204—18: Standard for Smoke and Heat Venting Table 901.6.1, 910.5.1, 910.5.2

211—20: Standard for Chimneys, Fireplaces, Vents and Solid Fuel-burning Appliances

603.2

232—19: Standard for Fire Protection of Records

3210.1.1

241—19: Standard for Safeguarding Construction, Alteration and Demolition Operations

3301.1, 3308.2

253—19: Standard Method of Test for Critical Radiant Flux of Floor Covering Systems Using a Radiant Heat Energy Source

804.3.1, 804.3.2, 804.4

260—19: Methods of Tests and Classification System for Cigarette Ignition Resistance of Components of Upholstered Furniture

805.1.1.1, 805.2.1.1, 805.3.1.1, 805.4.1.1

261—18: Standard Method of Test for Determining Resistance of Mock-up Upholstered Furniture Material Assemblies to Ignition by Smoldering Cigarettes 805.2.1.1, 805.3.1.1, 805.4.1.1, 805.1.1.1

265—19: Standard Methods of Fire Tests for Evaluating Room Fire Growth Contribution of Textile Wall Coverings in Full Height Panels and Walls

803.5.1, 803.5.1.1

286—19: Standard Methods of Fire Tests for Evaluating Contribution of Wall and Ceiling Interior Finish to Room Fire Growth

803.1, 803.1.1, 803.1.1.1, 803.3, 803.12, 803.13, 804.1.1, 804.2.4

289—19: Standard Method of Fire Test for Individual Fuel Packages 807.3, 807.4.1, 807.5.1.1, 808.3

- **303—21: Fire Protection Standard for Marinas and Boatyards** 3603.5, 3603.6, 3604.2
- **318—18: Standard for the Protection of Semiconductor Fabrication Facilities** 2703.16

326—20: Standard for the Safeguarding of Tanks and Containers for Entry, Cleaning or Repair

3510.1

- 385—17: Standard for Tank Vehicles for Flammable and Combustible Liquids 5706.5.4.5, 5706.6, 5706.6.1, 5707.2
- 400—19: Hazardous Materials Code

5601.1.5, Table 6303.1.4, 6304.1.2, Table 6304.1.5(1), Table 6304.1.5(2), 6404.1. 6601.1, 6701.1

- 407—17: Standard for Aircraft Fuel Servicing 2006.2, 2006.3
- **409—16: Standard for Aircraft Hangars** 914.8.3, Table 914.8.3, 914.8.3.1, 914.8.6
- 410—20: Standard on Aircraft Maintenance

2004.7

415—20: Standard on Airport Terminal Buildings, Fueling Ramp Drainage, and Loading Walkways

2001.2

484—19: Standard for Combustible Metals

320.3,4, 320.6, Table 2205.1

495—18: Explosive Materials Code

202, 911.1, 911.5, 5601.1.1, 5601.1.5, 5604.2, 5604.6.2, 5604.6.3, 5604.7.1, 5605.1, 5605.2.3, 5606.1, 5606.5.2.1, 5605.2.3, 5607.1, 5607.9, 5607.11, 5607.15

498—18: Standard for Safe Havens and Interchange Lots for Vehicles Transporting Explosives

5601.1.2

502—20 Standard for Road Tunnels, Bridges, and Other Limited Access Highways. 403.10.6

505—18: Fire Safety Standard for Powered Industrial Trucks, Including Type Designations, Areas of Use, Maintenance and Operation

309.2, 4003.3.3

652—19: The Fundamentals of Combustible Dust

320.3.5, 2203.4.8, 2203.5, 2204.1, 2204.2, 2205.1.1

654—20: Standard for Prevention of Fire and Dust Explosions from the Manufacturing, Processing and Handling of Combustible Particulate Solids 320.3.5, 2203.1, 2203.5, Table 2205.1

655—17: Standard for the Prevention of Sulfur Fires and Explosions Table 2205.1

664—20: Standard for the Prevention of Fires and Explosions in Wood Processing and Woodworking Facilities

2203.1, 2203.5, Table 2205.1, 2805.3

701—19: Standard Methods of Fire Tests for Flame-propagation of Textiles and Films

807.3, 807.4.1, 807.5.1.2, 2603.5, 3104.2

703—21: Standard for Fire Retardant-Wood and Fire-Retardant Coatings for Building Materials

803.4

704—17: Standard System for Identification of the Hazards of Materials for Emergency Response

202, 608.8, 5003.2.2.2, 5003.5, 5003.10.2, 5005.1.10, 5005.1.12, 5005.2.1.1, 5005.4.4, 5503.4.1, 5704.2.3.2

720—15: Standard for the Installation of Carbon Monoxide (CO) Detection and Warning Equipment

915.5.1, 915.5.2, 915.6

- **750—19: Standard on Water Mist Fire Protection Systems** 202, Table 901.6.1, 904.11.1.1, 904.13, 1207.5.5
- **780—17: Standard for the Installation of Lightning Protection Systems** 4003.4
- **853—20: Installation of Stationary Fuel Cell Power Systems** 1206.3, 1206.4, 1206.6.2, 1206.11, 1206.12
- 855—20: Standard for the Installation of Stationary Energy Storage Systems.
- 914—19: Code for Fire Protection of Historic Structures
- 1122—18: Code for Model Rocketry

5601.1.4

1123—18: Code for Fireworks Display 202, 5604.2, 5608.1, 5608.2.2, 5608.5, 5608.6 1124—06: Code for the Manufacture, Transportation, Storage and Retail Sales of Fireworks and Pyrotechnic Articles -- as AMMENDED by Section 5609.1.2 of this Code

202, 5601.1.3, 5604.2, 5605.1, 5605.3, 5605.4, 5605.5, 5609.1

1125—17: Code for the Manufacture of Model Rocket and High Power Rocket Motors

5601.1.4

- **1126—21: Standard for the Use of Pyrotechnics Before a Proximate Audience** 5604.2, 5605.1, 5608.1, 5608.2, 5608.4, 5608.5
- **1127—18: Code for High Power Rocketry** 5601.1.4

1221—19: Standard for the Installation, Maintenance and Use of Emergency Services Communications Systems

510.4.2, 510.5

- **2001—18: Standard on Clean Agent Fire Extinguishing Systems** Table 901.6.1, 904.10, 1207.5.5
- 2010—20: Standard for Fixed Aerosol Fire-extinguishing Systems Table 901.6.1, 904.12, 1207.5.5

State of Connecticut

Department of Emergency Services and Public Protection 1111 Country Club Road Middletown, CT

Regulations of Connecticut State Agencies, §29-357-1b through §29-357-12b inclusive; Connecticut Fireworks and Special Effects Code.

Regulations of Connecticut State Agencies, §29-349-106 through §29-378 inclusive; Connecticut Storage, Transportation and Use, of Explosives and Blasting Agents Code.

State of Connecticut

Department of Administrative Services 450 Columbus Blvd. Hartford, CT 06103

State Fire Prevention Code - 2020

The Connecticut State Fire Prevention Code adopted pursuant to Connecticut General statutes 29-291a.

Building Code - 2020

The Connecticut State Building Code adopted pursuant to Connecticut General Statutes 29-252.

Safety Code for Elevators and Escalators - 2018

The Connecticut State of Connecticut Regulations of the Department of Administrative Services Concerning Safety Code for Elevators and Escalators RSD 29-192-1e through 29-192-16e inclusive. Adopted pursuant to Connecticut General Statutes 29-192.

1103.3

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

This Appendix is adopted by the State of Connecticut as guidance.

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

(Del) Delete Appendix.

(DEL) APPENDIX D FIRE APPARATUS ACCESS ROADS

(ADD) APPENDIX D FIRE APPARATUS ACCESS

D1.2 Fire Apparatus Access.

D1.2.1 Fire department access and fire apparatus access roads shall be provided and maintained in accordance with Section 18.2

D1.2.2* Access to Structures or Areas.

D1.2.2.1 Access Box(es). The AHJ shall have the authority to require an access box(es) to be installed in an accessible location where access to or within a structure or area is difficult because of security. The access box(es) shall be of an approved type listed in accordance with UL 1037.

D1.2.2.2 Access to Gated Subdivisions or Developments. The AHJ shall have the authority to require fire department access be provided to gated subdivisions or developments through the use of an approved device or system.

D1.2.2.3 Access Maintenance. The owner or occupant of a structure or area, with required fire department access as specified in 18.2.2.1 or 18.2.2.2, shall notify the AHJ when the access is modified in a manner that could prevent fire department access.

D1.2.3 Fire Apparatus Access Roads.

D1.2.3.1 Required Access.

D1.2.3.1.1 Approved fire apparatus access roads shall be provided for every facility, building, or portion of a building hereafter constructed or relocated.

D1.2.3.1.2 Fire apparatus access roads shall consist of roadways, fire lanes, parking lot lanes, or a combination thereof.

D1.2.3.1.3* The provisions of 18.2.3.1 through 18.2.3.2.2.1 shall be permitted to be modified by the AHJ where any of the following conditions exists:

- (1) Agricultural buildings having an area not exceeding 400 ft2
- (2) Sheds and other detached buildings having an area not exceeding 400 ft2

D1.2.3.1.4 When fire apparatus access roads cannot be installed due to location on property, topography, waterways, nonnegotiable grades, or other similar conditions, the AHJ shall be authorized to require additional fire protection features.

D1.2.3.2 Access to Building.

D1.2.3.2.1 A fire apparatus access road shall extend to within 50 ft (15 m) of at least one exterior door that can be opened from the outside and that provides access to the interior of the building.

D1.2.3.2.1.1 Where a one- or two-family dwelling, or townhouse, is protected with an approved automatic sprinkler system that is installed in accordance with Section 13.3, the distance in 18.2.3.2.1 shall be permitted to be increased to 150 ft (46 m).

D1.2.3.2.2 Fire apparatus access roads shall be provided such that any portion of the facility or any portion of an exterior wall of the first story of the building is located not more than 150 ft (46 m) from fire apparatus access roads as measured by an approved route around the exterior of the building or facility.

D1.2.3.2.2.1 Where buildings are protected throughout with an approved automatic sprinkler system that is installed in accordance with NFPA 13, NFPA 13R, or NFPA 13D, the distance in 18.2.3.2.2 shall be permitted to be increased to 450 ft (137 m).

D1.2.3.3* Multiple Access Roads. More than one fire apparatus access road shall be provided when it is determined by the AHJ that access by a single road could be impaired by vehicle congestion, condition of terrain, climate conditions, or other factors that could limit access.

D1.2.3.5 Specifications.

D1.2.3.5.1 Dimensions.

D1.2.3.5.1.1* Fire apparatus access roads shall have an unobstructed width of not less than 20 ft (6.1 m).

D1.2.3.5.1.1.1* Where approved by the AHJ, the width of fire apparatus access roads shall be permitted to be less than the minimum specified in 18.2.3.5.1.1.

D1.2.3.5.1.1.2 The width of fire apparatus access roads shall be increased when the minimum width specified in 18.2.3.5.1.1 is not adequate to accommodate fire apparatus.

D1.2.3.5.1.2 Fire apparatus access roads shall have an unobstructed vertical clearance of not less than 13 ft 6 in. (4.1 m). **18.2.3.5.1.2.1** Vertical clearance shall be permitted to be reduced where approved by the AHJ, provided such reduction does not impair access by fire apparatus, and approved signs are installed and maintained indicating the established vertical clearance when approved.

D1.2.3.5.1.2.2 Vertical clearances shall be increased when vertical clearances are not adequate to accommodate fire apparatus.

D1.2.3.5.2* Surface. Fire apparatus access roads shall be designed and maintained to support the imposed loads of fire apparatus and shall be provided with an all-weather driving surface.

D1.2.3.5.3 Turning Radius.

D1.2.3.5.3.1 The turning radius of a fire apparatus access road shall be as approved by the AHJ.

D1.2.3.5.3.2 Turns in fire apparatus access roads shall maintain the minimum road width.

D1.2.3.5.3.3 Fire apparatus access roads connecting to roadways shall be provided with curb cuts extending at least 2 ft. (0.61 m) beyond each edge of the fire apparatus access road.

D1.2.3.5.4 Dead Ends. Dead-end fire apparatus access roads in excess of 150 ft (46 m) in length shall be provided with approved provisions for the fire apparatus to turn around.

D1.2.3.5.5 Bridges.

D1.2.3.5.5.1 When a bridge is required to be used as part of a fire apparatus access road, it shall be constructed and maintained in accordance with nationally recognized standards.

D1.2.3.5.5.2 The bridge shall be designed for a live load sufficient to carry the imposed loads of fire apparatus.

D1.2.3.5.5.3 Vehicle load limits shall be posted at both entrances to bridges where required by the AHJ.

D1.2.3.5.6 Grade.

D1.2.3.5.6.1 The gradient for a fire apparatus access road shall not exceed the design limitations of the fire apparatus of the fire department and shall be subject to approval by the AHJ.

D1.2.3.5.6.2* The angle of approach and departure for any means of fire apparatus access road shall not exceed 1 ft drop in 20 ft (0.3 m drop in 6 m) or the design limitations of the fire apparatus of the fire department, and shall be subject to approval by the AHJ.

D1.2.3.5.7 Traffic Calming Devices. The design and use of traffic calming devices shall be approved by the AHJ.

D1.2.3.6 Marking of Fire Apparatus Access Road.

D1.2.3.6.1 Where required by the AHJ, approved signs, approved roadway surface markings, or other approved notices shall be provided and maintained to identify fire apparatus access roads or to prohibit the obstruction thereof or both.
D1.2.3.6.2 A marked fire apparatus access road shall also be known as a fire lane.

D1.2.4* Obstruction and Control of Fire Apparatus Access Road.

D1.2.4.1 General.

D1.2.4.1.1 The required width of a fire apparatus access road shall not be obstructed in any manner, including by the parking of vehicles.

D1.2.4.1.2 Minimum required widths and clearances established under 18.2.3.5 shall be maintained at all times.

D1.2.4.1.3* Facilities and structures shall be maintained in a manner that does not impair or impede accessibility for fire department operations.

D1.2.4.1.4 Entrances to fire apparatus access roads that have been closed with gates and barriers in accordance with 18.2.4.2.1 shall not be obstructed by parked vehicles.

D1.2.4.2 Closure of Accessways.

D1.2.4.2.1 The AHJ shall be authorized to require the installation and maintenance of gates or other approved barricades across roads, trails, or other accessways not including public streets, alleys, or highways.

D1.2.4.2.2 Where required, gates and barricades shall be secured in an approved manner.

D1.2.4.2.3 Roads, trails, and other accessways that have been closed and obstructed in the manner prescribed by 18.2.4.2.1 shall not be trespassed upon or used unless authorized by the owner and the AHJ.

D1.2.4.2.4 Public officers acting within their scope of duty shall be permitted to access restricted property identified in 18.2.4.2.1.

D1.2.4.2.5 Locks, gates, doors, barricades, chains, enclosures, signs, tags, or seals that have been installed by the fire department or by its order or under its control shall not be removed, unlocked, destroyed, tampered with, or otherwise vandalized in any manner.

D1.2.4.2.6 Gates shall comply with 18.2.4.2.6.1 and 18.2.4.2.6.2.

D1.2.4.2.6.1 Electric gate operators and systems, where provided, shall be installed, maintained, listed, and labeled in accordance with UL 325, *Door, Drapery, Gate, Louver, and Window Operators and Systems*.

D1.2.4.2.6.2 Gates intended for automatic operation shall be designed, constructed, installed, and maintained to comply with ASTM F2200, *Standard Specification for Automated Vehicular Gate Construction*.

D1.2.4.2.7 When authorized by the AHJ, public officers acting within their scope of duty shall be permitted to obtain access through secured means identified in 18.2.4.2.1.

A P P E N D I X E HAZARD CATEGORIES

This Appendix is adopted by the State of Connecticut as guidance.

A P P E N D I X F HAZARD RANKING

This Appendix is adopted by the State of Connecticut as guidance.

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

This Appendix is adopted by the State of Connecticut as guidance.

APPENDIX H

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

This Appendix is adopted by the State of Connecticut.

(Add) Section H100 Reference to Connecticut General Statutes

(Add) **H100.1 Manufacturing establishments.** Manufacturing facilities as defined the section 29-307a of the Connecticut General Statutes shall comply with the reporting requirements found in Connecticut General Statutes 29-307a.

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

This Appendix is adopted by the State of Connecticut.

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

This Appendix is adopted by the State of Connecticut as guidance.

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.

A P P E N D I X N INDOOR TRADE SHOWS AND EXHIBITIONS

This Appendix is adopted by the State of Connecticut as amended.

(Amd) **N106.1 Automatic sprinkler systems.** An *approved automatic sprinkler system* in accordance with Section 903.3.1.1 of this code shall be provided in covered booths exceeding 400 square feet (9.3 m2) in floor area per level.

(Amd) **N106.2 Fire alarm and detection.** Each covered booth with a floor area exceeding 400 square feet (11.1 m2) on any level shall be provided with an *approved fire alarm system* in accordance with Section 907.2.

PART IV—Existing Buildings/Occupancies

Amendements to the 2021 NFPA 101[®], Life Safety Code

CHAPTER 1*

ADMINISTRATION

(Del) **1.1.1** Delete section.

(Del) 1.1.6 Injuries from Falls. Delete section.

(Amd) **1.3.1** 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 January 1, 2006.

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.

Where the wording of a section in NFPA 101® *Life Safety Code*® says 'Where required by Chapters 11 through 43' it shall be read as 'Where required by Chapters 11 through 42'.

(Del) **1.4.3* Equivalent Compliance.** Delete Section See part I for modifications

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, shall be considered part of

the requirements of this code to the extent called for by this code. In addition to the referenced publications found in Chapter 2, the following are added.

NFPA 70 2020 edition as amended by the State Building Code.

415 2021 ed

731 2020 ed

CHAPTER 3 DEFINITIONS

(Amd) **3.3.37* 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) **3.3.66* Dormitory.** A building or a space in a building in which group sleeping accommodations are provided for more than 16 persons who are not members of the same family in one room, or a series of closely associated rooms, under joint occupancy and single management, with or without meals, and with or without individual cooking facilities.

(Amd) **3.3.68 Dwelling Unit.** One or more rooms arranged for the use of one or more individuals living together, providing complete, independent living facilities, including permanent provisions for living, sleeping, eating, cooking and sanitation.

(Amd) **3.3.68.1_One- and Two-Family Dwelling Unit.** A building that contains not more than two dwelling units, 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) **3.3.68.2. One Family Dwelling Unit.** A building that consist solely of a single dwelling unit with independent permanent cooking and bathroom facilities which the dwelling unit is occupied by members of a single family with not more than six (6) outsiders, if any, accommodated in rented rooms.

(Amd) **3.3.68.3_Two-Family Dwelling Unit.** A building that consists solely of two dwelling units with permanent cooking and bathroom facilities and 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) **3.3.99* Fire Code.** The Connecticut State Fire Prevention Code adopted pursuant to Connecticut General Statutes 29-291a.

(Amd) **3.3.198.3** * **Business Occupancy.** An occupancy used for the transaction of business other than mercantile. A business occupancy shall also include a training and skill development not in a school or academic program.

(Amd) **3.3.198.5*** **Detention and Correctional Occupancy**. An occupancy, other than one whose primary intended use is healthcare, ambulatory health care, or residential board and care, used to lawfully incarcerate or lawfully detain 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) **3.3.198.6* Educational Occupancy.** An occupancy used for educational purposes through the twelfth grade by six or more persons for four or more hours per day or more than 12 hours per week. Training and skill development not within a school or academic program shall be classified as business occupancies.

(Amd) **3.3.254* 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.

Add) **3.4.2 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 dwelling.

(Add) **3.4.3 Group B College** A building, structure, or portion thereof that is of a Group B Business occupancy classification and associated with a facility of higher education above the twelfth grade. This definition does not include training or skill development facilities.

(Add) **3.4.4 Group B Medical Occupancies** Group B medical and dental occupancies that provide services or treatment for four or more patients who may simultaneously be rendered incapable of taking action for self-preservation under emergency conditions. The occupancy shall include, but not be limited to, the following:

Outpatient clinics with general anesthesia or life-support equipment;

Dental centers providing treatment under general anesthesia;

One-day surgical centers;

Physician's offices providing treatment under general anesthesia.

Facilities such as the above that do not provide general anesthesia or life-support equipment simultaneously to four or more patients shall be classified as Group B Business 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.

(Amd) **3.4.6 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 1.3G fireworks or 1.4G fireworks. See also section 29-356 of the Connecticut General Statutes. Sparklers and Fountains. See definition under Sparklers and Fountains.

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 DOT.

Fireworks, 1.4G. Small fireworks devices containing restricted amounts of pyrotechnic composition designed primarily to produce visible or audible effects by combustion or *deflagration* that complies 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.

(Amd) **3.4.6.1 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) **3.4.7 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.

CHAPTER 4

GENERAL

(Amd) **4.4.1 Options**. Life safety meting the goals and objectives of Sections 4.1 and 4.2 shall be provided in accordance with the Prescriptive –based provisions per 4.4.2.

(Del) **4.4.3** Delete section.

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) CHAPTER 5 PERFORMANCE-BASED OPTION

(Del) Delete chapter in its entirety.

CHAPTER 6 CLASSIFICATION OF OCCUPANCY AND HAZARD OF CONTENTS

(Amd) **6.1.3.1* Educational Occupancy.** An occupancy used for educational purposes through the twelfth grade by six or more persons for four or more hours per day or more than 12 hours per week. Training and skill development not within a school or academic program shall be classified as business occupancies.

(Amd) **6.1.7.1 Detention and Correctional Occupancy**. An occupancy, other than one whose primary intended use is healthcare, ambulatory health care, or residential board and care, used to lawfully incarcerate or lawfully detain 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) 6.1.8.1.1_One- and Two-Family Dwelling Unit. A building that contains not more than two

dwelling units, 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) **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) **6.1.11.1 Business Occupancy.** An occupancy used for the transaction of business other than mercantile. A business occupancy shall also include a training and skill development not in a school or academic program.

(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.

(Add) **6.1.11.3 Group B College** A building, structure, or portion thereof that is of a Group B Business occupancy classification and associated with a facility of higher education above the twelfth grade. This definition does not include training or skill development facilities.

(Add) **6.1.11.4 Group B Medical Occupancies** Group B medical and dental occupancies that provide services or treatment for four or more patients who may simultaneously be rendered incapable of taking action for self-preservation under emergency conditions. The occupancy shall include, but not be limited to, the following:

Outpatient clinics with general anesthesia or life-support equipment;

Dental centers providing treatment under general anesthesia;

One-day surgical centers;

Physician's offices providing treatment under general anesthesia.

Facilities such as the above that do not provide general anesthesia or life-support equipment simultaneously to four or more patients shall be classified as Group B Business 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 in its entirety.

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. Existing wall or ceiling finishes consisting of wood or metal lath and plaster in good repair satisfy this requirement in non-high-rise buildings.

(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. Existing wall or ceiling finishes consisting of wood or metal lath and plaster in good repair satisfy this requirement in nonhigh-rise buildings.

(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) The minimum 2-hour fire-resistance rated separation required by 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 7.1.3.2.1 (6).

(5)* 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 resistance rating required by 7.1.3.2.1(1) or 7.1.3.2.1(3).

(6) Fire-retardant-treated wood enclosed in noncombustible or limited-combustible materials shall be permitted in accordance with NFPA 220.

(7) Openings in the separation shall be protected by fire door assemblies equipped with door closers complying with 7.2.1.8.

(8)* 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 exists:

(a) Vestibules that separate normally unoccupied spaces from an exit enclosure shall be permitted, provided the vestibule is separated from adjacent spaces by corridor walls and related opening protectives as required for the occupancy involved but not less than a smoke partition in accordance with Section 8.4.

(b) In buildings of Type I or Type II construction, as defined in NFPA 220(see 8.2.1.2), fire-protection-rated door assemblies to normally unoccupied building service equipment support areas as addressed in Section 7.14 shall be permitted, provided the space is separated from the exit enclosure by fire barriers as required by 7.1.3.2.1(3).

(c) Openings in exit passageways in mall buildings as provided in Chapters 36 and 37 shall be permitted.

(d) In buildings of Type I or Type II construction, as defined in NFPA 220(see 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.

(e) Existing openings to mechanical equipment spaces protected by approved existing fire-protection-rated door assemblies shall be permitted, provided that the following criteria are met:

i. The space is used solely for non-fuel-fired mechanical equipment.

ii. The space contains no storage of combustible materials.

iii. The building is protected throughout by an approved, supervised automatic sprinkler system in accordance with Section 9.7 or the mechanical equipment space is provided with sprinkler protection in accordance with Section 9.7 and provided with complete smoke detection in accordance with Section 9.6.

(9) Penetrations into, and openings through, an exit enclosure assembly shall be limited to the following:

(a) Door assemblies permitted by 7.1.3.2.1(8)

(b)* Electrical conduit serving the exit enclosure

(c) Pathways for devices for security and communication systems serving the exit enclosure, where pathways are installed in metal conduit

(d)* Required exit door openings

(e) Ductwork and equipment necessary for independent stair pressurization

(f) Water or steam piping necessary for the heating or cooling of the exit enclosure

(g) Sprinkler piping

(h) Standpipes

(i) Existing penetrations

(j) Penetrations for fire alarm circuits, where the circuits are installed in metal conduit

(10) Penetrations or communicating openings shall be prohibited between adjacent exit enclosures.

(11) All penetrations in fire barriers separating the exit from other parts of the building shall be protected in accordance with 8.3.4.

(12) Membrane penetrations shall be permitted on the exit access side of the exit enclosure and shall be protected in accordance with 8.3.4.7.

(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 door openings shall not exceed $\frac{1}{2}$ inches (13 mm) in height or $\frac{3}{4}$ inches (19.1 mm) in height for sliding doors serving dwelling units.

(Amd) **7.2.1.6.2.1** Where permitted in Chapter 11 to Chapter 42, inclusive, entrance doors to buildings and tenant spaces in the means of egress may be equipped sensor-released electrical lock hardware that prevents egress, provided the following criteria are met:

- (1) A sensor shall be provided on the egress side, arranged to electrically 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 sensor- released electrically locked egress doors, other than existing sensor- released electrically locked 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 stairs 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) **7.2.2.2.4.4** Existing stairs containing winders may also be continued in use provided all of the following are met:

- (1) 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.

(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 shall be permitted to 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 10 feet (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 shall be permitted to be unprotected.

(Amd) **7.2.8.2.2** The requirements of Section 7.2.8.2 shall be permitted to 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				
Use	(ft ² /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 s	seats		
Waiting spaces	See 13.1.7.2.	See 13.1.7.2.		
Kitchens	100	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		

(Amd) Table 7.3.1.2 Occupant Load Factor

Business Use (other than below)	150	14
Concentrated Business Use ^b	50	4.6
Air traffic control tower		
tower observation levels	40	3.7
Collaboration rooms/spaces = 450 ft<sup 2	30	2.5
(41.8 m²) in area ^ь .		
Collaboration rooms/spaces > 450 ft ²	15	1.4
(41.8 m²) in area [♭]		
Day-Care Use	35 net	3.3 net
Detention and Correctional Use	120	11.1
Educational Use		
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	MP	MP
Mercantile Use		
Sales area on street floor ^{b,c}	30	2.8
Sales area on two or more street floors ^c	40	3.7
Sales area on floor below street floor ^c	30	2.8
Sales area on floors above street floor	60	5.6
Floors or portions of floors used only	0 I ·	
for offices	See business use.	See business use.
Floors or portions of floors used only		
for storage, receiving, and shipping,	300	27.0
and not open to general public Mall buildings ^d	Per factors applicabl	27.9 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	200	10.0
In storage occupancies	MP	MP
In mercantile occupancies	300	27.9
In other than storage		21.0
and mercantile occupancies	500	46.5
		2- -

MP: The occupant load is the maximum probable number of occupants present at any time.

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

^bSee 7.3.1.2

^cFor 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.

^dFor determining occupant load in mercantile occupancies with no street floor, as defined in 3.3.283, 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.

^eFor 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.

^fThe portions of the mall concourse 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 concourse 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.

(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) **7.7.1.2** Exit discharge paths to a public way shall have a width of not less than 28 inches (710 mm).

(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 shall be permitted to include a standby generator that is installed for the smoke proof enclosure mechanical ventilations equipment.
 - (b) The standby generator shall be permitted to be used for the stair shaft and vestibule emergency lighting power supply.

(Del) 7.15 Occupant Evacuation Elevators. Delete section in its entirety.

(Del) 7.16 Emergency Stair Travel Devices. Delete section in its entirety.

CHAPTER 8 FEATURES OF FIRE PROTECTION

(Amd) Table 8.3.3.2.2 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	ŃP
Vertical shafts (including			
stairways, exits, and	1	1	NP
refuse chutes)			(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) **8.3.3.2.4.1** 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) **8.3.3.2.4.2** 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.

- (Del) 8.3.3.6.1 Delete section.
- (Del) 8.3.3.6.2 Delete section.
- (Del) 8.3.3.6.3 Delete section.
- (Del) **8.3.3.6.4** Delete section.
- (Del) **8.3.3.6.5** Delete section.
- (Del) **8.3.3.6.6** Delete section.
- (Del) **8.3.3.6.7** Delete section.
- (Del) 8.3.3.6.8 Delete section.
- (Del) 8.3.3.6.9 Delete section.
- (Del) 8.3.3.6.10 Delete section.

(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, laminated, or ceramic glass held in place by a retention 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 initiation of a smoke detection system or 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.

CHAPTER 9

BUILDING SERVICE FIRE PROTECTION, and LIFE SAFETY EQUIPMENT

(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.

(Del) 9.3.3 Acceptance Testing. Delete Section

(Del) 9.3.5 Integrated System Testing. Delete Section

(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 in its entirety.

(Del) 9.4.4 Number of Cars. Delete section.

(Del) 9.4.5* Elevator Machine Rooms. Delete section.

(Del) 9.4.6 Elevator Testing. Delete section in its entirety.

(Del) 9.6.2.10.3 Smoke Alarms in Sleeping Rooms. Delete section

(Del) 9.6.2.10.3.1 Delete section

(Amd) **9.6.2.10.4** Where two or more smoke alarms are required within a dwelling unit, suite of rooms, or similar area, they shall be arranged so that operation of any smoke alarm shall cause the alarm of all smoke alarms within the dwelling unit, suite of rooms, or similar area to sound, except when:

- (1) Otherwise permitted by another section of this code.
- (2) Configurations provide equivalent distribution of the alarm signal.
- (3) Installation existed prior to October 16, 1999.

(Amd) **9.6.2.10.9** Smoke alarms shall receive their operating power as follows:

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

(Amd) **9.6.2.10.10** Unless otherwise provided by the manufacturer's instructions, smoke alarms shall not remain in service longer than 10 years from the date of manufacture. Combination smoke/carbon monoxide alarms shall be replaced when the end-of-life signal activates or 10 years from the date of manufacture, whichever comes first, unless otherwise provided by the manufacturer's instructions.

(Amd) **9.6.2.10.11** The alarms shall sound only within an individual dwelling unit, suite of rooms, or similar area and shall not actuate the building fire alarm system, unless otherwise permitted by the authority having jurisdiction.

(Amd) **9.6.3.2.4** Detectors in accordance with 23.3.4.3.1(2) shall not be required to activate the building evacuation system.

(Del) 9.6.3.3 Delete section.

(Add) **9.6.3.7.2.1** 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.

(Del) 9.7.1.3 Delete section

(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.

(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.

(Add) **9.11.1.1** When a fire protection system is out of service for more than 4 hours in a 24 hour period, the AHJ shall be permitted to require the building to be evacuated or an approved fire watch to be provided for all portions left unprotected by the fire protection system shutdown until the fire protection system has been returned to service.

(Add) **9.11.3.3** The responsible person conducting an inspection, testing, or maintenance shall make records of all inspections, tests, and maintenance of the systems and its components and make the records available to the AHJ upon request. In the event of a system deficiency discovered during a required inspection or other event, the system shall be immediately tagged by such responsible person conducting the inspection noting the issue and date. The discovered deficiency(cies) shall be noted on the inspection report and a copy of such report shall be

immediately forwarded to the AHJ. Contact information for the responsible person shall be included in the report.

(Del) **9.11.4 Integrated Fire Protection and Life Safety System Testing** Delete section in its entirety.

(Del) 9.13 Special Inspections and Tests. Delete section in its entirety.

(Del) 9.14 Risk Analysis for Mass Notification Systems. Delete section in its entirety.

(Del) 9.15.1. Delete section.

(Del) 9.15.2. Delete section.

(Add) **10.3.9.2.1 Natural Cut Christmas Trees.** Combustible vegetation, including natural cut Christmas trees shall be in accordance with table 10.3.9.2.1.

(Add) Table 10.3.9.2.1

Table 10.13.1.7	Provisions for	^r Christmas Tree		/
		Cut Tree Permitted With Automatic	Cut Tree Permitted Without Automatic	
Occupancy	No Trees Permitted	Sprinkler System	Sprinkler System	Balled Tree Permitted
Ambulatory health care				X
Apartment buildings		Within Unit	Within Unit	X
Assembly				X
Board and care				X
Business		Х		X
Day-care		Х		X
Detention and correctional	X			
Dormitories			**	X
Educational				X
Health care				X

Table 10.13.1.1 Provisions for Christmas Trees by Occupancy

Hotels			Х
Industrial	Х	Х	Х
Lodging and rooming	X		Х
Mercantile	X		Х
Storage	X	Х	Χ

** Cut trees in dwelling units that are associated with supervisory personnel in dormitory occupancies are permitted subject to the approval of the AHJ.

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) 11.8.4.3 Risk Analysis for Mass Notification Systems. Delete section.

(Del) **11.8.5.4** Delete section.

(Amd) **11.8.6 Emergency Command Center.** Emergency command center shall be in accordance with 11.8.6.1.

- (Del) **11.8.6.2**. Delete section.
- (Del) **11.8.6.3**. Delete section.
- (Del) **11.8.6.4**. Delete section.
- (Del) **11.8.6.5**. Delete section.
- (Del) **11.8.6.6**. Delete section.
- (Del) **11.8.6.7**. Delete section.

(Del) 11.8.8 Stairway Video Monitoring. Delete section.

(Del) 11.8.9. Integrated Fire Protection and Life Safety System Testing. Delete section.

(Del) **11.9.1.6.3** Delete section.

(Del) **11.10 Temporary Membrane Structures.** Delete section.

(Del) **11.11 Tents.** Delete section.

(DEL) CHAPTER 12 NEW ASSEMBLY OCCUPANCIES

(Del) Delete chapter in its entirety.

CHAPTER 13 EXISTING ASSEMBLY OCCUPANCIES

(Del) **13.1.1.4** Delete section.

(Del) 13.1.6 Minimum Construction Requirements. 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 13.2.3.6.6, inclusive.

(Amd) **13.2.5.2 Common Path of Travel.** 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) **13.2.5.3 Dead End Corridors.** 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/hr. (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) Protection as permitted in accordance with 9.7.1.2 where automatic extinguishing is used to meet the requirements of 13.3.2.1.2(1) or (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 9.7.1.1(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.

(Amd) **13.3.5.6** 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) **13.3.5.7** 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) **13.4.7.7.1.** On every legitimate stage, the main proscenium opening used for viewing performances shall be provided with one of the following proscenium opening protection methods as follows:

- (2) The proscenium opening protection shall comply with 12.4.7.7 and be protected by a listed, minimum 20-minute opening protective assembly, a fire curtain complying with NFPA 80, *Standard for Fire Doors and Other Opening Protectives*, or an approved water curtain complying with NFPA 13, *Standard for the Installation* of *Sprinkler Systems*.
- (3) Asbestos shall be permitted in lieu of a listed fabric.
- (4) Manual curtains of any size shall be permitted.

(Amd) **13.4.7.7.3** Proscenium opening protection provided by other than a fire curtain in accordance with 12.4.7.7 (see 13.4.7.7.2(1)) 13.4.7.7.1 shall activate upon automatic detection of fire and upon manual activation.

(Add) 13.4.7.12 Standpipes.

(Add) **13.4.7.12.1** Stages greater than 1,000 feet² (93 m²) in area shall be equipped with $1\frac{1}{2}$ -inch (38-mm) hose connections for first aid firefighting at each side of the stage.

(Add) **13.4.7.12.2** Hose connections shall be in accordance with NFPA 13 unless Class II or Class III standpipes in accordance with NFPA 14 are used.

(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.

(Amd) **13.7.3 Open Flame Devices and Pyrotechnics.** Open flame devices and pyrotechnics shall be in accordance with the Connecticut State Fire Prevention Code and Connecticut General Statutes 29- 357a, 29-359.

(Amd) **13.7.5.4.2.1** At least one battery cable shall be removed from the batteries used to start the vehicle engine, and the disconnected battery cable shall then be taped, except where the manufacturer's instructions indicate that this may cause damage to the vehicles operating systems.

(Del) 13.7.14 Integrated Fire Protection and Life Safety Systems. Delete section in its entirety.

(Del) CHAPTER 14 NEW EDUCATIONAL OCCUPANCIES

(Del) Delete chapter in its entirety.

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.

(Amd) **15.2.2.4.1** Classroom doors and doors to other instructional spaces 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 from the egress side without opening the door.

2. The unlocking and unlatching from egress side of the 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 egress 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 or impair their operation.

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

9. The emergency action plan, required by 15.7.1 shall address the use of the locking and unlocking means from both sides the door.

10. Staff shall be drilled in the engagement and release of the locking means, from both sides of the door, as part of the emergency egress drills required by 15.7.2.

(Amd) **15.2.2.4.2** Where existing classroom doors and doors to instructional spaces are replaced, they shall comply with the provisions for new construction as found in Part III.

(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) **15.2.5.3** 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 $\frac{1}{2}$ -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) 15.3.4.5 Risk Analysis for Mass Notification Systems. Delete section.

(Amd) **15.7.2.4 Fire Drills. Crisis Response Drills.** (a) Each local and regional board of education shall provide for a fire drill to be held in the schools of such board not later than thirty days after the first day of each school year and at least once each month thereafter, except as provided in subsection (b) of this section.

(b) Each such board shall substitute a crisis response drill for a fire drill once every three months and shall develop the format of such crisis response drill in consultation with the appropriate local law enforcement agency. A representative of such agency may supervise and participate in any such crisis response drill.

(Del) 15.7.6 Integrated Fire Protection and Life Safety Systems. Delete section in its entirety.

(DEL) CHAPTER 16 NEW DAY-CARE OCCUPANCIES

(Del) Delete chapter in its entirety.

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 Code 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 of this Code 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.

(Amd) Table 17.1.6.1 Location and Construction Type Limitations

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	Yes	I(443), I(332), II(222)
high-rise		/
	Yes	ll(111) [*]
	No	I(443), I(332), II(222)
High-rise	Yes	I(443), I(332), II(222)
	No	Not permitted

LED: Level of exit discharge.

*Permitted only if clients capable of self-preservation.

(Amd) **17.2.2.6.1** Classroom doors and doors to other client care spaces 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 from the egress side without opening the door.

2. The unlocking and unlatching from egress side of the 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 egress 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 or impair their operation.

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

9. The emergency action plan, required by 15.7.1 shall address the use of the locking and unlocking means from both sides the door.

10. Staff shall be drilled in the engagement and release of the locking means, from both sides of the door, as part of the emergency egress drills required by 15.7.2.

(Amd) **17.2.2.2.6.2** Where existing classroom doors and doors to instructional spaces are replaced, they shall comply with the provisions for new construction as found in Part III.

(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 1006.

(Amd) **17.2.5.3** 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) **17.3.5.5** 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 nine 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) 17.7.6 Integrated Fire Protection and Life Safety Systems. Delete section in its entirety.

(DEL) CHAPTER 18 NEW HEALTH CARE OCCUPANCIES

(Del) Delete chapter in its entirety.

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.

(Amd) **19.1.1.7** 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 and PA 21-165 to those sections of this code that would otherwise require means of egress to be kept unlocked.

(Amd) **19.1.1.4.1 Additions**. Alterations, renovations, additions or change of use to existing buildings shall conform to the requirements of Part III of this code,

(Del) **19.1.1.4.1.1** Delete section.

(Del) **19.1.1.4.1.2** Delete section.

(Del) **19.1.1.4.1.3** Delete section.

(Amd) **19.1.1.4.2 Changes in Use or Occupancy Classification.** Changes in use or occupancy classification shall be in compliance with the requirements of Part III of this code.

(Amd) **19.1.1.4.3 Rehabilitation.** Shall be in compliance with the requirements of Part III of this code.

(Del) **19.1.1.4.3.1** Delete section.

(Del) **19.1.1.4.3.2** Delete section.

(Del) **19.1.1.4.3.3** Delete section.

(Del) **19.1.1.4.3.4** Delete section.

(Amd) **19.1.1.4.4 Construction, Repair, and Improvement Operations.** Shall be in compliance with the requirements of Part III of this code.

(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. 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.

(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 19.2.2.5.2.

(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) **19.2.5.3* 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.

(Amd) **19.3.5.7*** Where this code permits exceptions for fully sprinklered buildings or smoke compartments, the sprinkler system shall meet all of the following criteria:

- (1) It shall be in accordance with Section 9.7
- (2) It shall be installed in accordance with 9.7.1.1 (1), unless it is an approved existing system.
- (3) It shall be electrically connected to the fire alarm system.
- (4) It shall be fully supervised

(Del) **19.4.3 High-Rise Buildings.** Delete section in its entirety.

(Amd) **19.7.9.1** Construction, repair, and improvement operations shall comply with the requirements Part III of this code.

- (Del) **19.7.9.2** Delete section.
- (Del) **19.7.9.3** Delete section.

(Del) 19.7.10 Integrated Fire Protection and Life Safety Systems. Delete section in its entirety.

(DEL) CHAPTER 20 NEW AMBULATORY HEALTH CARE OCCUPANCIES

(Del) Delete chapter in its entirety.

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.

(Amd) **21.1.1.4.1.1** Alterations, renovations, additions or change of use to existing buildings shall conform to the requirements of Part III of this Code.

(Del) **21.1.1.4.1.2** Delete section.

(Del) **21.1.1.4.1.3** Delete section.

(Amd) **21.1.1.4.2 Changes in Use or Occupancy Classification.** Changes in use or occupancy classification shall be in compliance with the requirements of Part III of this Code.

(Amd) **21.1.1.4.3 Renovations, Alterations, and Modernizations.** Shall be in compliance with the requirements of Part III of this Code.

(Amd) **21.1.1.4.4 Construction, Repair, and Improvement Operations.** Shall be in compliance with the requirements of Part III of this Code.

(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) **21.2.2.9** Sensor-released electrical locking systems 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** Vertical 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

(Amd) **21.4.3.1** Automatic sprinkler protection shall also be provided as required by Section 9.7.1.6.

(Del) **21.4.3.1.1** Delete section.

(Del) **21.4.3.1.2** Delete section.

(Del) 21.4.3.2 Delete section.

(Del) **21.4.3.3** Delete section.

(Del) 21.7.10 Integrated Fire Protection and Life Safety Systems. Delete section in its entirety.

(DEL)CHAPTER 22 NEW DETENTION AND CORRECTIONAL OCCUPANCIES

(Del) Delete chapter in its entirety.

CHAPTER 23 EXISTING DETENTION AND CORRECTIONAL OCCUPANCIES

(Amd) **23.2.5.2* Dead-End Corridors.** 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.

(Amd) **23.2.11.1.3** Where egress doors are locked with key-operated locks, the keys necessary for unlocking doors installed in the means of egress shall be individually identified by both touch and sight. The provisions of 23.7.7 shall apply.

Hazardous Area Description	Separation/Protection*	
Areas not incidental to residential housing	2 hours	
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	1 hour or sprinklers	

(Amd) Table 23.3.2.1 Hazardous Area Protection

15 psi and 10 horsepower	
Central or Bulk laundries >100 ft ² (>9.3 m ²)	1 hour or sprinklers
Commercial cooking equipment	In accordance with 9.2.3
Commissaries	1 hour or sprinklers
Employee locker rooms	1 hour or sprinklers [†]
Hobby/handicraft shops	1 hour or sprinklers
Central or Bulk laundries >100 ft ² (>9.3 m ²)	1 hour or sprinklers
Maintenance shops	1 hour or sprinklers [†]
Padded cells	1 hour and sprinklers
Soiled linen rooms	1 hour or sprinklers
Storage rooms > 50 ft ² (>4.6 m ²)	1 hour or sprinklers
Trash collection rooms	1 hour or sprinklers
*Minimum fire registence rating	

*Minimum fire resistance rating

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

(Amd) **23.4.6.1.4** 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) 23.7.8 Integrated Fire Protection and Life Safety Systems. Delete section in its entirety.

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.

(Del) **24.1.3.2.1** Delete section.

(Del) 24.1.3.2.2 Delete section.

(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 8¹/₄ inches (209.5 mm) and minimum tread depths of 9 inches (229 mm) shall be permitted.

(Del) **24.2.8 Grab Bars and Stanchions for Bathtubs, Bathtub-Shower Combinations, and Showers.** Delete section in its entirety.

(Amd) **24.3.4.1.3** In buildings for which a building permit for new occupancy was issued before October 1, 1976, approved smoke alarms powered by batteries shall be permitted.

(Add) **24.3.4.1.3.1** Smoke alarms added to comply with the provisions of 24.3.4.1.1 (1) shall be permitted to be battery operated.

(Add) **24.3.4.1.3.2** Buildings for which a building permit for new occupancy was issued on or after May 1, 1999, shall be interconnected in accordance with NFPA 72, section 29.8.2.1.1.

(Add) **24.3.4.1.4** 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 in accordance with section 24.3.4.2.2 where either of the following conditions exist:.

- (1) Dwelling or sleeping units with communicating attached garages, unless the attached garage is defined as open parking structure by the Connecticut State Building Code, or the attached garage is mechanically ventilated in accordance with the International Mechanical Code portion of the State Building Code.
- (2) Dwelling or sleeping units containing fuel-burning appliances or fuel burning fireplaces.

(Del) 24.3.5* Extinguishment requirements. Delete section in its entirety.

CHAPTER 25

RESERVED

CHAPTER 26

(AMD) LODGING OR ROOMING HOUSES AND BED AND BREAKFASTS

(Amd) **26.1.1.1*** The requirements of this chapter shall apply to 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.

(Del) **26.1.1.4** Delete section.

(Del) 26.1.1.5 Delete section.

(Add) **26.2.1.1.3llumination.** The primary means of escape within bed and breakfast establishments 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 7.9.2.1.1 and 7.9.2.1.2.

(Amd) **26.2.2.4** 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** Sensor-released of electric locking system egress doors complying with Section 7.2.1.6.2 shall be permitted.

(Del) **26.2.4 Grab Bars for Bathtubs, Bathtub–Shower Combinations and Showers.** Delete section in its entirety.

(Add) **26.3.1.1.4** In lodging or rooming houses, two or fewer stories in height, and in bed and breakfast establishments, 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[®]. 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.

(Del) 26.3.3.3 Interior Finish. Delete section in its entirety.

(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.

(Amd) **26.3.4.6.1** Carbon monoxide detection and warning equipment as required by section 29-292 and section 29-453 of the Connecticut General Statutes shall be installed in accordance with section 26.3.4.6.2 where either of the following conditions exist:

- (1) Dwelling or sleeping units with communicating attached garages, unless the attached garage is defined as open parking structure by the Connecticut State Building Code, or the attached garage is mechanically ventilated in accordance with the International Mechanical Code portion of the State Building Code.
- (2) Dwelling or sleeping units containing fuel-burning appliances or fuel burning fireplaces.

(Add) **26.3.4.6.1.1** In sleeping rooms in lodging and rooming houses or bed and breakfasts that have a fireplace, woodstove, or similar appliance shall be equipped with carbon monoxide detection and warning equipment within the sleeping room. This equipment shall be permitted to be battery operated.

(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.

(Del) 26.3.6.2.4 Delete section.

(Amd) **26.4 Special Structures.** Lodging and rooming houses shall comply with Chapter 11 where located in a special structure.

(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.

(Amd) **26.5. Elevators, Escalators, and Conveyors.** Elevators, Escalators, and Conveyors shall comply with the provisions of the State Elevator Code adopted pursuant to Chapter 538 of the Connecticut General Statutes.

(Del) 26.7.2 Integrated Fire Protection and Life Safety Systems. Delete section in its entirety.

CHAPTER 27 RESERVED

(DEL) CHAPTER 28 NEW HOTELS AND DORMITORIES

(Del) Delete chapter in its entirety.

CHAPTER 29 (AMD) EXISTING HOTELS

(Amd) **29.1.1.1** The requirements of this chapter shall apply to 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 3.3.136.
- (2) Guest Suite. See Section 3.3.285.1.
- (3) Hotel. See Section 3.3.153.

(Amd) **29.2.2.2.3** Sensor-Released electrical locking systems 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) **29.2.5.3** 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 $\frac{1}{2}$ -hour fire resistance rating.

(Amd) Table 29.3.2.2.2 Hazardous Area Protection

Hazardous Area Description	Separation/Protection ^a
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, >100 ft ² (>9.3 m ²)	1 hour or sprinklers ^b
Bulk laundries	1 hour or sprinklers
Guest laundries >100 ft ² (>9.3 m ²) outside of	1 hour or sprinklers ^b
guest rooms or 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 ^c	
Trash collection rooms	1 hour or sprinklers
Minimum fire registence rating	

^a Minimum fire resistance rating

^b Where automatic sprinkler protection is provided, the separation specified in 8.7.1.2 and 29.3.2.2.3 shall not be required.

^c 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.

(Add) **29.3.4.5.3** 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 percent 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) **29.3.4.6.5** 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) 29.7.3 Drills in Dormitories. Delete section.

(Del) 29.7.8 Integrated Fire Protection and Life Safety Systems. Delete section in its entirety.

(DEL) CHAPTER 30 NEW APARTMENT BUILDINGS

(Del) Delete chapter in its entirety.

CHAPTER 31 (AMD) EXISTING APARTMENT AND DORMITORY BUILDINGS

(Amd) **31.1.1.1** The requirements of this chapter shall apply to 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 approved automatic fire detection and notification system in accordance with 31.3.4.4.
- (3) Option 3 Buildings provided with automatic sprinkler protection in selected areas as described in 31.3.5.6.
- (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 3.3.66.

(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** Sensor-release of electrical locking systems 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 access to a single exit, provided that one of the following conditions 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 1-hour 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 $\frac{1}{2}$ -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 1/2 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 $\frac{1}{2}$ 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) **31.2.5.3** 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.

(Amd) Table 31.3.2.1.1 Hazardous Area Protection

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, >100 ft ² (>9.3 m ²)	1 hour or sprinklers [†]
Bulk laundries	1 hour or sprinklers
Laundries >100 ft ² (>9.3 m ²) outside of dwelling	1 hour or sprinklers [†]
units	
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
* Minimum fire resistance rating	

* Minimum fire resistance rating

[†] Where automatic sprinkler protection is provided, the separation specified in 8.7.1.2 and 31.3.2.1.2 is not required.

(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) **31.3.4.2.6** 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) **31.3.5.6.2** 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.

(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) 31.7.4 Integrated Fire Protection and Life Safety Systems. Delete section in its entirety.

(DEL) CHAPTER 32 NEW RESIDENTIAL BOARD AND CARE OCCUPANCIES

(Del) Delete chapter in its entirety.

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.

(Amd) **33.1.1.4* Alternative Compliance.** Any facility meeting the requirements of Part III shall not be required to meet those of Chapter 33.

(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** Sensor-released of electrical locking systems 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) **33.2.3.4.4.1** Approved smoke alarms shall be provided in accordance with Section 9.6.2.10.

(Del) **33.2.3.4.4.5** Delete section.

(Del) **33.2.3.4.4.6** Delete section.

(Del) **33.2.3.4.4.7** 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) Sensor-release of electrical locking systems 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, sensor-release of electrical locking systems 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) **33.3.4.7.3** 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) CHAPTER 36 NEW MERCANTILE OCCUPANCIES

(Del) Delete chapter in its entirety.

CHAPTER 37 EXISTING MERCANTILE OCCUPANCIES

(Del) **37.1.1.5** Delete section in its entirety.

(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.

(Del) **37.1.1.7** Delete section.

(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) **37.2.2.6** Sensor-release of electrical locking systems 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) **37.2.5.3*** Dead-end corridors shall not exceed 50 feet (15 m), except that a deadend 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.**

(Add) **37.3.6.1** 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) **37.3.6.2** Openings in corridor partitions required to have a fire resistance rating shall be protected in accordance with Section 8.3.

(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. (Del) **37.4.7.3.2** Delete section.

(Del) **37.4.4.12.1** Delete section.

(Del) **37.4.4.12.2** Delete section.

(Amd) **37.4.5.3 Storage, Arrangement, Protection, and Quantities of Hazardous Commodities.** The storage, arrangement, protection, and quantities of hazardous commodities shall be in accordance with the applicable provisions of the following:

- 1) The Connecticut State Fire Prevention Code as adopted pursuant to Connecticut General Statutes 29-291a
- 2) NFPA 13
- 3) NFPA 30
- 4) NFPA 30B
- 5) NFPA 400, Chapter 14 for organic peroxide formulations
- 6) NFPA 400, Chapter 15 for oxidizer solids and liquids
- 7) NFPA 400, various chapters, depending on characteristics of a particular pesticide

(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, and section 29-357 of the Connecticut General Statutes.

The provisions of NFPA 1124, 2006 edition, are amended for use in Connecticut as follows:

(Amd) **NFPA 1124**, **7.3.7 Storage Rooms.** Storage rooms containing consumer fireworks, sparklers, or fountains regardless of size, in a new or existing permanent store shall be protected with an automatic sprinkler system installed in accordance with NFPA 13, 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, (102 m³) including packaging. Such storage shall be segregated into areas of 1,200 cubic feet (34 m³) or less, separated by a minimum of 4 ft. (1.3 m) of clear space.

(Amd) **NFPA 1124**, **7.5.3 Storage Rooms.** Storage rooms containing consumer *fireworks*, sparklers or fountains regardless of size, in a new or existing permanent store shall be protected with an automatic sprinkler system installed in accordance with NFPA 13, 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 (102 m³), including packaging. Such storage shall be segregated into areas of 1,200 cubic feet (34 m³) or less, separated by a minimum of 4 ft.(1.3 m) of clear space.

(Amd) **37.4.5.5 Extinguishing Requirements.** Bulk merchandising retail buildings shall be protected throughout by an approved supervised automatic sprinkler system in accordance with 9.7.1.1(1) and the applicable provisions of the following:

- 1) The Connecticut State Fire Prevention Code as adopted pursuant to Connecticut General Statutes 29-291a
- 2) NFPA 13
- 3) NFPA 30
- 4) NFPA 30B

(Amd) **37.7.3 Extinguisher Training.** Employees of mercantile occupancies shall be periodically instructed in the use of portable fire extinguishers where they are provided.

(Del) 37.7.8 Integrated Fire Protection and Life Safety Systems. Delete section in its entirety.

(DEL) CHAPTER 38 NEW BUSINESS OCCUPANCIES

(Del) Delete chapter in its entirety.

CHAPTER 39 EXISTING BUSINESS OCCUPANCIES

(Amd) **39.1.1.1** The requirements of this chapter shall apply to buildings or portions thereof currently occupied as a business occupancy. A business occupancy shall also include a training and skill development not in a school or academic program.

(Del) **39.1.1.6** Delete section.

(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.

(Add) **39.1.2.2 Group B Medical Occupancies** Shall apply to Group B medical and dental occupancies that provide services or treatment for four or more patients who may simultaneously be rendered incapable of taking action for self-preservation under emergency conditions. The occupancy shall include, but not be limited to, the following:

Outpatient clinics with general anesthesia or life-support equipment;

Dental centers providing treatment under general anesthesia;

One-day surgical centers;

Physician's offices providing treatment under general anesthesia.

Facilities such as the above that do not provide general anesthesia or life-support equipment simultaneously to four or more patients shall be classified as Group B Business occupancy.

(Add) **39.1.2.3 Group B College.** A building, structure, or portion thereof that is of a Group B Business occupancy classification and associated with a facility of higher education above the twelfth grade. This definition does not include training or skill development facilities.

(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 less 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.
- (3) The exit shall discharge directly to the outside.

(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) **39.2.5.3*** 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.

(Del) 39.3.4.4 Emergency Forces Notification. Delete section.

(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.

(Amd) **39.4.2.1** All high-rise business occupancy buildings shall be provided with a reasonable degree of safety from fire, and such degree of safety shall be accomplished by one of the following means:

(1) Installation of a complete, approved, supervised automatic sprinkler system in accordance with 9.7.1.1(1)

(2) Installation of an engineered life safety system complying with all of the following:

(a) The engineered life safety system shall be developed by a registered professional engineer experienced in fire and life safety systems design.

(b) The life safety system shall be approved by the authority having jurisdiction and shall be permitted to include any or all of the following systems:

i. Partial automatic sprinkler protection

- ii. Smoke detection alarms
- iii. Smoke control
- iv. Elevators
- v. Compartmentation
- vi. Other approved systems

(Amd) **39.7.3 Portable Fire Extinguisher Training.** Where portable fire extinguishers are provided, designated employees of business occupancies shall be trained periodically to the known location and proper use of portable fire extinguishers.

(Del) 39.7.8 Integrated Fire Protection and Life Safety Systems. Delete section in its entirety.

CHAPTER 40 INDUSTRIAL OCCUPANCIES

(Amd) **40.1.1.1** The requirements of this chapter shall apply to industrial occupancies.

(Del) **40.1.1.6** Delete section.

(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 contents as defined in 6.2.2.4 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.

(Del) **40.1.2.2** Delete section.

(Del) **40.2.1.3** Delete section.

(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.

(Del) **40.2.4.2** Delete section.

(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; unless otherwise permitted by the Connecticut State Fire Prevention Code.

(Amd) **40.2.6.1** Travel distance, measured in accordance with Section 7.6, shall not exceed that provided by Table 40.2.6.1 except as otherwise permitted by 40.2.6.2 or the Connecticut State Fire Prevention Code.

(Amd) 40.3.5 Extinguishing Requirements.

(Add) **40.3.5.1** Automatic sprinkler protection shall also be provided as required by Section 9.7.1.6.

- (Del) **40.4.2.2** Delete section.
- (Del) **40.4.2.3** Delete section.

(Del) 40.7.4 Integrated Fire Protection and Life Safety Systems. Delete section in its entirety.

CHAPTER 42 STORAGE OCCUPANCIES

(Amd) **42.1.1.1** The requirements of this chapter shall apply to storage occupancies.

(Del) 42.1.1.4 Delete Section.

(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.

(Del) 42.2.1.3 Delete section.

(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; unless otherwise permitted by the Connecticut State Fire Prevention Code.

(Amd) **42.2.6** Travel distance, measured in accordance with Section 7.6, shall not exceed that provided by Table 40.2.6.unless otherwise permitted by the Connecticut State Fire Prevention Code.

Level of Protection	Low Hazard Storage	Ordinary Hazard Storage	High Hazard Storage
	Occupancy	Occupancy	Occupancy
Protected throughout by an approved, supervised automatic sprinkler system in accordance with Section 9.7.1.1(1)	400ft m (122m)	400ft m (122m)	100ft (30m)
Not protected throughout by an approved, supervised automatic sprinkler system in accordance with Section	300ft (91m)	200ft (61m)	75ft (23m)

(Amd) Table 42.2.6 Maximum Travel Distance to Exits

9.7.1.1(1)		
Flammable and combustible liquid products stored and protected in accordance with NFPA 30.	Not applicable	150 feet (46 m)

(Amd) 42.3.5 Extinguishing Requirements.

(Add) **42.3.5.1** Automatic sprinkler protection shall also be provided as required by Section 9.7.1.6.

(Amd) 42.8.3.5 Extinguishing Requirements.

(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 37.1.3.2 and Section 39.1.3.2.
- (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) 42.8.4 Delete section.

(Del) 42.9.4 Integrated Fire Protection and Life Safety Systems. Delete section in its entirety.

(DEL) CHAPTER 43 BUILDING REHABILITATION

(Del) Delete chapter in its entirety.

END OF DOCUMENT

Notice of Intent to Adopt the 2022 Connecticut Fire Safety Code

The Department of Administrative Services, Office of the State Fire Marshal, in conjunction with the Codes & Standards Committee, is announcing its intent to adopt a new fire safety code to be titled the 2022 Connecticut Fire Safety Code. In accordance with the requirements of section 29-292a, the agency will accept comments from the public for a period of forty-five (45) days, beginning January 31, 2022 through the close of business March 17, 2022.

Written comments will be received by the agency via US mail, fax or email at:

Department of Administrative Services Office of the State Fire Marshal 450 Columbus Boulevard, Suite 1303 Hartford, CT 06103 Fax: 860-713-7269 Email: DAS.CodesStandards@ct.gov

A Public Hearing will be held by the agency in conjunction with the Codes & Standards Committee on February 23, 2022 starting at 1:00 P.M. via Microsoft Teams. Joining instructions will be posted on the <u>DAS Code Adoption</u> and <u>Secretary of State</u> web pages.

The 2022 Connecticut Fire Safety Code will consist of the following national model codes, as amended in the 2022 Connecticut Fire Safety Code:

- 2021 International Code Council (ICC) International Fire Code
- 2021 National fire Protection Association Standard 101 Life Safety Code

The Connecticut amendments to these model codes can be found here: 2022 CT State Fire Safety Code

The model codes can be viewed here: <u>ICC Free eCode Viewer</u>; <u>NFPA Free Viewer</u> or purchased at: <u>Where to Purchase Model Code Books</u>

The intended effective date for this code is October 1, 2022.

2022 CONNECTICUT STATE FIRE SAFETY CODE

Small Business Impact Statement/Flexibility Analysis

In accordance with C.G.S. Section 29-292 the State Fire Marshal and the Codes and Standards Committee analyzed the effect on small businesses of the 2022 State Fire Safety Code and considered whether potential adverse impacts on small businesses could be minimized in a way that (1) will not interfere with the intended objectives of the code and (2) will allow the new code to remain consistent with public health, safety and welfare. The State Fire Marshal and the Codes and Standards Committee determined the following:

(Check all appropriate boxes):

Adoption of the 2022 State Fire Safety Code will not have an effect on small businesses.

 \underline{X} Adoption of the 2022 State Fire Safety Code will have an effect on small businesses, but will not have an adverse effect on such small businesses.

_____ Adoption of the 2022 State Fire Safety Code may have an adverse effect on small businesses, and no alternative considered would be both as effective in achieving the purpose of the action and less burdensome to potentially affected small business. Alternatives considered include the following:

(1) The establishment of less stringent compliance or reporting requirements for small businesses;

(2) The establishment of less stringent schedules or deadlines for compliance or reporting requirements for small businesses;

(3) The consolidation or simplification of compliance or reporting requirements for small businesses;

(4) The establishment of performance standards for small businesses to replace design or operational standards required in the new section or amendment; and

(5) The exemption of small businesses from all or any part of the requirements contained in the new section or amendment.

_____ Adoption of the 2022 State Fire Safety Code will have an adverse effect on small businesses that cannot be minimized in a manner that is consistent with public health, safety and welfare.

2022 STATE FIRE SAFETY CODE

Fiscal Note

STATUTORY AUTHORITY: 29-292

OTHER AGENCIES AFFECTED: Any agency performing construction and thus using the State Fire Safety Code. The updated codes should have a minimal impact on the cost of construction.

EFFECTIVE DATE USED IN COST ESTIMATE: October 2022

ESTIMATE PREPARED BY: William Abbott, State Fire Marshal

SUMMARY OF STATE COST AND REVENUE IMPACT OF 2022 STATE FIRE SAFETY CODE

AGENCY: DAS

POTENTIAL FUND AFFECTED: General

	First Year	Second Year	Full Operation
	2022	2023	2024
Number of Positions	0	0	0
Personal Services	0	0	0
Other Expenses	0	0	0
Equipment	0	0	0
Grants	0	0	0
Total State Cost (Savings)	0	0	0
Estimated Revenue Gain (Loss)	0	0	0
Total Net Cost (Savings)	0	0	0

The State Fire Marshal and the Codes and Standards Committee are statutorily required to adopt the State Fire Safety Code.

EXPLANATION OF STATE IMPACT: The fiscal impact to the state of adopting the 2022 State Fire Safety Code is to provide educational programs to code users, which the state already does within existing resources under the authority of Section 29-251c of the Connecticut General Statutes. The change in codes means a change in subject matter for educational classes, and will have no impact on staffing. New code books for staff are funded from the educational fee collected on building permits, which doesn't impact the general fund.

EXPLANATION OF MUNICIPAL IMPACT: Municipalities will be required to purchase new ICC and NFPA code books and resources, if they have not purchased them already, at a total cost of between \$250 and \$1,500 depending on staffing levels within the municipality. This expense occurs at every code change cycle and is appropriately budgeted for by the municipalities.

Comments to proposed 2022 CT Fire Safety Code

1. Chapter 80 referenced standards, amended list of referenced NFPA codes list an edition year that does not exist. Older and newer editions of each code do exist.

NFPA 2-19 NFPA 10-21 NFPA 17-20 NFPA 17A-20 NFPA 55-19 NFPA 96-20 NFPA 211-20 NFPA 232-19 NFPA 415-20

(The proposed 2022 CT Fire Prevention Code does list the correct editions of the Codes referenced above).

2. Section 906 Portable fire extinguishers

Portable fire extinguishers should NOT be required in the following occupancies: B, E, M, R-2, R-4 and S.

The goal of life safety should be to ensure all occupants evacuate the building in a safe and timely manner. For a fire extinguisher to be effective, a trained person must be on site to use the extinguisher. This is unlikely in most cases and would be extremely burdensome and time consuming if a fire marshal is expected to verify trained personnel are on site.

In addition, occupants will attempt to extinguish the fire prior to calling the fire department or activating the fire alarm system. This further delays evacuation of the building.

Fire extinguishers are effective and necessary in commercial kitchens, assembly occupancies in addition, occupancies where occupants cannot be evacuated (detention, health care, etc...).

Comments to proposed 2022 CT Fire Prevention Code

1. Table 13.6.1.2

Eliminate two sections of table "where required after 10/01/2018" and "where we required before 10/01/2018". Required in the following occupancies: Ambulatory health care group B medical Assembly group A Bed and Breakfast group R-1 Detention and correctional group I-3 Health Care group I-1 and I-2 Industrial group H Change title to "Where Required" and list Yes for the occupancies listed above, No for all others.

Keep the CFPC the same as prior to 10/01/2018 in regards to portable fire extinguishers.

Thank you,

Edward Sargent, deputy fire marshal City of Groton Fire Department 416 Benham Rd. Groton, CT 06340

sargente@cityofgroton-ct.gov
860-446-4106
From:	Volovski, Daniel <daniel.volovski@uconn.edu></daniel.volovski@uconn.edu>
Sent:	Friday, February 4, 2022 10:17 AM
То:	CodesStandards, DAS
Cc:	Garvin, Steven
Subject:	Public Comment on the Proposed 2022 CSFSC and CSFPC

EXTERNAL EMAIL: This email originated from outside of the organization. Do not click any links or open any attachments unless you trust the sender and know the content is safe.

Good morning,

We would like the following comment/suggestion included into the public comments for the review of the committee. The condition appears in both the CSFSC and the CSFPC and we would like some clarification.

Proposed 2022 CSFSC, Chapter 2 Definitions, Occupancy Classification, and 2022 CSFPC Chapter 3 Definitions 3.3.199.5.2

Proposed Language: (Add) GROUP B COLLEGE A building, structure, or portion thereof that is of a Group B Business occupancy classification and associated with a facility of higher education above the twelfth grade. This definition does not include training or skill development facilities.

Comment/Question: The newly added definition of Group B College as an occupancy classification as a building, structure, or portion thereof associated with a facility of higher education bears further explanation as to the scope. We are seeking clarification as to whether this proposed added occupancy classification applies to the following situations in what would have previously been a Business occupancy:

- Research buildings on college campuses that do not support undergraduate programs (Examples: Those used by private companies on college campuses, or those that do not hold any college classes but are occupied by graduate students and staff members for research purposes).
- Support buildings on college campuses that are not normally occupied by college students (Examples: Facilities maintenance buildings, administrative/staff support buildings, and other logistical buildings that support campus operations that normally fall under a Business occupancy.)
- Buildings owned by a university that are remote from the campus proper and are not normally occupied by students.

Respectfully submitted,

Dan Volovski, MPA Acting Lieutenant/Deputy Fire Marshal UCONN FIRE DEPARTMENT FIRE MARSHAL UNIT STORRS, CT 06269-5052 PHONE: 860-486-5506 CELL 860-576-4206



The content of this message may include personnel or medical files and/or records that have been compiled in connection with the detection or investigation of a criminal or medical incident. This email and the information contained within should not be shared with anyone other than its intended recipient(s) unless authorization is obtained from the sender.



State of Connecticut

HOUSE OF REPRESENTATIVES STATE CAPITOL HARTFORD, CONNECTICUT 06106-1591

REPRESENTATIVE BEN MCGORTY ONE HUNDRED TWENTY-SECOND DISTRICT

LEGISLATIVE OFFICE BUILDING 300 CAPITOL AVENUE HARTFORD, CONNECTICUT 06106

CAPITOL PHONE: (860) 240-8700 TOLL FREE: 1-800-842-1423 Ben.McGorty@housegop.ct.gov ASSISTANT HOUSE REPUBLICAN LEADER

MEMBER BANKING COMMITTEE PUBLIC SAFETY AND SECURITY COMMITTEE REGULATION REVIEW COMMITTEE

March 10, 2022

Department of Administrative Services Codes and Standards Committee Office of the State Building Inspector 450 Columbus Boulevard, Suite 1303 Hartford, CT 06103

Re: 2022 Connecticut State Fire Safety Code

Dear Louis Free, Chairman Carlton Smith, Vice Chairman and members of the Codes and Standards Committee, my name is State Representative Ben McGorty of the 122nd House Assembly District representing the towns of Shelton, Stratford and Trumbull. I am also a Lieutenant and Deputy Fire Marshal for the Town of Stratford. I have been in the fire service for over forty years.

Within my jurisdiction, I am receiving complaints and have discovered during routine inspections, illegal dwelling units in two and three family dwellings. This is a very common occurrence in Stratford and believe all municipalities statewide experience this same problem. In the Town of Stratford, we have hundreds of two family dwellings. Many of these dwellings have been converted into three and four family dwellings without building permits or zoning approval. These units are separate from the legal first and second floor apartments. The illegal dwelling units have been built in attics and basements. Many of these illegal dwelling units may have full kitchens and cooking equipment but lack a second means of egress, windows for rescue and other fire protection features that are required for three or more family apartment buildings.

The State Fire Marshal's office was in Stratford a few years ago to assist with compliance of the fire code of a twofamily dwelling that is operating as a three family. At that time, it was declared the dwelling unit in question a "Guest Suite" and as an accessory to the second-floor apartment as there was no stove for cooking within the unit in question.

I believe that justification of a dwelling's unit should not fall on whether there is or isn't a kitchen stove. Most home fires and casualties are from five major causes: cooking, heating, electrical, candles and smoking. Somehow our code only addresses cooking equipment and no other fire source.

www.RepMcGorty.com

In my experience I have found landlords hiding the kitchen stoves and cooking equipment when we inspect and replace them after we leave as they are aware of the loophole in the code. The practice of allowing these apartments to be occupied because they do not have a kitchen stove is not, in my opinion, fulfilling the protection of human life. Allowing these apartments to exist as they are called "Guest Suites" is dangerous as many tenants do not know that the dwelling unit is not fire code compliant.

I, therefore, would like to make a change to the regulations to the 2018 CT State Fire Safety Code- The Internal Fire Code Sections 202 General Definitions page 16:

Dwelling

"A single Unit providing complete independent living facilities for one or more persons, including permanent provisions for living, sleeping, eating, cooking and sanitation" I would like to delete from this regulation the reference to **eating and cooking**.

When you conduct an inspection and there are locked doors between each dwelling unit and the tenants are not related or tenants in common, these apartments should be classified as separate dwelling units, not guest suites. A dwelling unit should not be subject to whether you cook or eat.

I hope that you can support this change and recommend that this change be added to the new 2022 CT State Fire Safety Code. I am happy to discuss further at your convenience.

Sincerely,

al nig

State Representative Ben McGorty 122nd District Representing Shelton, Stratford & Trumbull (Cell) 203-415-8428

From:	Abbott, William
Sent:	Tuesday, February 8, 2022 9:17 AM
То:	Hobbs, Darren
Subject:	Fwd: Change request for the 2018 CSFC

Get Outlook for iOS

From: Rep. McGorty, Ben <<u>Ben.McGorty@cga.ct.gov</u>>
Sent: Monday, February 7, 2022 8:58 PM
To: Abbott, William
Subject: Change request for the 2018 CSFC

Fire Marshal Abbott,

Within my jurisdiction, I am receiving complaints and discovered during routine inspections, illegal dwelling units in two and three family dwellings. This is a very common occurrence in Stratford, and believe all municipalities statewide experience this same problem. In the town of Stratford we have hundreds of two family dwellings. Many of these dwellings have been converted into three and four family dwellings without building permits or zoning approval. These units are separate from the legal first and second floor apartments. The illegal dwelling units have been built in attics and basements. Many of these illegal dwelling units may have full kitchens and cooking equipment but lack a second means of egress, windows for rescue and other fire protection features that are required for three or more family apartment buildings.

Your office had been to Stratford a couple years back to assist with compliance and the fire code of a two family dwelling that is operating as a three family. At that time it was declared the dwelling unit in question a "Guest Suite" and as an accessory to the second floor apartment as there was no stove for cooking within the unit in question.

I believe that justification of a dwellings unit should not fall on whether or not there is a kitchen stove. Most home fires and casualties are from five major causes: cooking, heating, electrical, candles and smoking. Somehow our code only addresses cooking equipment and no other fire source.

In my experience I have found landlords hiding the kitchen stoves and cooking equipment when we inspect, and replace after we leave as they are aware of the loophole in the code. The practice of allowing these apartments to be occupied because they do not have a kitchen stove is not, in my opinion, fulfilling the protection of human life. Allowing these apartments to exist as they are called "Guest Suites" is dangerous as many tenants do not know that the dwelling unit is not fire code compliant.

I, therefore, would like to make a change to the regulations to the 2018 CT State Fire Safety Code- The Internal Fire Code Sections 202 General Definitions page 16.

Dwelling

" A single Unit providing complete independent living facilities for one or more persons, including permanent provisions for living, sleeping, eating, cooking and sanitation" I would like to delete from this regulation (eating and cooking). When you conduct an inspection and there are locked doors between each dwelling unit and the tenants are not related or tenants in common, these apartments should be classified as separate dwelling units, not guest suites. A dwelling unit should not be subject to whether or not you cook or eat.

I hope that you can support this change and recommend that this change be added to the new 2022 CT State Fire Safety Code. I am happy to discuss further at your convenience.

Ben McGorty State Representative 122 District Representing Shelton, Stratford & Trumbull 203-415-8428

From:	Melissa Kops <melissa@ctgbc.org></melissa@ctgbc.org>
Sent:	Monday, February 14, 2022 6:00 PM
То:	CodesStandards, DAS
Subject:	2022 Codes - Public Hearing Testimony

EXTERNAL EMAIL: This email originated from outside of the organization. Do not click any links or open any attachments unless you trust the sender and know the content is safe.

I would like to give oral testimony

- (1) Melissa Kops
- (2) Connecticut Green Building Council
- (3) IECC and IRC
- (4) Support for code adoption and a couple suggested code amendments:

o IRC - R303.4 Mechanical ventilation

Building and dwelling units complying with Section N1102.4.1 shall be provided with **[add: whole-house]** mechanical ventilation in accordance with Section M1505, or with other approved means of ventilation.

Reason for this recommendation: Ventilation is incredibly important for health and wellbeing, and previous versions of the IRC required whole-house ventilation at air infiltration rates lower than 5 ACH. We believe that exhaust-only ventilation is not adequate for providing fresh air in a well-sealed home.

IECC - R403.6.1 Heat or energy recovery ventilation

Dwelling units shall be provided with a heat recovery or energy recovery ventilation system **[delete:** . The system shall be balanced with a minimum sensible heat recovery efficiency of 65 percent at 32F (0C) at a flow greater than or equal to the design airflow.

Reason for this recommendation: Connecticut residents have the highest energy bills in the nation, and we don't think that healthy fresh air should come at an energy penalty. Incorporating energy recovery into new construction is a cost-effective way to provide fresh air without breaking the bank.

Melissa Kops, AIA, LEED AP BD+C, LFA Architect | City of New Haven Board Advisor | CT Green Building Council Lecturer | Yale School of the Environment

From:	Soto, Reynaldo <soto@townofwindsorct.com></soto@townofwindsorct.com>
Sent:	Thursday, February 17, 2022 10:30 AM
То:	CodesStandards, DAS
Subject:	2022 Codes - Public Comment

EXTERNAL EMAIL: This email originated from outside of the organization. Do not click any links or open any attachments unless you trust the sender and know the content is safe.

Good afternoon to all,

My name is Reynaldo Soto and I am an CT Licensed Building Official and Fire Safety Code Inspector. I am appointed as one of the Assistant Building Officials for the Town of Windsor, in Windsor CT.

I have received numerous calls from Owners, interested in adding Accessory Apartment to their Single Family homes to rent out for additional income. I have some concerns with this, as Accessory Apartments are not recognized under the CT. Building Code but yet new Accessory Apartments can be approved by Municipal Zoning and Planning Departments. I would like to point out some of the Sections and the language written because as of October 1st, 2021 an Accessory Apartment is defined as a separate dwelling unit.

Effective October 1st, 2021_

Substitute House Bill No. 6107 Public Act No. 21-29 under Sec. 1. (b) (1) "Accessory Apartment" means a separate dwelling unit that (A) is on same lot as a principal dwelling unit of greater square footage, (B) has cooking facilities, and (C) complies with or is otherwise exempt from any building code, fire code and health and safety regulations;

(NEW) Effective January 1, 2022

Sec. 6 (2) - Allow Accessory Apartments to be attached to or located within the proposed or existing principal dwelling, or detached from the proposed or existing principal dwelling and located on the same lot as such dwelling.

Sec. 6 (6) (A) - Be prohibited from requiring (A) a passageway between any such Accessory Apartment and any such principal dwelling,

(B)an exterior door for any such Accessory Apartment, except as required by the Applicable Building and Fire Code,

(D) a familial, marital or employment relationship between occupants of the principal dwelling and Accessory Apartment,

(E) a minimum age for occupants of the Accessory Apartment,

Sec. 6 (7) Be interpreted and enforced such that nothing in this section shall be in derogation of (A) applicable building code requirements, (B) the ability of a municipality to prohibit or limit the use of accessory apartments for short term rentals or vacation stays, or (C) other requirements where a well or private sewerage system is being used, provided approval for any such Accessory Apartment shall not be unreasonably withheld.

Sec. 6 (7) (d) A municipality, special district, sewer or water authority shall not (1) consider an Accessory Apartment to be a new residential use for the purposes of calculating connection fees or capacity charges for utilities, including water and sewer service, unless such Accessory Apartment was constructed with a new single-family dwelling on the same lot, or (2) require the installation of a new or separate utility connection directly to an Accessory Apartment or impose a related connection fee or capacity charge.

After reading Sec. 6 (7) am I not correct to believe, that the section is stating that the new Accessory Apartments must meet all applicable building codes right?

Also Accessory Apartments are allowed to be attached or located within the primary dwelling, which under Section R302.3 Two Family dwellings would require Fire Separation to be met, between each dwelling unit and common spaces would it not?

A building containing two dwelling units is defined as a two family dwelling under the 2015 IRC Chapter 2 Section R202 – Definitions.

I would like to recommend that Accessory Apartments be added to the building code so that requirements for a Two Family, are met including Fire Separation. I feel this would make things a lot easier for Building Officials and would then not contradict the approvals being given by the Planning and Zoning departments.

Sincerely,

Rey Soto

Rey Soto Assistant Building Official



Building Department 275 Broad Street | Windsor, CT 06095 860-285-1960 (p) | 860-285-1809 (f) soto@townofwindsorct.com | www.townofwindsorct.com

From:	Marc Scrivener <mscrivener@windhamct.com></mscrivener@windhamct.com>
Sent:	Tuesday, February 22, 2022 10:09 AM
То:	CodesStandards, DAS
Subject:	Testimony RE: Draft 2022 State Codes

EXTERNAL EMAIL: This email originated from outside of the organization. Do not click any links or open any attachments unless you trust the sender and know the content is safe.

On behalf of the Connecticut Career Fire Chiefs Organization, which represents approximately 50 of the Fire Chiefs of career municipal or state fire departments, I submit the following testimony regarding proposed changes in the Connecticut Fire Code 903.2.8. exception # 2. Specifically, the testimony concerns the current and proposed language regarding Group R as it relates to a change in occupancy from any occupancy to Group R-2.

As we understand it, the proposed changes would permit the conversion of an existing building (meeting certain height restrictions) to a 3 or more dwelling unit building without fire sprinklers in certain situations.

In our opinion, the conversion of an attic space to a dwelling unit places sleeping residents in a more perilous location without adequate fire protection features including implied single exit features.

We believe a single means of egress, if blocked by fire or other condition, would present a lifethreatening hazard to occupants. Furthermore, a blocked single means of egress in a residential occupancy during a fire presents an extreme hazard to firefighters and firefighting operations such as attempting to affect a rescue.

We stand with our peers, in the Connecticut State Fire Marshal's Association, in opposition to the proposed changes. We call for the Codes and Standards Committee to correct the language to prevent allowing a single means of egress to a non-sprinklered residential occupancy.

Sincerely,

Marc A. Scrivener, BSBM, MM, 26.2, 50k Fire Chief President, Connecticut Career Fire Chiefs Association Past President - CT Fire Chiefs Association Willimantic Fire Department 13 Bank Street PO Box 115 Willimantic CT 06226

860.465.3120 (Office) 860.933.5144 (Cell) 860.423.7304 (Fax) Twitter: WillimanticFD www.willimanticdowntown.org Be miserable. Or motivate yourself. Whatever has to be done, it's always your choice - Wayne Dyer

National Suicide Prevention Lifeline **1-800-273-8255** Fire/EMS Helpline: 1-888-731-FIRE (3473) Crisis Text Line: Text HOME to 741741 to connect with a crisis counselor

I am vaccinated and boosted for COVID-19.

From:	Laura di Bonaventura <laura@ldmail.net></laura@ldmail.net>
Sent:	Tuesday, February 22, 2022 12:48 PM
То:	CodesStandards, DAS; Alban, Margarita; Schweinfurth, Peter; Welles, Arn; Anastasio, Marisa; Aleman, Javier; awalsh@opendoorcounsel.net; Turner,
	Tony
Subject:	public testimony
Attachments:	Greenwich EMAC Codes Testimony 2.22.22.docx

EXTERNAL EMAIL: This email originated from outside of the organization. Do not click any links or open any attachments unless you trust the sender and know the content is safe.

Please see the attached public testimony for your meeting on 2/23/22. Thank you. Laura di Bonaventura Greenwich EMAC P&Z subgroup

Memorandum

To: Connecticut Codes & Standards Committee

From: Greenwich Energy Management Advisory Committee, Planning & Zoning subgroup*

Date: 2/22/2022

Subject: Adoption of CT 2022 Building Code & 2021 International Energy Conservation Code (IECC)

Please accept our public testimony as follows:

- 1) We support the adoption of the 2021 IECC without amendments that weaken or reduce energy efficiency or slow the adoption of renewable energy systems.
- 2) We support the addition of stretch codes as alternative performance pathways.
- 3) We urge the inclusion of Passive House certification among any alternative pathways as a means of achieving lower operating costs for residents (especially in affordable housing) and energy efficiency, among other benefits.

Background

In 2021, the Town of Greenwich Board of Selectmen established an <u>Energy Management Advisory</u> <u>Committee (EMAC)</u>. EMAC's purpose is to advise the Selectmen on ways to improve energy efficiency and expand the use of renewables, in order to save more and pollute less.

EMAC's Planning & Zoning subgroup, working with the Planning & Zoning Commission, is preparing municipal zoning regulations to support the development community in realizing the Town and the State's energy and emissions goals. EMAC's P&Z subgroup is responding to Public Act 21-29 and the Governor's Executive Order 21-3.

CT residents, including Greenwich residents, are already feeling the pain of our changing climate. Help us build a just and prosperous future with strong baseline building and efficiency codes and sufficient stretch options.

* Signatories Laura di Bonaventura, Chair, EMAC P&Z Subgroup Margarita Alban, Chair, P&Z Commission Peter Schweinfurth, Chair, EMAC Allison Walsh, EMAC P&Z Subgroup Tony Turner, EMAC P&Z Subgroup Javier Altman, EMAC P&Z Subgroup Marisa Anastasia, EMAC P&Z Subgroup Arn Welles, EMAC P&Z Subgroup

Hobbs, Darren

From:Glenn Heinmiller <glenn@lampartners.com>Sent:Tuesday, February 22, 2022 12:35 PMTo:CodesStandards, DASSubject:2022 Codes - Public Hearing Testimony

EXTERNAL EMAIL: This email originated from outside of the organization. Do not click any links or open any attachments unless you trust the sender and know the content is safe.

Request to give oral testimony at 2/23 hearing

- (1) Glenn Heinmiller
- (2) International Association of Lighting Designers
- (3) CT State Building Code, Amendments to the IECC

(4) C302.2 Light pollution controls.

Glenn Heinmiller

FIALD, LEED AP, LC Principal

84 Sherman Street Cambridge, MA 02140 p: 617.354.4502 d: 617.702.5945 c: 617.851.4502 www.lampartners.com



From:	Glenn Heinmiller <glenn@lampartners.com></glenn@lampartners.com>
Sent:	Thursday, March 17, 2022 5:00 PM
То:	CodesStandards, DAS
Cc:	Ashley Robbins
Subject:	Comments on the Draft 2022 Connecticut State Building Code
Attachments:	IALD Comment on Draft 2022 Connecticut State Building Code.pdf

EXTERNAL EMAIL: This email originated from outside of the organization. Do not click any links or open any attachments unless you trust the sender and know the content is safe.

Please find attached IALD's written comments on the Draft 2022 Connecticut State Building Code.

Thank you for your consideration

Glenn Heinmiller FIALD, LEED AP, LC Principal

84 Sherman Street Cambridge, MA 02140 p: 617.354.4502 d: 617.702.5945 c: 617.851.4502 www.lampartners.com



Darren Hobbs | Director Regulatory Compliance (OSBI |OSFM |OEDM) Department of Administrative Services State of Connecticut 450 Columbus Boulevard, Suite 1303 Hartford, CT 06103

17 March 2022

Re: Draft 2022 Connecticut State Building Code – Amendment to the IECC

Dear Mr. Hobbs:

I am writing to comment on the proposed amendment to the 2021 IECC, which adds a new section, **C302.2 Light pollution controls**.

The International Association of Lighting Designers (IALD) is the leading global organization of lighting designers. We rely on our extensive experience and knowledge of lighting technology and human visual performance to provide comfortable, safe and environmentally sensitive lighting for building occupants and the public.

Through design practice, lighting designers ensure that lighting is used in a responsible manner to minimize energy use and light pollution. IALD members advocate for energy conservation and for light pollution control, and have been major contributors to the International Energy Conservation Code (IECC) and ASHRAE/IES Standard 90.1, to the light pollution control provisions in the LEED rating system, the International Green Construction Code (IgCC), and the IDA/IES Model Lighting Ordinance (MLO). Collaborating with the International Dark-Sky Association (IDA), we drafted the model state-level dark-sky legislation, which was supported by the IDA, the Illuminating Engineering Society (IES), the National Electrical Manufacturers Association (NEMA), and the IALD, and which was adopted by the State of New York.

The IALD supports sensible and effective light pollution control regulations and the intent of this proposed amendment. However, unfortunately, we must oppose it, for reasons that are summarized below and detailed in the following pages.

• The proposed regulation does not belong in the energy code, as it will not

save energy.

- The proposed regulation would not lead to any significant reduction in light pollution. It would ban certain lighting fixtures that are allowed under LEED, the IgCC, and the MLO, and which may be necessary to provide comfortable, pleasing, and safe nighttime environments for Connecticut residents.
- The proposed regulation, if included in the State building code, could create confusing and unresolvable conflicts with existing local light pollution ordinances.

Not an Energy Code Provision

The proposed code provision does not belong in the Connecticut energy code because it will not save energy. IECC-2021 section C101.3 states:

"*Intent*. This code shall regulate the design and construction of buildings for the effective use and **conservation of energy** over the useful life of each building."

The clearly stated purpose of the proposed amendment is to control light pollution, not to save energy. Any claims of energy savings should be supported with evidence or analysis. General statements such as: "wasted" light is also wasted energy are insufficient and likely incorrect. This may be true on a conceptual level, but lacks an understanding of how lighting works in reality. Consider these two examples:

- A contractor intends to install a 100-watt/10,000 lumen floodlight on the side of a building to light a parking lot, and 30% of the output of the fixture will be uplight. The proposed amendment would not allow this, and the contractor would have to install a "full cutoff" fixture. The wasted-light energy savings concept assumes that the contractor would install a 70-watt "full cutoff" floodlight (saving 30 watts) instead—but this is unlikely to happen. The contractor would probably just install a 100-watt/10,000 lumen "full cutoff" fixture, or possibly use a higher wattage fixture in a futile attempt to push more light out into the parking lot. The 'no uplight' requirement would be met, but there would be no energy savings, and perhaps an increase.
- A lighting designer might typically recommend a pole-mounted fixture, designed to provide an attractive glow for aesthetic effect and to provide a sense of brightness. Let's say this fixture is 30-watts/3000 lumens and emits 5% of its output (150 lumens) as uplight. Under this proposed regulation, this fixture would be banned. The wasted-light energy savings concept assumes that the designer would now select a different fixture with no uplight that is 28-watts/2850 lumens or less (saving 2-watts) —but it just doesn't work that way. We do not have that kind of control over the wattage of a fixture. The wattage of the replacement fixture might be more, might be less.

The wattage of the fixtures used will be regulated by the lighting power density limits in the energy code, not by a light pollution regulation that restricts uplight.

If you want to save energy *and* reduce light pollution significantly, then you limit the total amount of light generated, and require that lights be shut off or dimmed when not needed. Of course, this is exactly what the energy code already does with lighting power limits and lighting shutoff requirements. Reducing the energy used reduces light pollution—not the other way around.

Would Ban Lighting Fixtures Allowed Under LEED, the IgCC and the MLO

Pedestrian-scale, pole-mounted and wall-mounted fixtures are used to light walkways, plazas and building entries. These fixtures might emit a small amount of uplight for aesthetic appearance, to provide a sense of brightness, to enhance wayfinding and sense of security, or because they are of a specific style that is compatible with the building. These types of fixtures are effective tools to provide comfortable, pleasing, and safe nighttime environments for the public. The small amount of uplight is useful and is not "wasted".

Please see the attached Appendix for examples of fixtures and applications that would be prohibited by the proposed amendment.

It is important to note that these types of fixtures are permitted in some cases under LEED Light Pollution Reduction credit, the IgCC, and the IDA/IES MLO, and California's CALGreen. This is because these standards utilize the Lighting Zone (LZ) concept and the Backlight, Uplight and Glare (BUG) rating system. This method prohibits excessive amounts of uplight (such as the aforementioned floodlight on the side of a building) but allows small amounts of useful uplight.

Could Increase the Cost of Construction

In some applications, the use of "fully cutoff" fixtures could require more fixtures and poles to achieve the vertical illuminance (lighting of faces) and uniformity (minimizing dark spots) required to provide for security and comfort.

Could Conflict with Local Ordinances, Creating Compliance and Enforcement Problems

If the state building code preempts a local regulation that covers the same scope (light pollution control), then this amendment to the state building code could completely replace any local ordinance, even if the local ordinance is more stringent.

If a state regulation does not preempt a local regulation (or vice versa), then the designer and the local code official would be faced with a daunting, perhaps impossible task. They would have to figure out how to comply with and enforce both regulations simultaneously, or try to evaluate relative stringency and pick the most stringent regulation to comply with and enforce. The difficulty of these problems would vary depending on the specifics of each local ordinance.

Thank you for your consideration. If you have any questions, please contact me by email.

Respectfully submitted,

blem flemmillen

Glenn Heinmiller, FIALD Chair, IALD Energy + Sustainability Committee <u>glenn@lampartners.com</u>

IALD Comment on Draft 2022 Connecticut State Building Code Appendix 1

Example of the types of fixtures that could be banned under the proposed IECC amendment C302.2 Light pollution controls

















Hobbs, Darren

From:	Laura Baker <laura@reca-codes.com></laura@reca-codes.com>
Sent:	Tuesday, February 22, 2022 3:35 PM
То:	CodesStandards, DAS
Subject:	2022 Codes - Public Hearing Testimony
Attachments:	RECA Comments Supporting 2021 IECC in CT 5-20-21.pdf

EXTERNAL EMAIL: This email originated from outside of the organization. Do not click any links or open any attachments unless you trust the sender and know the content is safe.

Good afternoon:

Per the notice online, I am writing to notify you that I would like to give oral testimony at the hearing tomorrow. Here is the information requested from the website:

- 1. Laura Baker
- 2. Responsible Energy Codes Alliance (RECA)
- 3. International Energy Conservation Code
- 4. Support for the Adoption of the 2021 IECC

As requested online, I am attaching the most recent comments provided by RECA supporting adoption of the 2021 IECC from May 20, 2021.

Please let me know if you have any questions or need anything else from me. Thanks,

Laura Baker

Laura W. Baker Responsible Energy Codes Alliance 1850 M Street NW, Suite 610 Washington, DC 20036 (404) 717-5338 (cell) laura@reca-codes.com

reca-codes.com



Submitted Via Email

May 20, 2021

Louis J. Free Chairman, Code Amendments Subcommittee Department of Administrative Services Office of the State Building Inspector 450 Columbus Boulevard, Suite 1303 Hartford, CT 06103

RE: Comments of the Responsible Energy Codes Alliance (RECA) Supporting the Adoption of the 2018 and 2021 International Energy Conservation Code

Dear Chairman Free,

The International Code Council recently published the 2021 version of the *International Energy Conservation Code (IECC)*, which is a clear and substantial improvement over the 2015 and 2018 versions of the *IECC*. The Responsible Energy Codes Alliance supports adoption of this latest, updated, state-of-the-art version of the *IECC* for residential and commercial construction in Connecticut and nationwide.

The need for decisive action to reduce energy demands and the production of greenhouse gases is clearer than ever before, and the 2021 *IECC* provides a solution that will not only address this important policy objective, but will also make buildings more resilient, reduce costs for owners and occupants, help promote local job creation, and improve the state's building infrastructure for generations to come. While eliminating state-specific weakening amendments and adopting the unamended 2018 *IECC* at this time would certainly be an improvement over the current code,¹ adopting the new 2021 *IECC* presents an important leadership opportunity for states and cities that wish to be on the forefront of building efficiency. As a result, we recommend that the Code Amendments Subcommittee consider the full range of long-term benefits of adopting the 2021 *IECC* for residential and commercial construction in the state.

¹ According to a recent analysis prepared by U.S. DOE's Pacific Northwest National Laboratory, Connecticut homes built to the 2018 *IECC* (unamended) would be 2.1% more efficient, on average, than homes built to the current Connecticut code, saving homeowners over \$782.52 over the first 30 years of the home's useful life. *See* <u>https://www.energycodes.gov/sites/default/files/documents/ConnecticutResidentialCostEffectiveness 2018.pdf</u> RECA intends to submit a proposal to eliminate weakening amendments to the Connecticut Building Code in order to help align the Code with the *IECC* going forward.



Energy and Cost Savings

The *IECC* is the most widely adopted model energy code for residential and commercial construction, and earlier versions have been adopted in Connecticut and nearly every state that has a statewide energy code. For the last fifteen years, the *IECC* has improved in efficiency with every new edition, providing straightforward energy and cost savings for the owners of homes and commercial buildings, and providing an important policy tool for state and local governments to achieve energy and carbon reduction goals.

The U.S. Department of Energy analyzes and provides cost savings determinations for each new edition of the *IECC* for residential construction and *ASHRAE* Standard 90.1 for commercial construction. (Standard 90.1 is incorporated as a compliance option in the commercial chapter of the *IECC*, and the energy savings figures for the *IECC* and *ASHRAE* are typically very close.) Below is a summary of the energy cost savings for states in climate zone 5A (which includes the whole state of Connecticut) can expect from adopting the two most recent editions of these model codes.

Residential		Commercial	
Model Code	Energy Cost Savings over previous model code	Model Code	Energy Cost Savings over previous model code
2018 <i>IECC</i> (Residential)	2.1% ²	<i>ASHRAE</i> Std. 90.1-2016	8.5% ³
2021 <i>IECC</i> (Residential)	7.44% ⁴	<i>ASHRAE</i> Std. 90.1-2019	4.2% ⁵

² See U.S. Dep't of Energy, Cost-Effectiveness Analysis of the Residential Provisions of the 2018 IECC for Connecticut, at 2 (June 2020), available at

https://www.energycodes.gov/sites/default/files/documents/ConnecticutResidentialCostEffectiveness_2018. pdf.

³ See U.S. Dep't of Energy, *Energy Savings Analysis: ANSI/ASHRAE/IES Standard 90.1-2016*, at 23 (Oct. 2017), *available at* <u>https://www.energycodes.gov/sites/default/files/documents/02202018 Standard 90.1-</u>2016 Determination TSD.pdf.

⁴ See U.S. Dep't of Energy, Preliminary Energy Savings Analysis: 2021 IECC for Residential Buildings, at 22 (May 2021), available at

https://www.energycodes.gov/sites/default/files/documents/2021_IECC_PreliminaryDetermination_TSD.pdf. ⁵ See U.S. Dep't of Energy, *Preliminary Energy Savings Analysis: ANSI/ASHRAE/IES Standard 90.1-2019*, at 24 (Apr. 2021), *available at*

https://www.energycodes.gov/sites/default/files/documents/20210407 Standard 90.1-2019 Determination TSD.pdf.



Greenhouse Gas Reduction

Connecticut has stated its intent to be a national leader in reducing Greenhouse Gas Emissions through the 2018 Act Concerning Climate Change Planning and Resiliency, which established a mandate to achieve a 45% reduction in greenhouse gases by 2030.⁶ The Governor's Council on Climate Change explicitly recognized the value of building efficiency in meeting those climate goals:

"Connecticut must continue to adopt progressive building codes that incorporate the latest International Energy Conservation Code (*IECC*) standards, including product-efficiency and resiliency standards, while working regionally with other states to advance federal productefficiency standards."⁷

By adopting the 2021 *IECC*, Connecticut can leap ahead and capture the important energysaving and carbon-reducing improvements incorporated into both the 2018 and 2021 versions of the *IECC*.⁸

Broad Support for 2021 IECC Improvements

Of course, some updates to the model energy codes are more noteworthy than others. The 2021 *IECC*, in particular, represents a considerable step forward. Like previous versions of the *IECC*, it was developed with the direct input of the nation's leading architects, building code officials, builders, manufacturers, environmental groups, and sustainability experts in a consensus-based code development process.

During this process, the efficiency improvements proposed for the 2021 *IECC* were endorsed by a broad range of organizations, including mayors, code officials, state energy officials, sustainability directors, and other governmental representatives from every region of the U.S. The U.S. Conference of Mayors unanimously adopted a Resolution endorsing improvements that would achieve a 10% improvement in the 2021 IECC, finding that:

"... building energy codes, by setting minimum efficiency requirements for all newly constructed and renovated residential, multi-family, and commercial buildings, provide measurable and permanent energy

⁶ 2018 Act Concerning Climate Change Planning and Resiliency, Public Act No. 18-82 (2018), *available at* <u>https://www.cga.ct.gov/2018/act/pa/2018PA-00082-R00SB-00007-PA.htm</u>.

⁷ See Governor's Council on Climate Change, Building a Low-Carbon Future for CT, GHG Reduction Strategies and Recommendations at 35 (Dec. 2018) (emphasis added), available at <u>https://portal.ct.gov/DEEP/Climate-Change/Climate-Change</u>.

⁸ For an estimate of energy and carbon savings associated with the latest model energy codes, download the Building Energy Codes Emissions Calculator at <u>https://www.imt.org/resources/building-energy-codes-emissions-calculator/</u>.



savings and carbon emissions reductions over the century-long life spans of these buildings ..."9

The 2021 *IECC* is the result of voting by governmental members who participated directly in the ICC process. These members voted in record numbers to improve almost every aspect of the *IECC*, paving the way for a more efficient, more sustainable future.

The 2021 *IECC* contains reasonable and significant energy-saving and carbon-reducing improvements for the entire building, including:

- Improved building envelopes, providing year-round comfort and energy savings for occupants;
- Improved requirements for verification, certificates, and other consumer protections;
- More efficient mechanical and lighting systems and automated controls designed with occupant health and safety in mind;
- Additional flexibility for builders and design professionals to optimize their design choices without reducing efficiency;
- Improved resilience, protecting occupants from environmental and climate-related risks and helping protect the investment of building owners; and
- A framework for jurisdictions to customize efficiency and net-zero requirements to adapt the *IECC* to meet energy and climate goals.

Delaying the adoption of potential efficiency improvements in the energy code could also have significant long-lasting negative consequences. Buildings constructed today are designed to last 70 years or more, and the vast majority of features that affect efficiency will be chosen and set in place at construction. The failure to grasp the opportunity to build more efficient buildings at the outset is a tremendous loss; any delay in adoption will result in the construction of buildings with less efficiency, a condition that will last for many years and possibly for the life of the buildings. For many families, a home is often the largest single investment, and it is critical that each new home provide comfort, resilience, and energy savings from day one. Likewise, the owners and occupants of commercial buildings depend on the state to regulate buildings in a way that optimizes energy and cost savings and that will be consistent with Connecticut's long-term energy and climate goals. The 2021 *IECC* provides a consensus-driven, adaptable blueprint for Connecticut's future.

⁹ See U.S. Conference of Mayors, *Meeting Mayors' Energy and Climate Goals by Putting America's Model Energy Code on a Glide Path to Net Zero Energy Buildings by 2050*, USCM Resolution 59 (July 1, 2019) (emphasis added), *available at* <u>https://energyefficientcodes.org/wp-content/uploads/2019-07-1-Putting-the-*IECC*-on-a-Glide-Path-to-Net-Zero-Energy-Buildings-by-2050.pdf.</u>



Conclusion

RECA's members and supporters have been involved in energy code development and adoption for over twenty years, and we offer our assistance and experience as you work to maximize energy efficiency in residential and commercial buildings. Please contact us if you have any questions or would like to discuss how RECA can be of assistance.

Sincerely,

Eric Lacey RECA Chairman



RECA is a broad coalition of energy efficiency professionals, regional efficiency organizations, product and equipment manufacturers, trade associations, and environmental organizations with expertise in the development, adoption, and implementation of building energy codes nationwide. RECA is dedicated to improving the energy efficiency of homes throughout the U.S. through greater use of energy efficient practices and building products. It is administered by the Alliance to Save Energy, a non-profit coalition of business, government, environmental and consumer leaders that supports energy efficiency as a cost-effective energy resource under existing market conditions and advocates energy-efficiency policies that minimize costs to society and individual consumers. Below is a list of RECA Members that endorse these comments.

Air Barrier Association of America Alliance to Save Energy American Chemistry Council American Council for an Energy-Efficient Economy CertainTeed LLC EPS Industry Alliance Extruded Polystyrene Foam Association Institute for Market Transformation Institute for Market Transformation Johns Manville Corporation Knauf Insulation National Fenestration Rating Council Natural Resources Defense Council North American Insulation Manufacturers Association Owens Corning

Polyisocyanurate Insulation Manufacturers Association

Hobbs, Darren

From:	Harwood Loomis <loomish@southington.org></loomish@southington.org>
Sent:	Wednesday, March 2, 2022 2:16 PM
То:	CodesStandards, DAS
Cc:	Jeffrey Pooler
Subject:	Proposed State Building Code - Comments
Attachments:	Proposed_CSBC_Amendments.pdf; Proposed_CSBC_Cover_Letter.pdf

EXTERNAL EMAIL: This email originated from outside of the organization. Do not click any links or open any attachments unless you trust the sender and know the content is safe.

To the Codes and Standards Committee:

As public comment during the comment period for the proposed 2022 State Building Code Supplement, the Southington Building Department respectfully submits three additional amendments, which this department believes are necessary to enable proper enforcement of the intent of the codes. Inclusion of the proposed language would counteract pushback we routinely encounter from permit applicants when we cite deficiencies in construction documents submitted in support of permit applications.

Harwood W. Loomis, RA, LBO Assistant Building Official Town of Southington Tel: 860-276-6242 E-mail: loomish@southington.org

This message contains confidential information and is intended for the individual named. If you are not the addressee you should not disseminate, distribute or copy this e-mail. Please notify the sender immediately by e-mail if you have received this e-mail by mistake And delete this e-mail from your system.'

Office of Building Department

Town of Southington, Connecticut

Jeffrey C. Pooler Building Official (860) 276-6242 poolerj@southington.org



John Weichsel Municipal Center 196 North Main Street Southington, CT 06489

March 2, 2022

Department of Administrative Services Office of the State Building Inspector 450 Columbus Boulevard, Suite 1303 Hartford, CT 06106

Re: Proposed Building Code Amendments

To Whom It May Concern:

Pursuant to the Notice of Intent to Adopt the 2022 Connecticut State Building Code, the Southington Building Department submits the following proposed amendments to the IBC and IRC portions of the proposed Connecticut Supplement for consideration. After internal discussion based on issues that continually arise in the course of plan reviews and field inspections of construction in progress, this department believes that the proposed amendments will "level the playing field," resulting in more uniform administration and enforcement of the intent of the code throughout the state. The proposed amendments are offered in order to clarify what the ICC has always maintained is the intent of the code, but which the current code language does not clearly and explicitly convey.

Thank You,

Hawood W Loomie

Harwood W. Loomis, RA, LBO Assistant Building Official E-mail: <u>loomish@southington.org</u>

Attachment: as

Proposed amendment to IBC 107.2.1:

(Amd) 107.2.1 Information on construction documents. *Construction documents* shall be dimensioned and drawn upon suitable material. Electronic media documents are permitted to be submitted where *approved* by the *building official*. *Construction documents* 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 relevant laws, ordinances, rules and regulations, as determined by the *building official*. Where the quality or arrangement of materials is essential for conformity to this code, as determined by the *building official*, neither this code nor any reference standards adopted hereunder shall not be cited, nor terms such as "legal," "per code," "as required," or their equivalent used, as a substitute for providing specific information.

Discussion:

When the Connecticut State Building Code for other than 1- and 2-family dwellings was based on the *BOCA National Building Code*, the provision addressing information on plans and specifications read as follows:

111.5 Plans and specifications. The application for the permit shall be accompanied by not less than two copies of specifications and of plans drawn to scale, with sufficient clarity and detail dimensions to show the nature and character of the work to be performed. When quality of materials is essential for conformity to this code, specific information shall be given to establish such quality; and this code shall not be cited, or the term "legal" or its equivalent be used, as a substitute for specific information. The code official is permitted to waive the requirement for filing plans when the work involved is of a minor nature.

When the BOCA codes were first replaced by the ICC family of codes, the provision prohibiting citing the code as a substitute for specific information was not carried forward into the IBC. I questioned this to the ICC at that time, and the response was that the intent of the code remains the same, and that code officials can cite Section 107.2.1. Since the adoption of IBC 2003 by Connecticut in 2005, we have consistently seen construction drawings that omit key information (such as guard details) and simply insert notes such as "Guard as required by code." When we attempt to cite such statements as not being acceptable because of Section 107.2.1, we invariably get push-back because the language of the code does not explicitly prohibit the use of such notes.

The amendment proposed above would restore the language we lost when we shifted from BOCA to the IBC. This will make administration and enforcement easier and more consistent throughout the state.

Proposed amendments to IRC 106.1.1

(Amd) R106.1.1 Information on construction documents. *Construction documents* shall be drawn upon suitable material. Electronic media documents are permitted to be submitted where *approved* by the *building official*. *Construction documents* 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 relevant laws, ordinances, rules and regulations, as determined by the *building official*. Where the quality or arrangement of materials is essential for conformity to this code, as determined by the *building official*, neither this code nor any reference standards adopted hereunder shall not be cited, nor terms such as "legal," "per code," "as required," or their equivalent used, as a substitute for providing specific information.

Discussion:

When the residential portion of the Connecticut State Building Code was based on the CABO One and Two Family Dwelling Code, the section of the code addressing plans read as follows:

112.1 Plans required. When required by the building official, plans shall be drawn to scale and shall be of sufficient clarity to indicate the nature and extent of the work proposed and shall show in detail that it will conform to the provisions of this code and all relevant laws, ordinances, rules and regulations. Plans shall include a plot plan drawn to scale showing the location of all easements, drainage facilities, adjacent grades, property lines, the proposed building and of every existing building on the site.

Neither the predecessor *CABO One and Two Family Dwelling Code* nor the *current International Residential Code* includes an explicit prohibition against citing the code instead of providing specific information and/or details in the construction documents. we have consistently seen construction drawings that omit key information (such as guard details) and simply insert notes such as "Guard as required by code." When we attempt to cite such statements as not being acceptable because of Section 106.1.1, we invariably get push-back because the language of the code does not explicitly prohibit the use of such notes.

The amendment proposed above would restore language was included in the *BOCA National Building Code* and which would be helpful in administering and enforcing the IRC portion of the State Building Code. we lost when we shifted from BOCA to the IBC. This will make administration and enforcement easier and more consistent throughout the state.

(Amd) R106.2 Site plan or plot plan. The *construction documents* submitted with the application for *permit* shall be accompanied by a site plan showing the size and location of new construction and existing structures on the site and distances from *lot lines* the locations of all easements, drainage facilities, and adjacent grades. In the case of demolition, the site plan shall show construction to be demolished and the location and size of existing structures and construction that are to remain on the site or plot. The *building official* is authorized to waive or modify the requirement for a site plan where the application for *permit* is for *alteration* or repair or where otherwise warranted.

Discussion:

When the residential portion of the Connecticut State Building Code was based on the CABO One and Two Family Dwelling Code, the section of the code addressing plans read as follows:

112.1 Plans required. When required by the building official, plans shall be drawn to scale and shall be of sufficient clarity to indicate the nature and extent of the work proposed and shall show in detail that it will conform to the provisions of this code and all relevant laws, ordinances, rules and regulations. Plans shall include a plot plan drawn to scale showing the location of all easements, drainage facilities, adjacent grades, property lines, the proposed building and of every existing building on the site.

The current IRC requires that the grade must slope away from the building at ½ inch per foot for the first six feet from the building, The IRC also requires a foundation drainage system for all residential structures with habitable or usable spaces (*i.e.* basements) below grade, and that this drainage system discharge "by gravity or mechanical means into an approved drainage system." However, the IRC does not require that the site plan show grades or drainage facilities. Without a site plan showing the location and extent of the subsurface drainage system and the discharge therefrom, it is not possible for building officials to fully assess code conformity during the plan review process.

The amendment proposed above would restore language was included in the *CABO One and Two Family Dwelling Code* which would be helpful in administering and enforcing the IRC portion of the State Building Code, and we lost when we shifted from CABO to the IBC. This will make administration and enforcement easier and more consistent throughout the state.

Hobbs, Darren

From:	Strong, Michael J
Sent:	Thursday, March 3, 2022 7:30 AM
То:	CodesStandards, DAS
Cc:	Nezames, Theodore H; Barakat, Rabih M; Fox, Adam G.; LeBlanc, Michael M
Subject:	2022 Connecticut Fire Safety Code - Public Comments related to NFPA 502

On behalf of the Connecticut Department of Transportation (Department) I would like to offer the following comments (<u>underlined</u>):

Comment 1

(Add) 403.10.6 Road tunnels. <u>Newly-constructed road</u> tunnels shall comply with Chapter 7 of NFPA 502. <u>Renovations to existing road tunnels are not required to comply with Chapter 7 of NFPA 502.</u>

The purpose of the comment is to clarify the applicability of the new code provisions.

Comment 2

Chapter 80 references NFPA 502 with a link to 403.11.6 but the correct reference should be <u>403.10.6</u>.

Contact me if you have any questions or require additional information.

Michael J. Strong, P.E. Trans. Supervising Engineer CT DOT - Office of Facilities Design (P) (860) 594-3306 (F) (860) 594-3375 (Cell) (860) 221-5129 E-Mail <u>Michael.Strong@ct.gov</u>

Please use E-Mail or Cell # to reach me while I am working outside the office
From:	Harwood Loomis <loomish@southington.org></loomish@southington.org>
Sent:	Friday, March 4, 2022 5:03 PM
То:	CodesStandards, DAS
Cc:	Jeffrey Pooler
Subject:	Re: Proposed State Building Code - Comments

EXTERNAL EMAIL: This email originated from outside of the organization. Do not click any links or open any attachments unless you trust the sender and know the content is safe.

I wish to offer the following comments on the proposed draft of the 2022 Connecticut State Building Code:

In the IEBC portion of the proposed 2022 CSBC, the draft Connecticut Supplement deletes the entirety of Section 105: Permits, and Section 106, Construction Documents, and replaces them with Sections 105 and 107 of the IBC. I respectfully submit that this is an unwise substitution that makes enforcement of the IEBC for alterations to existing buildings more difficult.

Taken together, IEBC Sections 105 and 106 require applicants to clearly identify the code path each project will take (Prescriptive, Work Area, or Performance); to declare whether the proposed work will be a Level 1, Level 2, or Level 3 alteration; and to specifically identify the work area or areas affected. Further, since IEBC Section 105 makes direct reference to Chapter 3, this also provides additional criteria for providing specific information that is invaluable in reviewing plans for alterations and renovations.

Sections 105 and 107 of the IBC are intended for application to projects involving new construction. By deleting the corresponding sections from the IEBC and substituting those sections from the IBC, the draft eliminates requirements for alteration-specific information needed to perform an adequate plan review, and eliminates the language that building officials can cite specifically when seeking this information if (as usual) it is not included in the application and construction documents.

Please retain Sections 105 and 106 in the IEBC portion of the 2022 Connecticut State Building Code.

Harwood W. Loomis, RA, LBO

Assistant Building Official

Town of Southington

Tel: 860-276-6242

E-mail: loomish@southington.org

This message contains confidential information and is intended for the individual named. If you are not the addressee you should not disseminate, distribute or copy this e-mail. Please notify the sender immediately by e-mail if you have received this e-mail by mistake And delete this e-mail from your system.'



International Code Council 73 Allston Avenue Middletown, RI 02842 t: 888.422.7233, ext. 4876 c: 401.265.0003 wnash@iccsafe.org www.iccsafe.org

March 9, 2022

Department of Administrative Services Office of the State Building Inspector 450 Columbus Blvd.; Suite 1303 Hartford, CT 06106

Re: Intent to Adopt the 2022 Connecticut State Building Code

To Whom It May Concern:

My name is William Nash, and I am a Senior Regional Manager – Government Relations in Connecticut for the International Code Council (Code Council) and your liaison to the Code Council. Please allow this letter to serve as written comments supporting the proposal to update the existing Connecticut State Building Code to the published 2021 ICC family of International Codes (I-Codes) included in the posted notice.

The ICC is a member-focused association dedicated to helping the building safety community and the construction industry provide safe and sustainable construction by developing codes and standards used in the design, build, and compliance process. Most U.S. states and communities, Federal agencies, and many global markets choose the I-Codes to set the standards for regulating on and off-site building, plumbing, mechanical, and fuel gas construction, sanitation, fire prevention, and energy conservation in the built environment.

The International Building Code (IBC), along with 14 other 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 Code Council Governmental Members, many of whom are from Connecticut, to determine the final code provisions. Because of the above-noted process, there were many beneficial changes to the model code that Connecticut is considering adopting. While we respectfully recommend that Connecticut adopt the most updated version of the model codes (2021 versions), we recognize the significant efforts that leaders in Connecticut have made, along with their commitment to a safe built environment via up-to-date codes for their visitors and citizens.

The I-Codes are correlated to work together without conflicts to eliminate confusion in building design, inconsistent code enforcement, or interpretation among different jurisdictions. Jurisdictions that utilize the most current edition of the I-Codes thereby ensure the highest standards for safety, energy efficiency, sustainability, economic incentive, and long-term resiliency of their built environment.

The Code Council would like to commend the State of Connecticut for its consistently outstanding work for reviewing and now proposing to update the CT State Building Code based on the 2021 I-Codes. The proposed update to the 2021 I-Codes incorporates amendments that reflect Connecticut's unique character and needs. It will ensure that the CT Building Code remains technically viable, allow for consistency in code application and



International Code Council 73 Allston Avenue Middletown, RI 02842 t: 888.422.7233, ext. 4876 c: 401.265.0003 wnash@iccsafe.org www.iccsafe.org

enforcement, allow for economic investment in building construction, and provide the most significant safety to the public and emergency responders while embracing modern technology and building practices.

Connecticut's adoption of the I-Codes provides the most significant safety to its citizens. In addition, it supports the construction industry when economic investment in building construction is essential to the state and local economy. Further, the adoption of updated model building codes is a financial incentive. Statewide building construction codes reduce costs associated with personal injury in the built environment reduce property damage and associated costs while providing for the safety of the public and emergency responders, which is critical in the present economy. The economic benefits of adopting updated codes include improved safety, reduced maintenance costs, energy savings, and lower insurance premiums. For instance, the Multi-Hazard Mitigation Council of the National Institute of Building Science continues to update their 2005 landmark study on mitigation and resiliency (Mitigation Saves: Mitigation Saves up to \$13 per \$1 Invested (nibs.org)) to detail that for every dollar spent on building safer, stronger, and resilient buildings, on average, reduces losses from high-wind damage, floods, earthquakes and other disasters by up to thirteen dollars.

Technical assistance and training from the Code Council is always available to groups including, but not limited to the CT Dept. of Administrative Services, CT Office of the State Building Inspector, CT Office of the State Fire Marshal, CT Design Professionals, and State and Local plan review, permit, and inspection staff. In addition, they will continue to have access to Code Council training programs and materials, product Evaluation Reports, certification programs, and Code Council 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 Code Council is honored to partner with the State of Connecticut in support of the adoption and administration of the CT State Building Code based on the 2021 I-Codes, and we look forward to continuing to serve your needs for many more years. Please feel free to contact me via email or cell phone (information noted below) if you have any questions, concerns, or comments regarding the 2021 I-Codes adoption or anything else Code Council-related.

Sincerely,

William AN. Q.J.

William J. Nash, Jr. Senior Regional Manager – Government Relations International Code Council <u>wnash@iccsafe.org</u> 401-265-0003



Louis J. Free, Chairman Codes and Standards Committee Office of the State Building Inspector 450 Columbus Blvd, Suite 1303 Hartford, CT 06103

Subject: Public Comment for proposed SCBC and CSFC

Name: Walter Summers Organization: Fire Marshal, Town of South Windsor Codes: State Building Code, State Fire Code Subject: 1) Certificate of Occupancy 2) Plan review fees

3) Electronic inspection reports

4) Smoke alarms

Dear Chairman Free,

I would like to submit my comments on the proposed Connecticut State Building Code and Connecticut Fire Safety Code for the Committee's review.

CSBC Section 111.3 and 111.5: These sections should include language to reflect that any temporary or partial certificate of occupancy shall have the approval of Zoning Official and Fire Marshal. This change would clarify the proper procedure and action for approving any temporary and partial certificate of occupancy has to meet 111.1.2 and 111.1.3. This would also codify the opinion of the State Building Official in interpretation I-12-07.

(Amd) 111.3 Temporary occupancy. The building official may issue a temporary certificate of occupancy before the completion of the entire work covered by the permit, provided such portion or portions shall be occupied safely prior to full completion of the building or structure without endangering life or public welfare. Approval is based on meeting the requirements of Section 11.3 and Section 111.5 Any occupancy permitted to continue during completion of the work shall be discontinued within 30 days

(Add) 111.5 Partial occupancy. The building official may issue a partial certificate of occupancy for a portion of the building or structure when, in the building official's opinion, and meeting Section 111.3 and Section 111.5, the portion of the building to be occupied is in substantial compliance with the requirements of this code and no unsafe conditions exist in the portion of the building not covered by the partial certificate of occupancy. after completion of the work unless a certificate of occupancy is issued by the building official.

CFSC Part 1 Section 105.1: This section should also include the wording of "construction document review". As many municipalities also charge a fee for plan review of construction cuments adding this section would clarify the language. The language would mirror the hguage in the CSBC.

(Amd) **105.1 General.** A municipality or fire district, by ordinance, may establish requirements and a fee schedule for construction document review, permits, certificates, notices, approvals, or orders pertaining to fire control and fire hazards pursuant to section 105 of this code. The local fire marshal shall issue such permits, certificates, notices, approvals or orders. Permits shall be in accordance with sections 105.1.1 to 105.7.25 inclusive.

CFSC Part 3 Section 108.6.1: This section should add language to allow the inspector to send the inspection report electronically. Many inspection programs gather the inspection results, obtain a signature by the occupant, and then email the report once the inspection is complete. Also add that the building permit holder's representative can also receive the report for the building permit holder.

(Add) 108.6.1 Notification of inspection results. Notification as to the passage or failure, in whole or in part, of any required inspection shall be made in writing by the fire code official or his/her duly authorized representative and shall be left at the job site, electronically sent, or delivered to the holder of the building permit or his/her designee. It shall be the duty of the building permit holder to ascertain the results of the required inspection.

CFSC Part 4 Section 9.6.2.10: This section is a deletion now. This section should be an add to mirror section 13.7.1.8.1.1 of the FPC to make it clear that smoke alarms are only good for 10 years and keep the Codes consistent.

(Del) 9.6.2.10.10* Delete section – Change to (Add) Unless otherwise provided by the manufacturer's instructions, smoke alarms shall not remain in service longer than 10 years from the date of manufacture. Combination smoke/carbon monoxide alarms shall be replaced when the end-of-life signal activates or 10 years from the date of manufacture, whichever comes first, unless otherwise provided by the manufacturer's instructions.

CFSC Part 4 Section 9.6.2.10.4 Delete section: This section should be an AMD to mirror section 13.7.1.8.8 of the FPC to reflect when smoke alarms interconnection is required.

(Amd) 9.6.2.10.4 Where two or more smoke alarms are required within a dwelling unit, suite of rooms, or similar area, they shall be arranged so that operation of any smoke alarm shall cause the alarm of all smoke alarms within the dwelling unit, suite of rooms, or similar area to sound, except when:

(1) Otherwise permitted by another section of this code.

(2) Configurations provide equivalent distribution of the alarm signal.

(3) Installations existed prior to October 16, 1989.

I want to thank the Committee for their commitment to voluntarily serve the State of Connecticut and produce safe Building and Fire Codes.

Respectfully, Lon

Walter Summers Fire Marshal



International Code Council 500 New Jersey Avenue, NW Sixth Floor Washington, DC 20001 t: 888.ICC.SAFE (422.7233) t: 202.370.1800 f: 202.783.2348 www.iccsafe.org

March 11, 2022

Via Email: DAS.CodesStandards@ct.gov

Department of Administrative Services Office of the State Fire Marshal 450 Columbus Boulevard, Suite 1303 Hartford, CT 06103

RE: Intent to Adopt the 2022 Connecticut Fire Safety Code

To Whom It May Concern,

Thank you for the opportunity to offer comments on Connecticut's Notice of Intent to Adopt the 2022 Connecticut Fire Safety Code. My name is Karl Fippinger and I respectfully submit the following comments in my capacity as Vice President, Fire and Disaster Mitigation for the International Code Council (Code Council). My experience includes more than 30 years in the fire and emergency services and more than 20 years as a practicing emergency manager at the federal, state, and local levels. I was born in Hartford and resided in Wethersfield for 23 years.

The Code Council is a nonprofit organization, driven by the engagement of its more than 65,000 members, dedicated to helping communities and the building industry provide safe, resilient, and sustainable construction through the development and use of model codes (I-Codes) and standards used in the design, construction, and compliance processes. One of the primary strengths of the I-Codes is the coordination of technical requirements. The I-Codes are designed to be used as a complete set of complementary documents, which provides users with full integration and coordination of technical requirements.

The Code Council applauds and supports the State of Connecticut's intent to adopt the 2021 edition of the International Fire Code (IFC) for all new construction and existing buildings permitted on or after January 1, 2006. This approach is consistent with and complementary to the State's intended adoption of the 2021 International Building Code (IBC), International Existing Building Code (IEBC), and the International Existing Building Code (IEBC) as part of its 2022 Connecticut State Building Code adoption.

Alternatively, the State of Connecticut's approach to regulating existing buildings permitted on or before December 31, 2005 is inconsistent. In its approach, the State intends to amend and delete significant portions of the consensus-based model code under IFC *Chapter 11 - Construction Requirements for Existing Buildings*. More specifically, the State proposes to delete the significant provisions from IFC Chapter 11 that address *Fire Safety Requirements for Existing Buildings (Sec. 1103)* and *Means of Egress for Existing Buildings (Sec. 1104)*.

The proposed deletion of IFC Chapter 11 requirements coupled with administrative rulemaking that establishes separate regulatory schemes for existing buildings creates an overly burdensome process for regulators and design professionals. In simple terms, the existing building requirements compel code officials and design professionals to work across three sets of model fire and life safety codes, promulgated by two different codes and standards development organizations, which are then incorporated into two state fire codes - the Connecticut State Fire Safety Code and the Connecticut State Fire Prevention Code. We offer this approach is both inefficient and counterintuitive. More importantly the process this creates lends itself to increased risk for misinterpretation and inconsistent application, inspection, and enforcement of the fire code, potentially compromising life safety.

We understand the inherent budget and staffing challenges faced by building and building and fire code officials in the State of Connecticut, particularly across its small towns and rural communities. We also understand the pressure placed on the design community to continually innovate while remaining cost-competitive for their clients. For these reasons we advocate for a consolidated, streamlined, and more efficient approach to fire code regulation for Connecticut's existing buildings.

As mentioned above, the I-Codes are correlated and designed as a complete set of complementary documents. The good news is that all nine of the I-Codes that are intended for adoption as part of the 2022 Connecticut State Building Code process will work seamlessly with the IFC under the Connecticut State Fire Safety Code, but only for buildings permitted in 2006 or after. Rather than amending and deleting the IFC Chapter 11 requirements, we recommend the State recognize IFC Chapter 11 and fully apply the IFC throughout the Connecticut State Fire Safety Code. This approach will streamline the Connecticut State Fire Safety Code by eliminating the need for Part IV. This would relieve fire code officials, building code officials, and design professionals from a technically complex and overly burdensome process.

Our team has been privileged to review alternative proposals developed by Connecticut fire marshals and life safety professionals incorporating IFC Chapter 11 requirements into the Connecticut State Fire Safety Code. These proposals effectively address critical issues for the State including conflicts in code, existing elevators, fire alarms, fire sprinkler systems, egress requirements, door size, etc. We understand the State has also reviewed these proposals. On behalf of our Connecticut members and the design community, we urge you to consider incorporating these proposals as an alternative to the requirements currently intended for adoption in your final rulemaking for the 2022 Connecticut State Fire Safety Code,

We appreciate the opportunity to submit comments and remain available to answer any questions.

Sincerely,

Karl Fippinger, CEM, PMP Vice President - Government Relations Fire and Disaster Mitigation (202) 730-3946 kfippinger@iccsafe.org

From:	Maria Karpman <maria.karpman@karpmanconsulting.net></maria.karpman@karpmanconsulting.net>
Sent:	Tuesday, March 15, 2022 10:02 AM
То:	CodesStandards, DAS
Cc:	Cassidy, Joseph
Subject:	2022 CT Energy Code change proposal
Attachments:	2022 CT State Energy Code Change Proposal Maria Karpman.docx

EXTERNAL EMAIL: This email originated from outside of the organization. Do not click any links or open any attachments unless you trust the sender and know the content is safe.

Hi Joe,

I would like to propose the following changes to the 2022 CT Energy Code:

1. Remove IECC Section C407 Total Building Performance compliance option, leaving 90.1 Section 11 and Appendix G as the only whole building performance paths of compliance with 2022 CT Energy Code

2. Require use of <u>DOE ASHRAE Standard 90.1 2019 Section 11 and Appendix G Compliance Form</u>.

Justification for the changes and the suggested code language are described in the attached document. These recommendations are aligned with the findings of a multi-year US DOE - funded effort to streamline the whole building performance compliance documentation, and would allow Connecticut design teams and jurisdictions to take advantage of the tools and resources developed as part of this DOE effort.

Please let me know if you have any questions.

Thank you,

Maria

--

Maria Karpman LEED AP, BEMP, CEM

Karpman Consulting

www.karpmanconsulting.net

Phone 860.430.1909

78 Eastern Blvd

Maria Karpman 3/14/2022

Summary of the proposed changes

- 1. Remove Chapter C407 Total Building Performance compliance option, leaving 90.1 Section 11 and Appendix G as the only whole building performance paths of compliance with 2022 CT Energy Code
- 2. Require use of DOE ASHRAE Standard 90.1 2019 Section 11 and Appendix G Compliance Form.

Justification

2021 IECC and the draft 2022 CT State Building Code includes three whole building performance-based compliance options– IECC Chapter 407 (Total Building Performance), 90.1 Section 11 (Energy Cost Budget Method) and 90.1 Appendix G (Performance Rating Method). US Department of Energy has initiated a multi-year effort to streamline whole building performance-based compliance documentation and enforcement. The work was informed by a group of national stakeholders, including several from Connecticut. Based on the stakeholder survey [1], the 90.1 Section 11 is used more often for the minimum compliance. The 90.1 Appendix G was originally developed specifically for evaluating high performance designs and is an overwhelming favorite for above-code programs. Starting with the 90.1 2016 edition, Appendix G has become an approved path for documenting minimum compliance with Standard 90.1, but many jurisdictions with earlier base codes (e.g., New York and Connecticut) already accept it as a compliance option. The survey has also found that the use of IECC Chapter 407 is going down. For example, it is no longer allowed by NYC Energy Code 2020 or New Jersey energy code.

Commercial buildings that follow prescriptive path often use COMcheck to document compliance. However, COMCheck doesn't support whole building performance projects. The DOE stakeholders identified development of a standardized compliance form for such projects as the highest priority for streamlining enforcement. To address this gap, DOE has funded development of the <u>ASHRAE Standard</u> <u>90.1 Performance Based Compliance Form</u> [2] that supports ASHRAE 90.1 2016/2019 Section 11 and Appendix G. The form is actively maintained through ongoing DOE funding and is already adopted by several jurisdictions (e.g., New York City Department of Buildings, Seattle Department of Buildings, Washington State) and beyond-code program (e.g., EPA ENERGY STAR Multifamily New Construction Program). It is also being considered for adoption for LEED v4.1 EA energy performance credit. DOE Energy Codes website includes a comprehensive submittal Review Manual that is based on the information provided in the Compliance Form, and free trainings are available on the use of the Compliance Form and Review Manual. On the other hand, there is no standardized compliance form for IECC Chapter 407, Total Building Performance.

The existence of three significantly different building energy modeling protocols complicates enforcement. Jurisdictions need to have submittal reviewers proficient with each approach, permit applicants can "path shop" for a protocol that is more lenient for the project at hand, and submittals often erroneously mix and match requirements of the different protocols. Since IECC Chapter C407 (Total Building Performance) use is going down based on the national survey, and it lacks a standard reporting format, we propose eliminating this compliance options from 2022 CT Energy Code and requiring the use of DOE 90.1 Section 11 and Appendix G Compliance Form by projects that pursue these compliance options. [1] <u>Performance-Based Code Compliance: A Roadmap to Establish Quality Control and Quality Assurance</u> Infrastructure (energycodes.gov)

[2] ASHRAE Standard 90.1 Performance Based Compliance Form | Building Energy Codes Program

Proposed code language

C401.2.1 International Energy Conservation Code

Commercial buildings shall comply with one of the following:

- 1. Prescriptive Compliance. The Prescriptive Compliance option requires compliance with Sections C402 through C406 and Section C408. Dwelling units and sleeping units in Group R-2 buildings without systems serving multifamily units shal be deemed to be in compliance with this chapter, provided that they comply with Section R406.
- 2. Total Building Performance. The Total Building Performance option requires compliance with Section C407. ANSI/ASHRAE/IESNA 90.1 Section 11 or Appendix G

90.1 11.7.2 Permit Application Documentation

Compliance shall be documented using the forms developed by the U.S. Department of Energy¹, and submitted to the *building official*. The information submitted shall include the following:

G1.3.2 90.1 Section G1.3.2 Application Documentation

Simulated performance shall be documented <u>using the forms developed by the U.S. Department</u> of Energy² and documentation shall be submitted to the rating authority. The information shall be submitted in a report and shall include the following:

.....

¹ https://www.energycodes.gov/ashrae-standard-901-performance-based-compliance-form

² https://www.energycodes.gov/ashrae-standard-901-performance-based-compliance-form

From:	Jason Davidson <jdavidson@phta.org></jdavidson@phta.org>
Sent:	Wednesday, March 16, 2022 5:34 PM
То:	CodesStandards, DAS
Cc:	Justin Wiley; Nicholas Capezza; Dominick Mondi; William J. Nash
Subject:	Support: The 2021 International Swimming Pool and Spa Code
Attachments:	Jason Davidson_PHTA_CT.pdf

EXTERNAL EMAIL: This email originated from outside of the organization. Do not click any links or open any attachments unless you trust the sender and know the content is safe.

To the Department of Administrative Services:

On behalf of the Pool and Hot Tub Alliance (PHTA), please see the attached letter of support for the proposed adoption of the 2021 International Swimming Pool and Spa Code (ISPSC).

Jason Davidson

f У in 🖸 🖸



Jason Davidson Director, Government Relations O: 703-838-0083 ext: 165 C: 443-745-8130 JDavidson@phta.org www.phta.org

Pool & Hot Tub Alliance2111 Eisenhower Ave., Ste. 5004775 Granby CircleAlexandria, VA 22314Colorado Springs, CO 80919



March 16, 2022

Codes and Standards Committee Department of Administrative Services Office of the State Building Inspector 450 Columbus Blvd. Suite 1303 Harford, CT 06103

Re: Consideration of the 2021 International Swimming Pool and Spa Code

To the Codes & Standards Committee and the Department of Administrative Services:

This letter is in regard to the state of Connecticut's consideration of the International Swimming Pool and Spa Code (ISPSC). The Pool and Hot Tub Alliance (PHTA) (formerly the Association of Pool & Spa Professionals (APSP)) partnered with the International Code Council (ICC), the body responsible for many of our national building codes, to create the first ever national code for swimming pools and spas in 2012.

The International Swimming Pool and Spa code (ISPSC) is a comprehensive swimming pool and spa code developed collaboratively by PHTA and the ICC. The ISPSC belongs to the family of International Codes (I-Codes) and is even referenced in the International Building Code and the International Residential Code. Like all other I-codes, the ISPSC was developed through the rigorous ICC Government Consensus Process, which requires full and fair consideration of all comments and submissions, first by a balanced panel of recognized experts, and secondly, a final determination by the public servants who have hands on experience, and who comprise the ICC membership. The ISPSC is the only swimming pool and spa code designed to correlate with the building codes adopted in Connecticut and addresses ALL aspects of pool and spa design and construction through integrating quality, safety, and energy conservation.

Industry-Backed Standards Keeping Pools Safer for Everyone

The ISPSC is derived from and fully supported by the ANSI/APSP national consensus standards, which have been developed under the rigorous due process requirements of the American National Standards Institute (ANSI). The ISPSC will incorporate these standards for the construction of public and residential pools and spas and will use prescriptive and performance-related provisions that are well known and commonly used by industry professionals. In addition, the standards and other requirements within the code are based on up to date, scientific and third-party testing and research such as entrapment prevention, drowning prevention, energy usage, materials and dimensions.



2111 Eisenhower Ave., Ste 500 Alexandria, VA 22314

Helping Small Businesses in Connecticut by Voting for Consistency

Adopting the ISPSC promotes **consistency for small businesses**. The Conecticut pool and spa industry lacks a consistent and uniform code for the construction of pools and spas. Small businesses are faced with a city-by-city patchwork of multiple codes and construction standards that make it extremely difficult and costly to operate their businesses. By adopting one uniform swimming pool and spa code throughout the state, Connecticut pool and spa professionals will be able to grow their businesses in more than one jurisdiction with the certainty of code consistency. The ISPSC will reduce confusion for industry professionals, inspectors and officials, promote unified training opportunities for code officials and contractors across the state, and will ultimately make pools and spas safer for everyone.

The ISPSC will establish minimum regulations for public and residential pools, spas, and hot tubs using prescriptive and performance-related provisions. Additional benefits of the ISPSC include:

- Seamless integration with the most widely used model codes in North America, the International Building Code® (IBC®) and International Residential Code® (IRC®).
- Meets or exceeds the requirements of the federal Virginia Graeme Baker Act for suction entrapment avoidance.
- Covers fencing, decks, lighting, heaters, circulation systems, pumps, accessibility, diving, sanitizing equipment, filters, and suction fittings.
- Includes provisions for pools and facilities geared specifically for water parks, along with provisions based on the latest research for diving, barriers, general design, and water quality safety.
- All necessary provisions in one book. The ISPSC combines the provisions of the relevant sections of the IRC, IBC, IPC®, and IMC®, and the APSP standards, serving as a fully-integrated document for pool and spa safety.

On behalf of the many Connecticut pool and spa professionals represented by PHTA, as well as those states that do business in Connecticut, we respectfully request that you adopt the International Swimming Pool and Spa Code.

Sincerely,

Jason Davidson

PHTA, Director of Government Relations

jdavidson@phta.org



About Us

The Pool & Hot Tub Alliance was formed in 2019, combining the Association of Pool & Spa Professionals (APSP) and the National Swimming Pool Foundation (NSPF). With the mission to "Celebrate the Water," PHTA facilitates the expansion of swimming, water safety and related research and outreach activities aimed at introducing more people to swimming, making swimming environments safer and keeping pools open to serve communities.

APSP, now the PHTA, is the world's oldest and largest association representing swimming pool, hot tub, and spa manufacturers, distributors, manufacturers' agents, designers, builders, installers, suppliers, retailers, and service professionals. Dedicated to the growth and development of its members' businesses and to promoting the enjoyment and safety of pools and spas, PHTA offers a range of services, from professional development to advancing key legislation and regulation at the federal and local levels, to consumer outreach and public safety. PHTA is the only industry organization recognized by the American National Standards Institute to develop and promote national standards for pools, hot tubs, and spas. For more information, visit APSP.org or NSFP.org.



2111 Eisenhower Ave., Ste 500 Alexandria, VA 22314

From:	Wu, Cornelia <cwu@neep.org></cwu@neep.org>
Sent:	Thursday, March 17, 2022 12:21 PM
То:	CodesStandards, DAS
Cc:	Port, Darren; Krim, Andrea
Subject:	NEEP Comments Supporting 2021 IECC in CT - March 2022
Attachments:	NEEP Comments Supporting 2021 IECC in CT - March 2022.pdf

EXTERNAL EMAIL: This email originated from outside of the organization. Do not click any links or open any attachments unless you trust the sender and know the content is safe.

To: Department of Administrative Services Office of the State Building Inspector

Please find attached the Northeast Energy Efficiency Partnerships (NEEP)'s Comments in Support of Connecticut Adoption of the 2021 International Energy Conservation Code.

Thank you, Cornelia Wu

Cornelia Wu, RA, LEED AP Building Policy Manager cwu@neep.org

Northeast Energy Efficiency Partnerships (NEEP) 781-860-9177 x 135 www.neep.org

Connect with NEEP!



Support for Connecticut Adoption of the 2021 IECC

March 17, 2022

Submitted via Email

Louis J. Free Chairman, Code Amendments Subcommittee Department of Administrative Services Office of the State Building Inspector 450 Columbus Boulevard, Suite 1303 Hartford, CT 06103

RE: NEEP Comments in Support of Connecticut Adoption of 2021 International Energy Conservation Code

Dear Chairman Free,

The Northeast Energy Efficiency Partnerships (NEEP) submits the following comments in response to the request for public comment in the Notice of Intent to Adopt the 2022 Connecticut State Building Code. NEEP strongly supports the State of Connecticut's efforts to create a better energy future for its residents and businesses by adopting the 2021 International Energy Conservation Code (IECC) for residential and commercial construction.

NEEP is a non-profit with a mission to accelerate regional collaboration to promote advanced energy efficiency and related solutions in homes, buildings, industry, and communities. With the goal to assist the region's leaders to reduce building sector energy consumption and carbon emissions, our vision is that the region's homes, buildings, and communities will be transformed into efficient, affordable, low-carbon, resilient places to live, work, and play.

Support for Adoption of the 2021 IECC

Connecticut and its residents and businesses stand to benefit from the adoption of the 2021 IECC in many ways, including the following:

- By adopting the 2021 IECC, Connecticut will stay on track with energy efficiency and emissions
 reduction goals. The code will provide energy and cost savings to its building and homeowners and
 individual tenants for many years. New construction is the most cost-effective time to install better
 insulation, quality windows and doors, and efficient heating and cooling equipment that is
 appropriately sized. Construction costs for these better quality products should be reduced through
 economies of scale, as suppliers and retailers reduce inventories and streamline production to meet
 these new energy targets.
- Air sealing, ventilation, moisture control, and indoor air quality provisions in the IECC conserve energy and provide health and safety benefits to the occupants of the building.



Support for Rhode Island Adoption of the 2012 IECC

Recommendation

NEEP encourages the removal of any amendments to the 2021 IECC that make the code less stringent. Such modifications reduce the energy savings achieved by the model code. The code as proposed includes a weakening amendment in section R402.4.1.2. This state amendment allows sampling of air leakage in buildings with more than seven units. Regardless of the number of units, all building owners and occupants deserve to benefit equally from the 2021 IECC model code improvements.

Conclusion

Adoption of the 2021 IECC serves these essential goals:

- Connecticut will be on track to achieve the General Assembly's goal of reducing greenhouse gas emissions by at least 45% by 2030 and at least 80% by 2050.
- Improves the thermal performance of the wall, roof, floor and basement construction, and of window and door performance that all combine to lower energy bills and provide healthier environments for owners and tenants of new and renovated buildings within the state;

The benefits of these code changes will be immediate and continuous savings for both businesses and residences throughout the state. They also will hold down the increasing costs of energy from higher demand that would occur if not adopted and reduce continued reliance on older and more expensive power generators, a leading contributor to increased energy bills in our Mid-Atlantic and Northeast states. High energy bills disproportionately affect vulnerable populations, creating an excess energy burden on those who can least afford it. In the interests of equity, we encourage the adoption of the 2021 IECC without weakening amendments.

NEEP wholeheartedly endorses the proposed adoption of the 2021 IECC as an essential component of Connecticut's overall energy efficiency goals. We encourage the Commission to apply a consistent set of requirements in the statewide energy code that meet or exceed the provisions of the 2021 IECC. NEEP is available to answer inquiries about any aspect of IECC adoption and implementation. We also recognize that these changes require the education of the construction industry workforce to learn the most cost-effective ways to achieve these goals. Please do not hesitate to contact NEEP for technical support and assistance in this effort.

Sincerely,

201

Cornelia Wu Building Policy Manager NEEP - Northeast Energy Efficiency Partnerships 81 Hartwell Avenue, Lexington, MA 02421 781-860-9177 Ext.135 cwu@neep.org

From:	susan lauzier <susan.lauzier@glastonbury-ct.gov></susan.lauzier@glastonbury-ct.gov>
Sent:	Thursday, March 17, 2022 12:26 PM
То:	CodesStandards, DAS
Cc:	Richard Johnson
Subject:	State Building Code Testimony - Town of Glastonbury
Attachments:	Letter to Dept of Administrative Services 03-17-22 (State Building Code
	Testimony - Windows in Residential Bedrooms).pdf

EXTERNAL EMAIL: This email originated from outside of the organization. Do not click any links or open any attachments unless you trust the sender and know the content is safe.

Dear Sir or Madam,

On behalf of Town Manager Richard Johnson, attached is a letter to be submitted as written testimony during the public comment period regarding the State Building Code as relates to windows in bedrooms in residential structures.

Thank you, Sue

Susan Lauzier Executive Assistant to the Town Manager Town of Glastonbury 2155 Main Street Glastonbury, CT 06033 (860) 652-7500 susan.lauzier@glastonbury-ct.gov

"This communication, along with any documents, files, or attachments, is intended only for the use of the addressee and may contain legally privileged and confidential information. If you are not the intended recipient, you are hereby notified that any dissemination, distribution, or copying of any information contained in or attached to this communications is strictly prohibited. If you have received this message in error, please notify the sender immediately and destroy the original communication and its attachments without reading, printing, or saving in any manner."

Please consider the environment before printing a copy of this email.

Town of Glastonbury



2155 MAIN STREET • P.O. BOX 6523 • GLASTONBURY, CT 06033-6523 • (860) 652-7500 FAX (860) 652-7505

Richard J. Johnson Town Manager

March 17, 2022

VIA EMAIL: DAS.CODESSTANDARDS@CT.GOV

Department of Administrative Services Office of the State Building Inspector 450 Columbus Boulevard, Suite 1303 Hartford, CT 06103

To Whom It May Concern:

This letter is written on behalf of the Glastonbury Town Council to present formal testimony as part of the process to update the State Building Code. Specifically, concerning windows in residential bedrooms. The Glastonbury Council (Zoning Authority) recently heard a proposal to convert a former warehouse building to 30 residential condominium units. The project did not initially include windows in bedrooms and was modified to provide a transom-like window in bedrooms as possible. This process created a concern on the part of the Council and residents that the Building Code would currently allow for bedroom spaces to be windowless. The concerns related to safety of inhabitants in the event of fire or other emergency limiting the occupant's ability to exit the bedroom.

The suggestion was to amend the Code to require a window along exterior walls or, if interior, facing directly to the exterior of the structure. As part of the current process to review and update the State Building Code, I was asked to forward these comments for consideration as part of that process.

Many thanks for considering the preceding. Should you have any questions, please let me know.

Sincerely **Richard J** son Town Manager

RJJ/sal

From:	Eric Lacey <eric@reca-codes.com></eric@reca-codes.com>
Sent:	Thursday, March 17, 2022 1:34 PM
То:	CodesStandards, DAS
Subject:	RECA Comments Supporting Adoption of 2021 IECC
Attachments:	RECA Comments Supporting 2021 IECC in CT 3-17-22.pdf; RECA Comments
	Supporting 2021 IECC in CT 5-20-21.pdf

EXTERNAL EMAIL: This email originated from outside of the organization. Do not click any links or open any attachments unless you trust the sender and know the content is safe.

Chairman Free,

Please see the attached comments on behalf of the Responsible Energy Codes Alliance supporting the proposed adoption of the 2021 IECC for residential and commercial construction. If you have any questions, please feel free to call or email me.

Thank you, Eric

Eric Lacey, Chairman Responsible Energy Codes Alliance 1850 M Street, NW, Suite 610 Washington, DC 20036 (202) 339-6366 (202) 342-0807 fax www.reca-codes.com eric@reca-codes.com



Submitted via Email

March 17, 2022

Louis J. Free Chairman, Code Amendments Subcommittee Department of Administrative Services Office of the State Building Inspector 450 Columbus Boulevard, Suite 1303 Hartford, CT 06103

RE: RECA Comments Supporting the Adoption of the 2021 International Energy Conservation Code in Connecticut

Dear Chairman Free,

The Responsible Energy Codes Alliance¹ submits these comments in response to a request for public comment in the Notice of Intent to Adopt the 2022 Connecticut State Building Code.² **RECA supports Connecticut's proposed adoption of the 2021 International Energy Conservation Code (***IECC***) for residential and commercial construction and encourages the Department to finalize and implement the new codes as soon as practicable. Updating the statewide energy codes from the 2015** *IECC* **to the 2021** *IECC* **will provide a range of energy efficiency, cost savings, and emissions reduction benefits for the owners and occupants of buildings in Connecticut.**

Energy and Cost Savings

As we noted in our May 2021 comments (attached hereto) and in testimony we provided at the February 23, 2022 Public Hearing, adopting the 2021 *IECC* will provide substantial energy and cost savings to Connecticut building owners and occupants. It is well-documented that the 2021 *IECC* (and by reference, *ASHRAE* Standard 90.1-2019) will provide cost-effective energy savings for residential and commercial buildings in Connecticut. Since our previous letter, U.S. DOE has conducted additional analyses specific to Connecticut regarding the benefits of adopting the 2021 *IECC* for residential construction and *ASHRAE* Standard 90.1-2019. Below is a summary of DOE's findings:

¹ The Responsible Energy Codes Alliance is a broad coalition of energy efficiency professionals, regional efficiency organizations, product and equipment manufacturers, trade associations, and environmental organizations with expertise in the development, adoption, and implementation of building energy codes nationwide.

² Dep't of Administrative Services, *Notice of Intent to Adopt the 2022 Connecticut State Building Code* (Jan. 31, 2022), *available at* <u>https://portal.ct.gov/-/media/DAS/Office-of-State-Building-Inspector/2022-CSBC-Notice-Flex-Fiscal.pdf</u>.



Summary of U.S. Department of Energy's Energy and Cost Savings Analyses of the Latest Model Energy Codes for Connecticut

	Residential ³		Commercial ⁴		
Residential Savings over Model Code Current CT Code		Life Cycle Cost Savings over Current CT Code		Energy Cost Savings over Current CT Code	Avg Life Cycle Cost Savings over Current CT Code
2021 <i>IECC</i>	8.8%	\$4,077	ASHRAE Std. 90.1-2019	1.7% - 8.0%	\$3.93/ft ²

Progress Toward Emissions-Reduction Goals

The full adoption of the latest model energy codes for residential and commercial construction will also help Connecticut achieve the General Assembly's goal of reducing greenhouse gas emissions by at least 45% by 2030 and by at least 80% by 2050.⁵ The Governor's Council on Climate Change, in its Phase 1 Near-Term Actions Report, specifically calls out the adoption of building energy codes as a means of accelerating energy efficiency:

The state should continue to keep pace with adopting the International Energy Conservation Code (IECC) and consider strategies to further enhance opportunities to improve energy efficiency through high-performance and stretch codes and construction and renovation practices.⁶

According to the U.S. Energy Information Administration, residential and commercial buildings account for nearly 40% of total energy consumption,⁷ so in order for Connecticut to make meaningful progress toward reducing air pollutant emissions as envisioned by the General Assembly, the energy used in buildings must be addressed. The adoption of the 2021

07/ConnecticutResidentialCostEffectiveness 2021.pdf.

³ U.S. Dep't of Energy, *Cost-Effectiveness of the 2021 IECC for Residential Buildings in Connecticut* (July 2021), *available at* <u>https://www.energycodes.gov/sites/default/files/2021-</u>

⁴ U.S. Dep't of Energy, *Cost-Effectiveness of ANSI/ASHRAE/IES Standard 90.1-2019 for Connecticut* (July 2021), *available at* <u>https://www.energycodes.gov/sites/default/files/2021-07/Cost-effectiveness of ASHRAE Standard 90-1-2019-Connecticut.pdf</u>.

⁵ See Conn. Gen. Stat. § 22a-200a.

⁶ See Governor's Council on Climate Change, *Taking Action on Climate Change and Building a More Resilient Connecticut for All, Phase 1 Report: Near-Term Actions*, at 33 (Jan. 2021), *available at* https://portal.ct.gov/-/media/DEEP/climatechange/GC3/GC3_Phase1_Report_Jan2021.pdf.

⁷ See U.S. Energy Infrastructure Admin., *Frequently Asked Questions (FAQs): How Much Energy is Consumed in U.S. Buildings*, <u>https://www.eia.gov/tools/faqs/faq.php?id=86&t=1s</u>.



IECC and *ASHRAE* Standard 90.1-2019 will clearly set the state on a path toward reduced greenhouse gas emissions. In addition to reviewing the latest model codes for cost-effectiveness, U.S. DOE also analyzed the reductions in greenhouse gas emissions that would result from statewide adoption of these codes. A summary of DOE's findings is below:

Statewide CO2 Emissions Reduction Impact from Adoption of 2021 IECC (Residential)⁸ and ASHRAE Standard 90.1-2019 (Commercial)⁹

Code Edition	CO2 Emissions Reduction (First Year)	CO2 Emissions Reduction (30 Years Cumulative)	
2021 IECC (residential)	4,456 Metric Tons	1,975,000 Metric Tons	
ASHRAE Standard 90.1- 2019 (commercial)	2,437 Metric Tons	1,708,000 Metric Tons	

State-Specific Weakening Amendments

Although we support Connecticut's proposed code update and encourage the Subcommittee and Department to move forward, we encourage the Subcommittee to work toward eliminating state-specific weakening amendments so that citizens can enjoy the full benefits of the latest model codes. As we noted in our testimony at the February 23, 2022 Public Hearing, the proposed code maintains a current state amendment in section R402.4.1.2 which allows sampling of air leakage for buildings with more than seven units. We continue to believe that each home should be verified to be meet the *IECC's* envelope air tightness; the purchasers of new homes or multifamily dwelling units expect that their home has been verified to meet the code requirements. We encourage the Subcommittee and Department to move forward with the finalization of the 2021 *IECC* as proposed, but we urge the Subcommittee to remove this unnecessary weakening amendment in this or a future code update.

Conclusion

RECA supports the hard work of the Code Amendments Subcommittee and the Department in their efforts to improve the lives of Connecticut citizens. The adoption of the 2021 *IECC* will help maintain Connecticut's regional and national leadership in energy conservation. We offer our assistance and experience as you work to maximize energy

⁸ See U.S. Dep't of Energy, Cost-Effectiveness of the 2021 IECC for Residential Buildings in Connecticut, at iii (July 2021).

⁹ See U.S. Dep't of Energy, Cost-Effectiveness of ANSI/ASHRAE/IES Standard 90.1-2019 for Connecticut, at 1 (July 2021).



efficiency in residential and commercial buildings. Please contact us if you have any questions or would like to discuss how RECA can be of assistance.

Sincerely,

Eric Lacey RECA Chairman



RECA is a broad coalition of energy efficiency professionals, regional efficiency organizations, product and equipment manufacturers, trade associations, and environmental organizations with expertise in the development, adoption, and implementation of building energy codes nationwide. RECA is dedicated to improving the energy efficiency of homes throughout the U.S. through greater use of energy efficient practices and building products. It is administered by the Alliance to Save Energy, a non-profit coalition of business, government, environmental and consumer leaders that supports energy efficiency as a cost-effective energy resource under existing market conditions and advocates energy-efficiency policies that minimize costs to society and individual consumers. Below is a list of RECA Members that endorse these comments.

Air Barrier Association of America Alliance to Save Energy American Chemistry Council American Council for an Energy-Efficient Economy CertainTeed LLC EPS Industry Alliance Extruded Polystyrene Foam Association Institute for Market Transformation Institute for Market Transformation Johns Manville Corporation Knauf Insulation National Fenestration Rating Council Natural Resources Defense Council North American Insulation Manufacturers Association Owens Corning

Polyisocyanurate Insulation Manufacturers Association



Submitted Via Email

May 20, 2021

Louis J. Free Chairman, Code Amendments Subcommittee Department of Administrative Services Office of the State Building Inspector 450 Columbus Boulevard, Suite 1303 Hartford, CT 06103

RE: Comments of the Responsible Energy Codes Alliance (RECA) Supporting the Adoption of the 2018 and 2021 International Energy Conservation Code

Dear Chairman Free,

The International Code Council recently published the 2021 version of the *International Energy Conservation Code (IECC)*, which is a clear and substantial improvement over the 2015 and 2018 versions of the *IECC*. The Responsible Energy Codes Alliance supports adoption of this latest, updated, state-of-the-art version of the *IECC* for residential and commercial construction in Connecticut and nationwide.

The need for decisive action to reduce energy demands and the production of greenhouse gases is clearer than ever before, and the 2021 *IECC* provides a solution that will not only address this important policy objective, but will also make buildings more resilient, reduce costs for owners and occupants, help promote local job creation, and improve the state's building infrastructure for generations to come. While eliminating state-specific weakening amendments and adopting the unamended 2018 *IECC* at this time would certainly be an improvement over the current code,¹ adopting the new 2021 *IECC* presents an important leadership opportunity for states and cities that wish to be on the forefront of building efficiency. As a result, we recommend that the Code Amendments Subcommittee consider the full range of long-term benefits of adopting the 2021 *IECC* for residential and commercial construction in the state.

¹ According to a recent analysis prepared by U.S. DOE's Pacific Northwest National Laboratory, Connecticut homes built to the 2018 *IECC* (unamended) would be 2.1% more efficient, on average, than homes built to the current Connecticut code, saving homeowners over \$782.52 over the first 30 years of the home's useful life. *See* <u>https://www.energycodes.gov/sites/default/files/documents/ConnecticutResidentialCostEffectiveness 2018.pdf</u> RECA intends to submit a proposal to eliminate weakening amendments to the Connecticut Building Code in order to help align the Code with the *IECC* going forward.



Energy and Cost Savings

The *IECC* is the most widely adopted model energy code for residential and commercial construction, and earlier versions have been adopted in Connecticut and nearly every state that has a statewide energy code. For the last fifteen years, the *IECC* has improved in efficiency with every new edition, providing straightforward energy and cost savings for the owners of homes and commercial buildings, and providing an important policy tool for state and local governments to achieve energy and carbon reduction goals.

The U.S. Department of Energy analyzes and provides cost savings determinations for each new edition of the *IECC* for residential construction and *ASHRAE* Standard 90.1 for commercial construction. (Standard 90.1 is incorporated as a compliance option in the commercial chapter of the *IECC*, and the energy savings figures for the *IECC* and *ASHRAE* are typically very close.) Below is a summary of the energy cost savings for states in climate zone 5A (which includes the whole state of Connecticut) can expect from adopting the two most recent editions of these model codes.

F	Residential	Commercial		
Model Code	Energy Cost Savings over previous model code	Model Code	Energy Cost Savings over previous model code	
2018 <i>IECC</i> (Residential)	2.1% ²	<i>ASHRAE</i> Std. 90.1-2016	8.5% ³	
2021 <i>IECC</i> (Residential)	7.44% ⁴	<i>ASHRAE</i> Std. 90.1-2019	4.2% ⁵	

² See U.S. Dep't of Energy, Cost-Effectiveness Analysis of the Residential Provisions of the 2018 IECC for Connecticut, at 2 (June 2020), available at

https://www.energycodes.gov/sites/default/files/documents/ConnecticutResidentialCostEffectiveness_2018. pdf.

³ See U.S. Dep't of Energy, *Energy Savings Analysis: ANSI/ASHRAE/IES Standard 90.1-2016*, at 23 (Oct. 2017), *available at* <u>https://www.energycodes.gov/sites/default/files/documents/02202018 Standard 90.1-</u>2016 Determination TSD.pdf.

⁴ See U.S. Dep't of Energy, Preliminary Energy Savings Analysis: 2021 IECC for Residential Buildings, at 22 (May 2021), available at

https://www.energycodes.gov/sites/default/files/documents/2021_IECC_PreliminaryDetermination_TSD.pdf. ⁵ See U.S. Dep't of Energy, *Preliminary Energy Savings Analysis: ANSI/ASHRAE/IES Standard 90.1-2019*, at 24 (Apr. 2021), *available at*

https://www.energycodes.gov/sites/default/files/documents/20210407 Standard 90.1-2019 Determination TSD.pdf.



Greenhouse Gas Reduction

Connecticut has stated its intent to be a national leader in reducing Greenhouse Gas Emissions through the 2018 Act Concerning Climate Change Planning and Resiliency, which established a mandate to achieve a 45% reduction in greenhouse gases by 2030.⁶ The Governor's Council on Climate Change explicitly recognized the value of building efficiency in meeting those climate goals:

"Connecticut must continue to adopt progressive building codes that incorporate the latest International Energy Conservation Code (*IECC*) standards, including product-efficiency and resiliency standards, while working regionally with other states to advance federal productefficiency standards."⁷

By adopting the 2021 *IECC*, Connecticut can leap ahead and capture the important energysaving and carbon-reducing improvements incorporated into both the 2018 and 2021 versions of the *IECC*.⁸

Broad Support for 2021 IECC Improvements

Of course, some updates to the model energy codes are more noteworthy than others. The 2021 *IECC*, in particular, represents a considerable step forward. Like previous versions of the *IECC*, it was developed with the direct input of the nation's leading architects, building code officials, builders, manufacturers, environmental groups, and sustainability experts in a consensus-based code development process.

During this process, the efficiency improvements proposed for the 2021 *IECC* were endorsed by a broad range of organizations, including mayors, code officials, state energy officials, sustainability directors, and other governmental representatives from every region of the U.S. The U.S. Conference of Mayors unanimously adopted a Resolution endorsing improvements that would achieve a 10% improvement in the 2021 IECC, finding that:

"... building energy codes, by setting minimum efficiency requirements for all newly constructed and renovated residential, multi-family, and commercial buildings, provide measurable and permanent energy

⁶ 2018 Act Concerning Climate Change Planning and Resiliency, Public Act No. 18-82 (2018), *available at* <u>https://www.cga.ct.gov/2018/act/pa/2018PA-00082-R00SB-00007-PA.htm</u>.

⁷ See Governor's Council on Climate Change, Building a Low-Carbon Future for CT, GHG Reduction Strategies and Recommendations at 35 (Dec. 2018) (emphasis added), available at <u>https://portal.ct.gov/DEEP/Climate-Change/Climate-Change</u>.

⁸ For an estimate of energy and carbon savings associated with the latest model energy codes, download the Building Energy Codes Emissions Calculator at <u>https://www.imt.org/resources/building-energy-codes-emissions-calculator/</u>.



savings and carbon emissions reductions over the century-long life spans of these buildings ..."9

The 2021 *IECC* is the result of voting by governmental members who participated directly in the ICC process. These members voted in record numbers to improve almost every aspect of the *IECC*, paving the way for a more efficient, more sustainable future.

The 2021 *IECC* contains reasonable and significant energy-saving and carbon-reducing improvements for the entire building, including:

- Improved building envelopes, providing year-round comfort and energy savings for occupants;
- Improved requirements for verification, certificates, and other consumer protections;
- More efficient mechanical and lighting systems and automated controls designed with occupant health and safety in mind;
- Additional flexibility for builders and design professionals to optimize their design choices without reducing efficiency;
- Improved resilience, protecting occupants from environmental and climate-related risks and helping protect the investment of building owners; and
- A framework for jurisdictions to customize efficiency and net-zero requirements to adapt the *IECC* to meet energy and climate goals.

Delaying the adoption of potential efficiency improvements in the energy code could also have significant long-lasting negative consequences. Buildings constructed today are designed to last 70 years or more, and the vast majority of features that affect efficiency will be chosen and set in place at construction. The failure to grasp the opportunity to build more efficient buildings at the outset is a tremendous loss; any delay in adoption will result in the construction of buildings with less efficiency, a condition that will last for many years and possibly for the life of the buildings. For many families, a home is often the largest single investment, and it is critical that each new home provide comfort, resilience, and energy savings from day one. Likewise, the owners and occupants of commercial buildings depend on the state to regulate buildings in a way that optimizes energy and cost savings and that will be consistent with Connecticut's long-term energy and climate goals. The 2021 *IECC* provides a consensus-driven, adaptable blueprint for Connecticut's future.

⁹ See U.S. Conference of Mayors, *Meeting Mayors' Energy and Climate Goals by Putting America's Model Energy Code on a Glide Path to Net Zero Energy Buildings by 2050*, USCM Resolution 59 (July 1, 2019) (emphasis added), *available at* <u>https://energyefficientcodes.org/wp-content/uploads/2019-07-1-Putting-the-*IECC*-on-a-Glide-Path-to-Net-Zero-Energy-Buildings-by-2050.pdf.</u>



Conclusion

RECA's members and supporters have been involved in energy code development and adoption for over twenty years, and we offer our assistance and experience as you work to maximize energy efficiency in residential and commercial buildings. Please contact us if you have any questions or would like to discuss how RECA can be of assistance.

Sincerely,

Eric Lacey RECA Chairman



RECA is a broad coalition of energy efficiency professionals, regional efficiency organizations, product and equipment manufacturers, trade associations, and environmental organizations with expertise in the development, adoption, and implementation of building energy codes nationwide. RECA is dedicated to improving the energy efficiency of homes throughout the U.S. through greater use of energy efficient practices and building products. It is administered by the Alliance to Save Energy, a non-profit coalition of business, government, environmental and consumer leaders that supports energy efficiency as a cost-effective energy resource under existing market conditions and advocates energy-efficiency policies that minimize costs to society and individual consumers. Below is a list of RECA Members that endorse these comments.

Air Barrier Association of America Alliance to Save Energy American Chemistry Council American Council for an Energy-Efficient Economy CertainTeed LLC EPS Industry Alliance Extruded Polystyrene Foam Association Institute for Market Transformation Institute for Market Transformation Johns Manville Corporation Knauf Insulation National Fenestration Rating Council Natural Resources Defense Council North American Insulation Manufacturers Association Owens Corning

Polyisocyanurate Insulation Manufacturers Association

From:	Wisniewski, Marena
Sent:	Thursday, March 17, 2022 4:49 PM
То:	CodesStandards, DAS
Subject:	2022 Codes - Public Comment
Attachments:	2022 State Building Code Comment.pdf; 2022 State Fire Codes Comment.pdf

Good Afternoon,

Please find attached our agency's comments regarding the proposed 2022 codes. Should you have any questions, please do not hesitate to reach out.

Best, Marena Wisniewski State Register Coordinator Environmental Reviewer State Historic Preservation Office Dept. of Economic & Community Development 450 Columbus Boulevard, Suite 5 Hartford, CT 06103 860-500-2357



WE HAVE MOVED! Please send all correspondence to: State Historic Preservation Office Attn: Marena Wisniewski 450 Columbus Boulevard, Suite 5 Hartford, CT 06103

Get all the SHPO news and events! Sign up for our monthly <u>newsletter</u>.



Connecticut

Department of Economic and Community Development

State Historic Preservation Office

March 17, 2022

Mr. William Abbott Department of Administrative Services Office of the State Fire Marshall 450 Columbus Boulevard, Suite 1303 Hartford, CT 06103

> Subject: Notice of Intent to Adopt the 2022 Connecticut Fire Safety Code Notice of Intent to Adopt the 2022 Connecticut Fire Prevention Code

Dear Mr. Abbott:

The State Historic Preservation Office (Office) has reviewed the proposed drafts of the 2022 Connecticut State Fire Safety Code and Connecticut Fire Prevention Code, both published by the Department of Administrative Service (DAS) for review and comment January 31, 2022.

This Office is disappointed in the repeated deletion of exemption/modification opportunities for historic properties that are refenced in the model code International Fire Safety Code 2021 (IFC), the National Fire Protection Association Fire Code (NFPA 1), and the National Fire Protection Association Life Safety Code (NFPA 101). Published by the International Code Council, the IFC has been adopted by the majority of states, as well as by specific municipalities. These widely accepted regulations provide a base standard for safeguarding life and property that is both rigorous and conservative. Their consideration of historic properties follows this philosophy, exemplified in Section 102.6, "the provision of this code relating to the construction, *alteration*, repair, enlargement, restoration, relocation, or moving of buildings or structures shall not be mandatory for existing buildings or structures identified and classified by the state or local jurisdiction as historic buildings where such buildings or structures do not constitute a distinct hazard to life or property. Fire protection in designated historic buildings shall be provided with an *approved* fire protection plan as required in Section 1103.1.1." This section, as well as its accompanying Section 1103.1.1., is proposed to be deleted from the 2022 Connecticut Fire Safety Code without justification.

While the proposed 2022 Fire Safety code provides for Alternative Compliance (proposed addition 102.1.1), the deletion of the above implies that historic properties are not able to seek modification or alternative methods of fire and life safety protection measures. This deletion/substitution has already been communicated to our office by concerned constituents. As stated in our letter to Joseph Cassidy, (attached), Chapter 12 of the International Existing Building Code 2021 (IEBC) includes multiple examples of features within historic buildings that provide protection for their occupants. Section 1203 in particular makes reference to historic building materials that meet 1 hour fire-resistance-rated construction. Section 1103.1.1. of the IFC provides additional guidance through NFPA 914, a guide entirely dedicated to providing fire protection measures specific to historic structures.

State Historic Preservation Office

450 Columbus Boulevard, Suite 5 | Hartford, CT 06103 | P: 860.500.2300 | ct.gov/historic-preservation An Affirmative Action/Equal Opportunity Employer An Equal Opportunity Lender



Department of Economic and Community Development

State Historic Preservation Office

As an alternative, this Office suggests amending rather than deleting Section 102.6 to be more in line with the proposed amendments to the Connecticut Building Code 2022, specifically proposed amendment 104.10.3 - *Historic structures exemption*, "Pursuant to section 29-259 of the Connecticut General Statutes, exemptions may be granted to the provisions of this code for historic structures as defined by section 10-410 of the Connecticut General Statutes, which have been classified as such in the State Register of Historic Places as long as the provisions of subsection (b) of section 29-259 of the Connecticut General Statutes are adhered to and provided that such exemptions shall not affect the safe design, use or construction of such property." This amendment ensures that all design and life safety requirements are met, while allowing the character defining features of historic properties to be considered, and provides a uniform treatment applied across multiple State codes. As currently proposed, the codes are not aligned and will result in confusion among professionals trying to achieve compliance.

Historic structures are assets to our communities, and are given consideration under many state and federal laws. We urge you to consider these irreplaceable resources within the proposed 2022 Fire Codes. For further information please contact Marena Wisniewski, Environmental Reviewer, at (860) 500-2357 or marena.wisniewski@ct.gov.

Sincerely,

Jonathan haves

Jonathan Kinney State Historic Preservation Officer

Connecticut

Department of Economic and Community Development

State Historic Preservation Office

March 17, 2022

Mr. Joseph V. Cassidy, P.E. Department of Administrative Services Office of the State Building Inspector 450 Columbus Boulevard, Suite 1303 Hartford, CT 06103

Subject: Notice of Intent to Adopt the 2022 Connecticut State Building Code

Dear Mr. Cassidy:

The State Historic Preservation Office has reviewed the proposed draft of the 2022 Connecticut State Building Code, published by the Department of Administrative Service (DAS) for review and comment January 31, 2022.

This Office commends DAS for considering historic properties with the addition of Section 104.10.3 - *Historic structures exemption*, and Section 1201.1.1 - *Exemptions* to the proposed model code (International Building Code 2021, IBC), as well as similar additional language in complementary model codes. These considerations are vital tools to help maintain a property's historic integrity while encouraging the rehabilitation and preservation of historic places.

Within the proposed model code International Existing Building Code 2021 (IEBC), Chapter 12 (Section 1201-1206) provides concrete examples for modifications for historic structures that allow character defining features to remain, while maintaining, and in some cases aiding, in providing life safety for occupants. SHPO suggest that this chapter be referenced within the above sections, to aid architects, contractors, and property owners in the rehabilitation of their historic properties.

As referenced in Connecticut General statutes 10-410, historic structures are assets to our communities, and are given consideration under many state and federal laws. We appreciate their continued consideration in the State Building Code, and the recognition of their value. For further information please contact Marena Wisniewski, Environmental Reviewer, at (860) 500-2357 or marena.wisniewski@ct.gov.

Sincerely,

Jonathan heares

Jonathan Kinney State Historic Preservation Officer

State Historic Preservation Office

450 Columbus Boulevard, Suite 5 | Hartford, CT 06103 | P: 860.500.2300 | ct.gov/historic-preservation An Affirmative Action/Equal Opportunity Employer An Equal Opportunity Lender

Code Compliance & Fire Safety Consultants

86 University Drive Torrington, CT 06790 860-480-3951 josephversteeg@gmail.com

Public Comment

Re: Proposed 2022 CFSC – Part I; Section 107

I. As proposed in the Draft For Public Comment – January 31, 2022

(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.

II. Statement of Concern.

As worded, the inspection schedule only addresses occupancies within Part II of the CFSC since the acronyms used are not found in Part of the Code. Part IV of the Code uses words to identify the occupancies. If the intent is to alter the inspection schedule for occupancies within Part IV, the occupancy classification title should be added. For example, ...occupancy classification B, Business; R-2, Apartment Buildings and Dormitory Occupancies...

Respectfully,

Joseph H. Vertisteeg

Code Compliance & Fire Safety Consultants

86 University Drive Torrington, CT 06790 860-480-3951 josephversteeg@gmail.com

Public Comment

Re: Proposed 2022 CFSC – Part III; Section 119.1

I. As proposed in the Draft For Public Comment – January 31, 2022

(Add) 119.1 Mixed Used and Occupancy. The provisions of Section 508 of the 2021 International Building Code portion of the 2022 Connecticut State Building Code except as noted below shall also be considered requirements of this Code and known as the 2021 International Building Code, Section 508 portion of the 2022 Connecticut State Fire Safety Code.
 Exception: Sections 508.5.9 and 508.5.11 addressing Accessibility and Plumbing Facilities respectively are not adopted as part of the 2022 Connecticut State Fire Safety Code.
 within 508.2, 508.3, and 508.4 addressing building height and area are not adopted as part of the 2022 Connecticut State Fire Safety Code.

II. Statement of Concern.

As written, the Exception only exempts the Fire Official from enforcing the Accessibility and Plumbing provisions of the Building Code. It does not prevent the Fire Official from applying the building height and area calculations. The exception requires re-wording.

Respectfully,

Joseph H. Vertsteeg

Code Compliance & Fire Safety Consultants

86 University Drive Torrington, CT 06790 860-480-3951 josephversteeg@gmail.com

Public Comment

Re: Proposed 2022 CFSC – Part III; Section 503 and Appendix D

I. As proposed in the Draft For Public Comment – January 31, 2022

(Amd) **503.1 Where required.** Fire apparatus access roads shall be provided and maintained in accordance with section 503.1.

(Amd) **503.1.1 Buildings and facilities.** *Approved* fire apparatus access roads shall be provided for every facility, building, or portion hereafter constructed or moved into or within the jurisdiction. The fire apparatus access road shall comply with the requirements of Appendix D.

(Amd) **503.1.2 Additional access.** The fire code official in conjunction with the fire chief is authorized to require more than one fire apparatus access road based on the potential for impairment of a single road by vehicle congestion, condition of terrain, climate conditions or other factors that could limit access.

II. Statement of Concern.

The originally submitted proposed code change replaced Section 503 and Appendix D with a reference to the requirements in the Fire Prevention Code. In doing so the requirements in NFPA 1 and the Annex notes would be applicable. Although the wording of NFPA 1 has been incorporated into Annex D, the extremely informative NFPA Annex notes have not.

I strongly suggest the simple wording as originally proposed be reconsidered. Yes, it forces the user to open the CSFC Part III to find the requirements are in the CFSPC, but it is clear and concise. It also establishes a single document for these requirements.

Respectfully,

, Joseph H. Vertsteeg

Code Compliance & Fire Safety Consultants

86 University Drive Torrington, CT 06790 860-480-3951 josephversteeg@gmail.com

Public Comment

Re: Proposed 2022 CFSC – Part IV; Section 7.1.3.2.1

I. As proposed in the Draft For Public Comment – January 31, 2022

(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. Existing wall or ceiling finishes consisting of wood or metal lath and plaster in good repair satisfy this requirement in non-high-rise buildings.

(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. Existing wall or ceiling finishes consisting of wood or metal lath and plaster in good repair satisfy this requirement in non-high-rise buildings.

(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).

II. Statement of Concern.

The wording added to Section 7.1.3.2.1(1) recognizes existing lath and plaster exit stair assemblies in good repair satisfy the 1-hour requirement as applied by municipal fire marshals throughout Connecticut since 1971. It also limits this type of construction to non-high-rise buildings as permitted in (3)(a). Its use would not be permitted in sprinklered high-rise buildings per (3)(b).

Respectfully,

Joseph H. Vertsteeg

Joseph H. Versteeg March 13, 2022

Code Compliance & Fire Safety Consultants

86 University Drive Torrington, CT 06790 860-480-3951 josephversteeg@gmail.com

Public Comment

Re: Proposed 2022 CFSC – Part IV; Section 13.4.7.7.1

I. As proposed in the Draft For Public Comment – January 31, 2022

Delete the Sections 13.4.7.7.1, 13.4.7.7.2, & 13.4.7.7.3 as printed in the proposed CT Amendments and replace with the following:

13.4.7.7.1 On every legitimate stage, the main proscenium opening used for viewing performances shall be provided with <u>one of the following</u> proscenium opening protection <u>methods</u> as follows:

(1) The proscenium opening protection shall comply with 12.4.7.7. <u>be protected by a listed,</u> <u>minimum 20-minute opening protective assembly, a fire curtain complying with NFPA 80,</u> <u>Standard for Fire Doors and Other Opening Protectives, or an approved water curtain complying</u> with NFPA 13, Standard for the Installation of Sprinkler Systems.

(2) Asbestos shall be permitted in lieu of a listed fabric.

(3) Manual curtains of any size shall be permitted.

13.4.7.7.2 as worded in NFPA 101 remains

13.4.7.7.3 Proscenium opening protection provided by other than a fire curtain in accordance with 12.4.7.7 (see 13.4.7.7.2(1)) **<u>13.4.7.7.1</u>** shall activate upon automatic detection of fire and upon manual activation.

II. Statement of Concern.

This section of the Code has always been very confusing. My proposal simply states that proscenium openings can be protected by any on of four methods, the three contained in 13.4.7.7.1 (1), (2), or (3) and 13.4.7.7.2.

The wording of 12.4.7.7 has been included in 13.4.7.7.1(1) since 12.4.7.7 is not adopted in CT and does not appear in the NFPA CT reprint.

13.4.7.7.3 has been amended to reference 13.4.7.7.1(1) directly.

Respectfully, Joseph H. Vertisteeg

2022 State Building, Fire Safety & Fire Prevention Codes

	+!							Public Comments and Resulting Actions	
Substan	tive Item	S							
#	Date Received	Via	Commenter	State Code	Model Code	Code Section(s)	Subject	Comment	Response
PC22-01	2/1/2022	e-mail	Edward Sargent	SFSC SFPC	IFC	Chapter 80	Referenced standards & Section 906	Correct edition years on nine referenced NFPA standards; clarify where fire extinguishers are / are not required.	Reference standards corrected.
PC22-02	2/4/2022	e-mail	Daniel Volovski	SFSC SFPC	IFC	Chapter 3	Group B College definition	Seeking clarification on how this would apply to certain scenarios	Inspection frequencies of B-College based on nature of occupancy.
PC22-03	2/7/2022	e-mail	Rep. Ben McGorty	SFSC SBC	IFC / IBC	Chapter 2	Dwelling	Proposes removing "eating and cooking" from the definition	While we appreciate the underlying public safety issue, this is a complex issue with implications that cascade through the codes requiring significant analysis to avoid unintended issues in other areas of the codes. We will not include this is the current proposed codes, but will identify it as an action item for analysis in the next code cycle.
PC22-04	2/14/2022	e-mail & hearing	Melissa Kops	SBC	IRC IECC	R304.4 R403.6.1	Mechanical ventilation & Heat Recovery	Add requirement for whole house ventilation & require heat recovery	The reference has been changed to section M1505.4, which is the whole house ventilation section. Section R403.6.1 will no be amended to require heat recovery in climate zone 5 at this time.
PC22-05	2/17/2022	e-mail	Reynaldo Soto	SBC	IRC / Statute	Chapter 3	Accessory apartments	Add language to IRC to clarify how to handle the accessory apartments enabled by C.G.S. 8-20	PA 21-29 created the accessory apartments class for zoning enforcement purposes. They are considered dwelling units under the SBC. No change to the state building code is needed.
PC22-06	2/22/2022	e-mail	Marc Scrivener	SFSC SBC	IFC / IBC	903.2.8 Exc. 2	Group R sprinkler exceptions	Opposition to proposed change due to concern with unsafe conditions being permitted.	Modify IBC/IFC section 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. The use of any exceptions in this section shall not negate the requirements of Chapter 10.
PC22-07	2/22/2022	e-mail & hearing	Laura di Bonaventura	SBC	IECC	General	General Support & Passive House	Generally in support of 2021 IECC and stretch code. Request inclusion of Passive House certifications.	Thank you for your support. Stretch codes are a DEEP public policy initiative. Formal interpretation I-20-14 recognized PHI Passive Home Certification as an approved above code program.
PC22-08	2/22/2022	e-mail & hearing	Glenn Heinmiller	SBC	IECC	C302.2	Light pollution controls	Requirement is not relevant to energy code. [detailed written testimony received as of 3/17/22]	The light pollution section will be moved from the IECC to Chapter 27 of the IBC.
PC22-09	2/22/2022	e-mail & hearing	Laura Baker	SBC	IECC	General	General Support	General support for adoption of 2021 IECC	Thank you for your support.
PC22-10	3/2/2022	e-mail	Harwood Loomis	SBC	IBC IRC	111.5 R106.1.1 R106.2	Plans & specs Plans & specs Site plan or plot plan	Prohibit general statement that project will comply with code Prohibit general statement that project will comply with code Add locations of easements, drainage facilities and adjacent grades	The construction document language will be added to IBC 111.5 and R0106.1.1. The site plan information will not be added to R106.2.
PC22-11	3/3/2022	e-mail	Michael Strong	SFPC	IFC	403.10.6 Chapter 80	Tunnels Referenced Standards	Limit requirement to new tunnels; exclude renovations of existing tunnels Correct section referenced standard table points back to	Section 403.10.6 of the FSC will be changed to refer to new tunnels.
PC22-12	3/4/2022	e-mail	Harwood Loomis	SBC	IEBC	Chapter 1	Various section deletions	By deleting some administrative sections and deferring to them in the IBC, some enforcement value to code officials is lost	Side by side review of the section in the IEBC and IBC shows little difference no change will be made.
PC22-13	3/9/2022	e-mail	William Nash	SBC	General	General	General Support	General support for adoption of 202 Codes	Thank you for your support.
PC22-14	3/9/2022	e-mail	Walter Summers	SBC SFSC SFPC	IBC	111.3 & 111.5	Approvals	Add language to 111.3 and 111.5 to indicate that FM and zoning approvals apply to these sections	IBC Section 111.1.3 has been modified to include temporary and partial certificates of occupancy. A reference to zoning ap
			1		IFC	105.1	Fees	Add construction document review to fees	Language regarding review fees has been added.
					IFC	108.6.1	Inspections	add language to allow electronic reports	"Notification may be delivered electronically" has been added to IBC section 110.6.1.
					NFPA	9.6.2.10.10	Smoke detectors	do not delete to align with FPC	Proposed language has been added.
					NFPA	9.6.2.10.4	Smoke detectors	modify to align with FPC	Proposed language has been added.
PC22-15	3/11/2022	e-mail	Karl Fippinger	SFSC	IFC	Chapter 11	existing buildings	do not delete IFC chapter 11	Review deletions from Ch 11. Ch 10 refers to deleted MOE section;
PC22-16	3/15/2022	e-mail	Maria Karpman	SBC	IECC	C401.2.1		Delete Section C407 and add ANSI/ASHRAE/IESNA 90.1 Section 11 or Appendix G	IECC section C401.2 allows the use of 90.1 as an alternative. There is no need to preclude options.
					AHRAE		Permit Application		
					90.1	90.1 11.7.2	Documentation	Require use of forms developed by US DOE	The committee does not amend reference standards.
PC22-17	3/16/2022	e-mail	Jason Davison	SBC	ISPSC	General	Adoption	Support for adoption of ISPSC	Thank you for your support
PC22-18	3/17/2022		Cornelia Wu	SBC	IECC	General	Adoption	Support of adoption of IECC	Thank you for your support
PC22-19	3/17/2022	e-mail	Richard Johnson	SFSC SBC	IBC/IFC	1030	Bedroom Windows	Amend code to require bedrooms to have EEROs, even if sprinklered.	The model code language will be maintained.
PC22-20	3/17/2022	e-mail	Eric Lacey	SBC	IECC	General	Adoption	Support of adoption of IECC	Thank you of your support
PC22-21	3/17/2022		Jonathan Kinney	SFSC SBC	IFC IBC	Various	Historic	IFC: Opposition to deletion of provisions that preserve historic elements IBC: Support for provisions that preserve historic elements, but request additionate references	al Thank you for the support of the SBC. Historic building are addressed via the Fire Safety Code modification process.
PC22-22	3/13/2022	email	Joseph Versteeg	SFSC	Part I	107	inspections	add occupancy titles to inspection list	Part I, Section 107 Keep current format. The categories are found in Part III, Section 202.
					IFC	119.1	Use & Occupancy	add exception for height and area	Part III, Section 119.1 Added as Exception #2.
					IFC	503	fire access roads	use previously proposed language	Part III, Section 503 Keep current language as written.
					NFPA 101	7.1.3.2.1	existing walls	add lath and plaster as an equivalent	Part IV, Section 7.1.3.2.1 proposed language included.
I					NFPA 101				Part IV, Section 13.4.7.7.1 proposed language has been included.